



**YOUNG LIVES  
SCHOOL SURVEY  
ETHIOPIA  
ROUND 2 – WAVE 1 (2012)  
FIELDWORKER MANUAL**

**Please refer to accompanying justification documents for further details on the development and use of the Young Lives school survey questionnaires.**

## Errata

Note that Errata are listed on the last page of this manual.

## Contents

1.	The School Survey	4
2.	List of Instruments	5
3.	Preparing to Visit the Schools	6
4.	The Survey Sample	7
5.	Satellite Sites	7
6.	Language Issues	9
7.	Arriving at the School	11
8.	Arranging the Fieldwork Schedule	12
9.	Detailed Instructions for Completing Each Instrument	30
10.	Compensation for Participants and Schools	30
11.	Fieldworker Conduct	31
12.	What if...?	31
13.	Addendum for Somali Region Jijiga Town only	32
	Errata	34
	Appendix: Random Number Lists	36

## **CHECKLIST**

<b>1</b>	<b>Does the number of each completed teacher instrument match the number of teachers on the roster?</b>
<b>2</b>	<b>Does the number of each completed pupil instrument match the number of pupils present on the first day on which a pupil instrument was administered?</b>
<b>3</b>	<b>Have you identified all Young Lives children you expected to find in this school? And in the site (for supervisors)?</b>
<b>4</b>	<b>Have you surveyed every school teaching G4 and G5 in the site? (for supervisors)</b>
<b>5</b>	<b>Is there a completed principal questionnaire and school observation for every school in the site? (for supervisors)</b>
<b>6</b>	<b>Have all satellite sites teaching Grades 4 and/or 5 within the Young Lives site been surveyed?</b>

## 1. The School Survey

'Young Lives' is a longitudinal survey of children which began in 2002. It has followed 2000 children in Ethiopia since their first year of life. The schools included in the school survey are all the schools (and their satellites) located within the Young Lives sites plus all schools in new sites selected in the Somali and Afar regions.

The school survey collects data about all pupils studying in **grades 4 and 5**, their teachers and their schools. It collects data on every child studying in grades 4 and 5 in every school located in the Young Lives sites, which are normally made up of one of two *kebeles*. All children are included, not only (but including) the Young Lives index children.

This manual explains how to conduct the fieldwork for the Young Lives School Survey. Please read it carefully before you begin work. Refer to the manual each time you visit a school and administer the instruments. Ask your supervisor if you are unsure and seek advice from EDRI as soon as possible if your team encounters any unusual circumstance or difficulty not explained here.

There are **eight instruments** to be completed (nine where there are satellites). Instructions are given here about how to administer each, including question by question notes, where this is useful. This manual also explains how to organize administration at the school and gives guidelines on how to conduct the fieldwork appropriately.

## 2. List of Instruments

The instruments to be used are below, with indications of their contents:

1	<b>School Booklet 1a,</b>	Young Lives Child Site Roster (Young Lives sites only)
	<b>School Booklet 1b</b>	Teacher and Class Roster (one per school)
	<b>School Booklet 1c</b>	Individual Class Roster (one per class section)
2	<b>School Booklet 2</b>	School Facilities Observation ( <i>fieldworker completed</i> )
3	<b>School Booklet 3</b>	Principal Questionnaire ( <i>self-administered, fieldworker checked and supervised</i> )
4	<b>Teacher Booklet 1</b>	Teacher Questionnaire ( <i>self-administered, fieldworker checked and supervised</i> )
5	<b>Teacher Booklet 2</b>	Teacher Mathematics Knowledge ( <i>self-administered, fieldworker supervised</i> )
6	<b>Pupil Booklet 1</b>	Background & Non-cognitive Questionnaire ( <i>self-completed, fieldworker-led and supervised</i> )
7	<b>Pupil Maths Test</b>	( <i>self-completed, fieldworker-led and supervised</i> )
8	<b>Pupil Literacy Test</b>	( <i>self-completed, fieldworker-led and supervised</i> )
9	<b>School Booklet 2a</b>	Satellite Site Facilities Observation ( <i>fieldworker completed</i> )

***Note that the instruments which are the most complex to administer are (i) the rosters and (ii) the child questionnaires and tests. Please ensure you plan the completion of these instruments carefully.***

### **3. Preparing to Visit the Schools**

The supervisor should contact the school prior to the visit with as much notice as possible. He should reconfirm a few days before visiting each school. It is useful to gather information about the school in advance to help plan the fieldwork. For example – are classes only in the morning or both morning and afternoon? And importantly – what is the language of instruction in Grade 4 and how many pupil instruments will be needed for this school? Are there any satellites attached to this school (classes taught in other sites but with the same principal)?

Usually, fieldwork will require 2-4 days in a school. Fieldworkers should be flexible about visiting two schools in one day, if appropriate. It is up to the supervisor to organize the fieldwork schedule taking account of the expected workload in each school.

Because we will not know the exact number of children to be included in the survey until arrival at the schools, the supervisor will need to estimate the number of instruments to take to the school. Please over-estimate to ensure you have enough.

In each school there may be one or more Grade 4 and Grade 5 class. These are often given numbers like 4A, 5B, 5C. The survey includes **every** grade 4 and 5 class in a school, **regardless of whether a Young Lives child studies in that class or not.**

*An important part of the fieldwork is to identify schools and Young Lives children located in the site*

For each site you will have the following:

- **list of schools in the site to include in the survey**
- **list of other schools in the community which you need to check – we need to be sure they are not located in the site**
- **list of all YL children in site – the Site roster (1a)(YL sites only)**

Your team supervisor will have a list of schools for your team to visit during the fieldwork period. They will also have a list of schools which are believed to be in the community and which you need to check are not in the survey site. Your supervisor will also have a

list of Young Lives children in the site who could be attending the surveyed schools (the YL child site roster).

*If there is a school in the site which is not on the list of schools to visit it will be necessary to visit that school but please contact EDRI immediately so that arrangements can be made*

It is important that you include all younger cohort children in the site studying in grades 4 and 5 but in advance we do not know exactly in which schools children will be studying, so identifying where the index children attend school is a key part of the fieldwork.

The site roster lists the last known school of each Young Lives child. BEFORE fieldwork begins, fieldwork teams will need to determine which school and grade each Young Lives younger cohort child is studying in. Your supervisor will organise this. It is only necessary in the young Lives sites (not Somali and Afar).

All the Young Lives younger cohort index children identified as studying in grade 4 or 5 in the YL site will need to be included in the survey and be clearly identified by their ID code.

Older Cohort children do not need to be identified in the survey, even if they are studying in survey classes.

#### **4. The Survey Sample**

The classes in each school to be surveyed are all the Grade 4 and Grade 5 classes in the school (every school and satellite in the YL site). Every school and grade 4 and 5 class in the site will be surveyed, **regardless** of whether any Young Lives children attend, including all types of schools (e.g. private, government, NGO, ABE etc).

In each school to be surveyed, the people to be included in the survey are:

- All pupils in Grade 4 and 5 attending on the first day on which a pupil instrument is administered (this might be the first or second day you visit the school)
- All Grade 4 and 5 teachers of maths
- All Grade 4 and 5 teachers of *language of instruction (literacy)* (see below)
- The Principal of the school

## 5. Satellite Sites

A satellite school is a smaller school or classroom (usually in a remote or rural area) which has the same principal as a main (larger) school elsewhere. You will need to find out if any of the Grade 4 and 5 classes is in a satellite site within the Young Lives Site (you may need to get information about the class from the satellite school itself if it is not kept at the main school).

**Treat the satellite school as part of the main school and include it in the survey if it teaches Grade 4 and/or 5 and if the satellite is inside the Young Lives site.**

**If a satellite is not inside the Young Lives site this satellite should be IGNORED and TREATED AS NOT BELONGING TO THE SCHOOL FOR THIS SURVEY. Any classes that are taught wholly in these satellites should NOT BE RECORDED IN THE CLASS ROSTER (IN SCHOOL BOOKLET 1B). ANY TEACHERS WHO TEACH MATHS OR LITERACY ONLY IN SATELLITES OUTSIDE THE YOUNG LIVES SITE SHOULD NOT BE RECORDED ON THE TEACHER ROSTER (IN SCHOOL BOOKLET 1B)**

**In addition, you should complete the Satellite School Observation Booklet for all satellites inside the Young Lives site if they are used for teaching Grade 4 and/or 5. This is simply a version of the school observation for the satellite site (see more details below).**

If the school has satellites only complete one Teacher and Class Roster Booklet (1b) per school **do not complete separately per satellite site**. The satellite is treated as part of the main school and has the same school ID.

## 6. Language Issues

The *language of instruction/literacy teacher* is the teacher who teaches the language of instruction to the class. For example, if the class learns in Amharic, the Amharic teacher is the person we call the literacy teacher. Usually all the instruments will be completed in the language of instruction – but see below for details. In some schools, the language of instruction changes between grades 4 and 5, but in this case we always use the language of instruction from Grade 4 (as the pupils are only just entering grade 5).

However, note that in a school which uses Amharic as the medium of instruction in Grade 4 and English in Grade 5, the literacy teacher will be the Amharic teacher for G4 and the English teacher for G5. However the pupil tests will be conducted in Amharic so the teacher who will complete the questionnaires is the Amharic teacher.

**The literacy teacher who should complete the questionnaire is always the one who teaches the language in which the pupil literacy test is administered.**

***Pupil instruments***

- Tests and pupil instruments for all classes are in the language of instruction used in the school for Grade 4. For example if the language of instruction is Sidaminga in G1-4 and Amharic in G5 we use Sidaminga tests for all pupils. The following exceptions apply:
  - For Afar we will normally use instruments in Amharic (Afar version) but supervisors will also have copies of the Afarigna instruments to be used in the (unlikely) event that a school uses Afarigna as the medium of instruction.
  - For pupils in schools using English as a medium of instruction in G1-4 we test in the local language (e.g. Amharic in Addis Ababa, Somalinga in Somali)
  - An English test will be employed at the retest in May/June 2013

***Teacher and Principal Instruments***

- Teacher and principal instruments are usually completed in Amharic, Oromiffa or Tigrinya. But versions of the teacher instruments are available in Sidaminga, Hadiya, Wolayta and English for use in SNNP and Somali regions. You should allow the teacher to complete the instruments in the language which they find easiest to understand. Supervisors should ensure they take with them teacher and principal instruments in the languages appropriate for the sites they are supervising. See below:

	<b>Teacher Instruments</b>	<b>Principal Instrument</b>
Afar	Amharic, English	Amharic, English
Somali	Amharic, English	Amharic, English
Amhara	Amharic, English	Amharic, English
Tigray	Tigrinya, English	Tigrinya, Amharic, English
Oromia	Oromifa, English	Oromifa, Amharic, English
SNNP (Wolaita speaking)	Wolaita, Amharic, English	Amharic, English
SNNP (Sidaminga speaking)	Sidaminga, Amharic, English	Amharic, English
SNNP (Hadiya speaking)	Hadiya, Amharic, English	Amharic, English
Addis Ababa	Amharic, English	Amharic, English

**7. Arriving at the School**



On arrival at the school, introduce yourself to the principal or the deputy if the principal is absent and present your introduction letter from EDRI. You then need to make arrangements with the principal or deputy for a schedule to administer all the instruments.

### **Explaining the survey to the principal or deputy:**

- Explain that the first instrument to be completed will be the roster. You will need the principal's and class teacher's help for this.
- Explain that you will need to conduct a maths test (45 minutes) and a literacy test (45 minutes) with every pupil in every grade 4 and 5 class. Ideally, these will be held on different days (e.g. maths test on day 1 and literacy test on day 2 of the school visit).
- Explain that all pupils in all grade 4 and 5 classes will also need to complete a questionnaire (at least 45 minutes)
- Explain that the principal will need to complete a questionnaire (30-45 minutes).
- Explain that all teachers of grade 4 and 5 maths and literacy will need to complete a questionnaire (45 minutes)
- Explain that every grade 4 and 5 maths teacher will also need to complete a Mathematics Knowledge Questionnaire (60 minutes).
- Explain also that you will need to observe the school facilities (at least 15 minutes).
- Explain that you will need to visit any satellites that belong to the school, if they are inside the Young Lives site.

### **Gathering the initial information you need:**

- Find out how many Grade 4 and 5 classes there are to be surveyed (when you complete the rosters). Remember that if the school is a shift school, different classes may be in different shifts. All grade 4 and 5 classes need to be surveyed, regardless of shift.

- Find out if any of these classes is in a satellite site (see section above on what to do for satellite sites)
- Find out the hours that the children in each class are in school to help planning (morning/afternoon or whole day?)
- Fix a time to administer the child tests and child questionnaires. The child maths and literacy tests should not be administered on the same day if possible to avoid pupil fatigue. You need three 45 minute slots for each class but if the classes are large the administration may take longer, especially if reading levels are low. If classes are very large, it is advisable to split the class in half if possible (if an alternative room is available). You should always ensure that enough time is given and that enough fieldworkers are present to allow all pupils to fully complete the background questionnaire.
- At least two fieldworkers must supervise each test with each class. One fieldworker should read the instructions and questions (leading the test) and the other fieldworker should circulate in the class to supervise the children and respond to their questions. See further instructions on child testing below. If you are going to a school where you do not speak the local language you will need to ensure that you have appropriate assistance for translation. Teachers will usually be able to provide this. But, in Afar, for example, the teachers may not speak Afaringa. In this case it is important to be accompanied for the administration of the pupil instruments by an Afaringa speaker – either the local guide or associate or an Afaringa speaking teacher.
- Fix a time for the principal and the Grade 4 and 5 teachers to complete the teacher questionnaires.
- Fix times for the Grade 4 and 5 maths teachers to complete the mathematics knowledge questionnaire (Teacher Booklet 2). The teachers **must** be supervised by you but can complete these questionnaires at the same time as each other in the same room if possible. The teacher should not use a calculator and is allowed a maximum of one hour.

## 8. Arranging the Fieldwork Schedule

The schedule you arrange will depend on how many grade 4 and 5 classes there are, whether any are in satellites and when the children attend school (morning, afternoon or full day).

Don't arrange both pupil tests on the same day.

Complete the cover sheets for all instruments and tests **in advance**. This is especially important for the child instruments which must correctly identify each child using the correct child id found on the roster.

## **Informed Consent**

Teachers and principals should complete the consent form provided (with the tick boxes). Pupils do not complete a form but you should read to them the pupil consent statement provided to you by EDRI.

Pupils, teachers and principals should have the survey explained to them in language they can understand. They are free not to participate if they wish. Please explain that their participation is very valuable to the long-running Young Lives project and encourage them to take part. If a pupil or a teacher or principal does not wish to take part, record this by inserting the correct code in the fieldworker completed sections (see instrument cover sheets).

## **Checking for Completeness**

Many of the instruments in the survey are self-completed. It is essential to make several kinds of checks so that we avoid missing data where possible:

- Before accepting the completed background questionnaires from pupils, **ask them to check carefully that they have answered every question**. Circulate around the classroom and check visually that the instruments are complete **before collecting them from the pupils**. It will be difficult to return uncompleted sections to pupils because of the large number of pupils in the survey, so **check before** the instruments are finally collected.
- For pupil tests and the teacher maths questionnaire, encourage all respondents to select an answer to every question – using a 'best guess' if they don't know the answer.
- Check that the teacher and principal questionnaires have every question completed. Go back to the teacher/principal if there are missing answers until all questions are answered.

Before leaving the school and the site, the supervisor must check all instruments are appropriately completed.

## 9. Detailed Instructions for Completing Each Instrument

### A. Rosters

#### (i) School Booklet 1a, b, c: Completing the Rosters

School booklet 1 is divided into three parts (printed separately) - comprising the site roster (one for each site – booklet 1a) teacher and class roster (one for each school – booklet 1b) and individual class roster and class questionnaire (one for each class – booklet 1c). Complete all the rosters as the first task in the fieldwork following the instructions below. You should do this with the help of the principal and the class teachers as soon as possible after arriving at the school.

***It is essential that the rosters are completed correctly as they are the basis for the survey sample, for identifying the participants and linking the data.***

#### (ii) School Booklet 1a: The Site Level Young Lives Child Roster

##### Instruction to the fieldwork supervisor:

The site roster is pre-completed with the details of all Young Lives younger cohort children we expect to find in the site, together with the school and grade they were attending in 2009. The following details are pre-completed to help you locate the children:

<b>*YL child ID</b>	<b>*YL child name</b>	<b>*YL child gender</b>
<b>*Caregiver's name</b>	<b>*School attended at R3 (2009)</b>	

It is possible that children will no longer be studying in the same school. It is likely that children will not be in the same grade as they were in in 2009. You need to check the pre-filled details and complete the following information:

**\*Whether the school is located in the site**

**\*School attended at start of survey (name and id)**                      **\* Grade at start of survey**

**The column “is this school in the site/community?” relates to the school attended at the start of the survey NOT the school attended in Round 3. So, this column**

**“school attended at the start of the survey” should be completed FIRST followed by “is this school in the site/community”.**

Some schools attended by the YL children will not be located inside the YL sites. We only go to schools in the sites in this survey so these children are not included in the sample. For these children, write the school name in the “School attended in Sept 2012” column, and select “No (00)” in the “is this school located inside the site” column. If children are not studying in schools that will be included in the survey, it is not necessary to complete the rest of the roster after the ‘school attended in Sept 2012’ column.

Only children studying in grades 4 and 5 are included in the survey. School names and IDs should be completed with reference to the school list, also provided to field teams. Once you have found out which grades children study in, you can then complete the column “Is child included in the survey?” marking “01” for those children in grades 4 and 5, and “00” for those in other grades or not in school. Detail the reason for answering “No (00)” in the column “If not included in survey, why?”

Leave BLANK the column “If child is surveyed, what is the class ID of their class”, until you have completed the individual class roster. Return to complete this column after visiting the class.

### **(iii) School Booklet 1b: Teacher & Class Roster Booklet**

There is one teacher and class roster booklet (1b) for each school. This is the first instrument to be completed in each school.

#### **Teacher Roster**

You will need the help of the principal and/or school register for this. Use the roster 1b to record the names of EVERY teacher who teaches maths and every teacher who teaches literacy to Grades 4 and 5 in this school. Sometimes, the same teacher will teach both subjects (in this case record the name only once), other times there will be separate teachers for maths and literacy (record the name of each separate teacher once). Write the names in the column 'teacher's name'. This automatically allocates a teacher ID in column 1, which should be used to identify the teacher in all other parts of the survey. Then, use the school records to write the number of days each teacher has been absent since the start of the school year, in column 3. Include all the days the teacher was absent from class, whatever the reason (e.g. illness, training, leave of absence etc.). Do not record the details of any teachers who do not teach maths or literacy to grades 4 or 5. Ensure that each teacher's name is written only once.

### **Class Roster**

You will need the help of the headmaster and the school registers for this. This roster records the details of every grade 4 and 5 class in the school, the shift in which they are, and their teachers.

Begin by recording the name of every grade 4 and 5 class in the school in the column 'class name in school.' This might be 4A, 4B, 5A, 5B or some other label. Then, record which grade this class is in the column 'grade' and the shift in which they are taught in 'shift'. In some schools, shifts may rotate. For example a class taught in the morning in October could be taught in the afternoon in November. In this case record the shift in which the class is taught at the time of your visit.

Then use the teacher roster to record the IDs of the teachers who teach each class maths and literacy (language of instruction). For example - the principal tells you that class 5A (with class id C02) is taught both maths and literacy by Ashmelash Haile, so you refer back to the teacher roster to find the Teacher ID of Ashmelash Haile (T01) and then record this ID in the column 'maths teacher ID' And the column "language/literacy teacher ID"

See example below:

From Teacher roster

1	2	3
1. Teacher ID	2. Teacher's Name	3. Number of Days Absent Since 21 Maskarram 2005 (E.C.) (01 Oct 2012 G.C.) (N.B. this includes any day of absence, regardless of reason e.g. Including for sickness)
T01	Ashmelash Haile	6
T02	Nardos Tesfay	5
T03	Abraham Yadete	5
T04	Worheneh Elemu	4

From Class Roster

1. Class ID	2. Class Name in School e.g. 4A	3. Grade (4 or 5)	4. Shift (01=Morning/ 02=Afternoon/ 03=Whole Day)	5. Maths Teacher ID (from teacher roster)	6. Language Teacher ID (from teacher roster)
C01	4A	4	01	T02	T02
C02	4B	4	02	T01	T01
C03	5A	5	01	T03	T04
C04	5B	5	02	T03	T04

Ensure that each class is recorded only once on the class roster so that each class is allocated only one ID. The same goes for the teacher roster.

#### (iv) School Booklet 1c: Individual Class Roster

You need to complete one class roster for every class in grade 4 and 5 i.e. all those classes listed on the school roster. You will need the help of the principal and school register for this.

For each class, the names of every child ENROLLED in the class need to be recorded in the column 'child name' (Column 2). This process allocates every child a Child ID which should be used in the remaining survey protocols. Copy the names from the class register.

Once all names have been written in the 'child name' column, use the 'Site Level Young Lives Child Roster' (1a) to identify any Young Lives children. The roster has a list of all the YL children in the site. Match the names and details with the children on the Individual Class Roster you just completed. If a child is a YL child write "01" in column 3 and record the YL child ID in column 4. If not, please write "00" in column 3 and leave column 4 blank. The information on the Site Level YL Child Roster will help you to match the children – it gives you details of the child and their school and grade in 2009. But please be aware that the child may have changed schools – **so you need to check the Individual Class Roster names against every name on the Site Level Child Roster. There may be differences in the way names are written. If in doubt, you need to check that the child in question really is the YL child by confirming the information you have about them (gender, caregiver, previous school etc.).**

Once this is completed, use the school register to record the number of days each child has been absent (in column 5) from school since the 1st of October 2012 (Gregorian calendar) i.e. 21 Maskarram 2005 Ethiopian calendar. Since it is close to the start of the school year, many teachers may be keeping only temporary attendance registers. If the formal attendance register is not fully completed, ask the teacher if a temporary register is kept and use this to complete the pupil absenteeism data. If there is no attendance data, write -88.

**Do not complete column 6 on the individual class roster until the first day on which you administer the first pupil instrument.** On this day, visit the classroom to



check which children on the class roster are attending school on the day. Only those children attending school on this day will be included in the rest of the survey. Record this information in Column 6. You may now prepare the first pupil instrument for administration. For example, if you are starting with the maths test, prepare the maths test scripts by writing the IDs of all pupils present on the first day onto the front of the maths test instruments and complete the appropriate sections of the fieldworker page of the test for each pupil. You are now ready to administer the first instrument.

After completion of the first pupil instrument, write the IDs of all children present on that day on the remaining 2 pupil instruments.

Children who are not present for the administration of the first pupil instrument are not included in the survey. You may give them the second and/or third instruments to complete but **do not record IDs on these instruments and do not return these scripts in the final pack of instruments. You should destroy these scripts.**

When you go to the class to administer the second and third instruments, use the roster to call the names of all children who were present for the first instrument (all pupils for whom you wrote 01 in Column 6 on the Class Roster) and hand the new correctly prepared instrument (with the appropriate IDs completed) to each child. If any children who were present for the first instrument are now absent, indicate this on the front page of the instrument by ticking “child absent”, then keep this script to for inclusion with the rest of the fully completed pupil instruments at the end of the administration.

When fieldwork is finished, you should have the same number of each of the 3 pupil-level to return for data entry. For example, you might have 50 children listed on the individual class roster, of whom 40 were present for the first instrument (e.g. the maths test). You will then have 40 completed maths tests. When you go back to administer the literacy test and pupil questionnaire (for example on day 2) 35 of the pupils who sat the maths test are present, but you will return 40 of each instrument, among which are 5 with the “absent” box selected.

#### **Dealing with Pupils with Identical Names**

Sometimes there will be more than one pupil in a school with the same name. It is important that every Grade 4 and 5 pupil is uniquely identified so that we can locate them when we come back to the school at the end of the school year. It is also important to correctly identify the YL children.

Once the basic roster information about the children has been completed on the class roster, you need to answer the class questions 1 to 28 about the class. These questions must be answered with reference to this particular class, and must be answered separately FOR every class. You may need to ask the principal and or maths and literacy teachers to answer these questions. You may also need to visit the class. Now that the class roster is complete you can complete the final column in the Young Lives Child Roster to show the class ID of each YL child.

Q20 and Q24 relate to fees paid by the child/parent. If an Ngo, for example, pays the fees, enter 00.

## **B. Pupil tests in Maths and Literacy**

These tests should be administered to the whole class, under the close supervision of at least 2 fieldworkers and including one person who speaks the local language. This is a challenging part of the survey and will require care. The aim is that every child should

be able to perform to the best of their ability, so it is essential that they understand what to do fully, although you should never help them by giving an answer or guiding them towards an answer or by translating the question into another language.

One fieldworker should lead the test, reading out the instructions at the beginning of the test, so that children understand the format and how to respond. The other fieldworker should circulate the room continuously, supervising students and offering assistance to those who may be struggling to read. Do not read out the texts or questions in the literacy or maths tests. It can be useful to ask the class teacher to help you give instructions to the pupils. But do not allow the teacher to help the children with the answers.

The length of each period varies between schools. In some schools, 1 period will not be sufficient time for pupils to complete the test. In these cases, it is best to schedule the test to start before a break period or over a double period, so that pupils can overrun if necessary.

Be careful to take with you enough of the child test papers. If in doubt, please overestimate.

Sometimes the desks are not arranged in a way that is appropriate for testing. If able, rearrange the desks into the exam format. This will help minimise opportunities for cheating and copying.

The tests use multiple-choice responses. Show the pupils how to select the correct answer by writing on the board following the example below. Pupils may wish to change the response they have selected, if they feel it is incorrect. Explain how to do this, also by writing on the board as in the example below.

### **Multiple Choice Questions:**

- Mark a cross in the box next to what you believe to be the correct answer.
- If you want to change an answer they should shade the original answer box completely and select a new answer (see below)

$9 \times 2 =$	$9 \times 2 =$	$9 \times 2 =$
<i>υ</i> ) 18 <input checked="" type="checkbox"/>	<i>υ</i> ) 18 <input checked="" type="checkbox"/>	<i>υ</i> ) 18 <input checked="" type="checkbox"/>
<i>λ</i> ) 11 <input type="checkbox"/>	<i>λ</i> ) 11 <input type="checkbox"/>	<i>λ</i> ) 11 <input type="checkbox"/>
<i>ϑ</i> ) 7 <input type="checkbox"/>	<i>ϑ</i> ) 7 <input type="checkbox"/>	<i>ϑ</i> ) 7 <input checked="" type="checkbox"/>
<i>σ</i> ) 17 <input type="checkbox"/>	<i>σ</i> ) 17 <input type="checkbox"/>	<i>σ</i> ) 17 <input type="checkbox"/>

Instructions for administering the tests:

- Don't administer both child tests on the same day. You can administer one test before or after the child questionnaire, however.
- Explain that this is not a school test. The results of the test are confidential and will not be linked to the pupil's name.
- Complete the IDs on the front of the test for each of the children. Use the school/class roster to get the information you need. Complete this before the class begins as pupils will need the full 45 minutes to answer the tests.
- Only pupils present on the first day of administration of pupil instruments will be included in the survey. If a child is absent on a subsequent day when the test is conducted please complete the box on the cover sheet of the test which records that they are absent.
- Give the correct test script to each pupil detailed on the class roster. Note that pupil names are NOT written on the test script, so you must be sure that the correct sheet is given to the correct pupil according to the roster.
- Explain to the class how to complete the test script – the box of the correct answer is crossed or ticked as in the example on the sheet.

- Explain that the pupils may make calculations on the blank parts of the maths test. Only the letters selected for the answers will be looked at.
- Distribute the question booklet face down before starting the test.
- Begin the test, write the start and end time on the blackboard (45 minutes)
- Pupils should be instructed to attempt all the questions. If they cannot answer a question, they should select what appears to be the best answer and move to the next question.
- No calculators may be used in the math test
- Do not help the pupils with the questions
- Do not allow the pupils to talk to each other or to see each other's answers. Plan strategies to avoid this, depending on the situation in the class. For example, bring in extra chairs/desks or separate children to ensure they cannot see each other's papers
- If pupils complete the test early they should remain seated and wait quietly to the end of the test
- 10 minutes before the end of the test, ask pupils to check their answers if they have finished.
- At the end of the test ask all pupils to check that they have provided an answer to every question. Circulate around the room to verify they have not missed pages or sections. You may allow a few minutes extra to allow pupils to complete any sections missed.

### C. Pupil Booklet 1 (Pupil Self-Completion Questionnaire)

The pupil booklet must be completed by all children in all grade 4 and 5 classes. The booklet should be group-administered by the fieldworker. You will need to explain to pupils how to answer the questions. You will then need to read out each question, and explain it so that those pupils who struggle with reading are able to complete it. **The aim of the booklet is to gather answers to all questions for all pupils. It is not a test.** The booklet will take at least 30-40minutes to complete, depending on the pupils' reading ability. It contains a background questionnaire plus a set of attitude items.

Prepare the pupil booklets before administration. Complete the details on the cover page, taking information from the school/class rosters. Ensure that the correct booklet is given to the student with that pupil ID (using the class and school roster).

If the class are good readers (ask the class teacher about this) then allow the pupils to complete this section quietly by themselves. Allow at least 30 minutes. Encourage pupils to raise their hand if they need help understanding any question. The fieldworker(s) should walk around the class to check that the questions are being understood correctly.

If the class are weaker readers (check with the class teacher) it is preferable to read each question out loud to the whole class and ask the pupils to select their answer before moving on to the next question so that the questionnaire is completed as a class. One fieldworker will need to be directing the class, while the other will need to circulate the class and review students' progress. **Do not proceed too quickly** – ensure the majority of pupils have completed their answers before moving to the next question. The second fieldworker can then follow-up with the weakest readers who fall behind.

**Ask pupils to check that they have answered EVERY question before completing part 1 and moving to part 2 (the attitude items on the last page).**

Fieldworkers are encouraged to help pupils both as a group and individually to understand these questions and to select the appropriate response category. However, pupils should not discuss their answers with each other and should not allow other pupils to see their responses.

- Explain to the children that none of their responses will be linked to their name and that no information about them will be given to the school or teacher.
- Explain that the questionnaire IS NOT A TEST. **Pupils may ask for help on any question and you may translate the question into any language to get the most reliable response.** The aim is not to see what they know, but to get the best information we can about the pupils. It is important to help weaker children to tick the appropriate boxes to describe their situation, especially if they have difficulty reading.
- But you should be careful not to lead them to particular answers on attitude/opinion questions (the last page of the booklet).
- Encourage the children to answer all questions as honestly as possible. Ask the class teacher to leave the room during the administration of the questionnaire so that children feel free to respond honestly (unless you rely on the teacher for translation – in this case brief the teacher that their role is to translate only). Stress that there is no ‘correct’ answer to any of the questions
- It is OK to administer the pupil questionnaire on the same day as one of the tests.
- You should use the board in the class to show pupils how to respond to the questions by writing an example. See the box on the next page.

### ***Specific Question Guidance***

**Q 10** Please include only biological brothers and sisters Q about number of rooms should include toilet

## **Pupil Questionnaire Part 2**

For part 2, pupils respond to a series of attitude statements. Explain to the pupils that there are no correct answers to this part of the questionnaire. Explain that you will read a sentence aloud and then they should select the response which best describes how they feel in relation to that sentence. It is important that pupils do not see each other's responses on this section. Wait until the pupils' have selected their response before moving on to the next item.

- ***Before you read the sentences, carefully explain the response categories for the set of sentences you are about to read.***

This part of the questionnaire should take around 15-20 minutes. At the end, ask pupils to check that they have responded to all the items before concluding.

### **FIELDWORKER: READ THESE INSTRUCTIONS WITH PUPILS**

**We are going to ask you some questions about yourself. Please answer as honestly as possible, thinking about yourself.**

**Some questions have only one answer, and ask you to "Tick one box". For example:**

Do you live in a town or a village? (*Tick one box*)



Town

Village

**Some questions may have more than one answer, and ask you to “Tick all boxes that apply”. For example:**

Which of the following family members do you live with? (*Tick all boxes that apply*)

Mother  Father  Brother(s)

Sisters  Grandparents  Aunt(s)/Uncle(s)

**Some questions may ask you to write a number. For example:**

**How many brothers do you have? (*Write the number*)**

\_\_\_\_\_ **5** \_\_\_\_\_ brothers

#### **D. School Booklet 2: School Facilities Observation Schedule**

One school facilities observation schedule should be completed for each school in the survey. Sometimes there may be a satellite school or classroom which is located elsewhere but which has the same principal as the main school. In this case, complete the School Facilities Observation for the main school but do not include observation of the satellites. **In addition complete the Satellite School Observation Schedule for the satellite (School Booklet 2a) – see below.**

It is to be administered by the fieldworker through **observation**. That is, the fieldworker should walk around the school site and complete the questionnaire by observing the facilities. If any questions require information not attainable by observation, the fieldworker should ask the principal or teacher.

Please complete the cover sheet including the correct school ID. The school ID is pre-completed on the school roster.

If a facility is under construction or is being repaired and is not in use, treat that facility as not present.

### ***Specific Question Guidance***

#### **Q1.1**

Separate classroom here means that the class is not taught in a room shared with other classes.

#### **Q1.2 – 1.4**

Observe the facilities here. If it is not possible – e.g. no access to computer rooms, ask children as well as teachers whether the internet is used by pupils.

A library here could include a book-cupboard or store if children borrow books regularly from it.

#### **Q1.5**

Note this question applies only to drinking water, not water for other purposes. It applies to drinking water for children not school staff.

## **E. School Booklet 2a: Satellite Site Observation Schedule**

Whenever a school has one or more satellite sites within the Young Lives site which teach Grades 4 and/or 5, complete the Satellite Site Observation Schedule once for each satellite site. The questions are basically the same as for the main school

observation except the additional question 0.1. On question 0.1 carefully identify all classes (using the class ID) which are taught in the satellite.

### **F. School Booklet 3: Principal Questionnaire**

One principal questionnaire should be completed for each **school**. The ID used for the principal questionnaire is the same as the school ID.

This questionnaire is self-administered, but fieldworkers will need to review the questionnaire and check any questions which have not been completed. The questionnaire should take 45 minutes to complete.

Please ensure that the cover sheet is correctly completed.

If the principal is absent during the fieldwork time, please interview the deputy principal and ask him to answer with reference to the principal. Try to find a deputy who knows the principal well.

If the principal is new to the school then you may need to ask another member of staff some of these questions. If the Principal is absent from the school for the duration of the fieldwork period, please ask their deputy to complete this instrument.

#### ***Specific Question Guidance***

**Q 0.2** The school code can be copied from the school codes in 0.1

**Q 1.6** Including working in any kind of school in any location as a teacher.

**Q 1.8 and 1.9** If no exact match is found, choose the closest alternative.

**Q 3.1** Full-day schooling means two shifts – before and after lunch on most days of the week.

**Q 5.0** This question asks if all parents who wish for their children to attend this school are able to send their children here or if there are restrictions on entry.

**Q 5.2** Please enter figures in Birr for the annual amount payable to the school in the current school year. If expenses are paid but not to the school (e.g. to a shop for school uniform or textbooks), do not include these expenses here.

## **G. Teacher Booklet 1: Teacher Questionnaire**

### **Dealing with Teacher and Principal Absence**

- **Always complete the cover sheets for all instruments for absent pupils and teachers and return these along with the completed instruments. Be sure to identify the pupil or teacher as absent on the cover sheet (a box will be inserted for this).**

If a grade 4 or 5 teacher or the school principal is absent on the first day of fieldwork, complete the rosters as normal and also the cover sheets for the three teacher questionnaires.

On each subsequent day of the survey fieldwork, check whether the teacher or principal is present. If he/ she is present, ask him/her to complete the questionnaire instruments.

If at the end of the fieldwork, this teacher or principal has not attended, return the uncompleted instruments for data entry with the cover pages correctly completed detailing the teacher as 'absent.'

This questionnaire should be completed by **both** the maths and literacy teacher of the sampled class. Note that in some cases this will be the SAME teacher, in other cases it may be DIFFERENT teachers. There may also be cases where the same teacher teaches maths to multiple survey classes. What is important is that every teacher who teaches these subjects to grades 4 and 5 complete ONE questionnaire. Every teacher on the teacher roster should complete the questionnaire.

The questionnaire is self-completed, but fieldworkers should check the completed questionnaire and query any uncompleted questions. You are encouraged to clarify any questions the principal may not understand. Do not let teachers take the questionnaire home with them, in case they do not bring it back the next day.

The final section of the questionnaire asks the teacher to respond to a list of attitude items. For this section, ask him/her to respond as honestly as possible and allow

him/her to do this without you looking at the responses. Explain to the teacher that this information will not be linked to him individually or shared directly with the school.

## **H. Teacher Booklet 2: Teacher Questionnaire on Mathematics Knowledge**

Each grade 4 and 5 maths teacher (every maths teacher on the teacher roster) should complete this questionnaire. Arrange a time for the teachers to complete the questionnaires under your supervision. Those teachers who teach only literacy do not need to complete this questionnaire.

- Explain to the teachers that 60 minutes is required to complete the questionnaire. The questions require careful thought.
- Allow up to (not more than) one hour per questionnaire.
- Always supervise the teachers when completing the test
- If more than one teacher is completing the questionnaire, do not allow the teachers to discuss their answers with each other or to see each other's responses
- Do not help the teacher to answer the questions
- Do not allow them to use a calculator or mobile phone
- Instruct the teacher to attempt every question and leave no responses blank if possible.

### **10. Compensation for Participants and Schools**

EDRI will provide instructions to the team leader on how to compensate the schools and the participants in the school survey. Please follow these instructions carefully.

### **11. Fieldworker conduct**

Please read the following section carefully and follow the guidance given.

## 11.1 Basic Principles

There are a number of basic principles that the fieldworker must follow throughout the survey:

1. Ensure participants have seen information sheets and understood why you are conducting a survey in their school
2. For questionnaires, ensure you ask the questions exactly as they appear in the questionnaires
3. Make sure that you thoroughly check test and attitude items and follow-up on any incomplete sections
4. Never make answers or information up
5. Keep a neutral attitude with the respondents
6. Avoid any harm to the respondent
7. Treat everything the respondent tells you as confidential
8. Never make promises to participants that you cannot keep
9. Avoid 'leading' the respondent to any particular answer. You should, however, clarify the meaning of the question if required using the information from this manual.

## 11.2 General Conduct

### CONDUCT OF THE FIELDWORKER

1. Be polite towards everyone and treat all participants with respect. Your behaviour can have an enormous influence on people's opinions in the localities covered by the survey.
2. Avoid disturbing or upsetting anyone by your behaviour.
3. Be properly dressed, so that the respondent will be inclined to trust you, as a reliable and responsible person.
4. Arrive at the stated time, and never keep the respondents waiting.
5. Never attempt to sell anything to the child or school and its representatives.
6. Never lend or borrow money or goods from the school and/or its representatives.
7. Never bribe the child or school in order to get them to cooperate.

## **12. What if...?**

### **1) There are other schools not on the list in the site**

- 1) Call EDRI (Abreham) for approval to sample the new school. At this time Abreham will provide the supervisor/fieldworker with a school code for this school (Starting with ETSC535M1).
- 2) Abreham will need to add this school to the master list of schools with the new code to keep centrally and to ensure that Zoe, Caine, Anne & Mahder are updated.
- 3) If this school contains a YL child, add the child to the Site level Roster with the appropriate information including the school name and updated code provided by Abreham.
- 4) Blank School Rosters will need to be provided to the fieldworkers in case this occurs.

### **2) Other unforeseen events**

In the case of any unforeseen event, or if you have the wrong version of the tests, the supervisor should contact EDRI immediately

## **13. Addendum for Somali Region Jijiga Town only**

### **13.1 School Sample**

Include all schools in the site except Future talent private school. Administer instruments in the language of instruction in Grade 4 (Somaligna or Amharic). Follow

normal procedures for all private schools but use the procedures below for the two large government schools – Ahmed Guray and Wellwall/Willuhat.

### **13.2 Sampling Classes in the School – For 2 Large Government Schools in Jijiga Only**

Select two classes in Grade 4 and two classes in Grade 5. These should be representative of the classes in the school. Ask the school principal how the classes are organized – are pupils allocated randomly, by when they join the school, by where they live, by ability etc. Then choose two classes to represent diversity. For example, if they are organized by ability, choose one higher and one lower ability in each grade. For example, if they are organized by when they joined the school, select one early and one late enrolment class. If they are allocated by area of residence, choose one nearby to the school and one more remote class. Ask for advice from EDRI if you are unsure what to do. **Only include the selected classes on the class roster and the teachers who teach these classes on the teacher roster. I.e. for the purposes of the survey, treat these classes as the only classes in the school.**

### **13.3 Sampling Pupils in the Class – For 2 Large Government Schools in Jijiga Only**

If there are more than 59 pupils in a class, we will use a procedure to select a sample of 40 pupils to be included in the survey using the techniques described below. You will only record the sample pupils on the class roster. When answering questions about the class, however, in the class roster questions 1-28 and in the teacher background questionnaire, responses should relate to the whole class.

#### **Selection Procedure**

- You need to follow this procedure on the day you administer the first pupil instrument
- Use the 'Random Number Lists' on the last pages of this addendum (Appendix)
- Ask the class teacher for the class register (list of pupil names)
- Count the number of pupils on the register
- Select the column on the Random Number List which is **closest to but larger than** to the number on the register you counted above. *For example if there are 68 students on the register, select the random number list with 70 children. If there are 91 students in a class, select the random number list with 95 children.*



- Place this random number list next to the class register (and line up the two lists – they may have different spacing see below)

Nguyen Tat Quan	←	23
Nguyen Thuy Quynh	←	14
Le Thuy Hanh	←	3
Tran Thi Thu Hien	←	7
Nguyen Tat Quan	←	9

- Starting with the highest number on the selected random number list, select the child's name next to the highest number (in the example above it is 23)
- This child will be included in the class sample if he/she is present on the day of the first pupil instrument administration
- If this child is absent from class or if there is no name next to this number ignore this selection and go to the next highest number
- Write the selected child's name on the class roster in column 2
- Repeat the process using the second highest number, then the third highest number and so on, until there are 40 children recorded in the class roster

## ERRATA

- Pupil background questionnaire Hadiya version Q32 options coded 03 and 04 are reversed when compared to the other language versions. This will be re-coded in the dataset.
- Pupil literacy test Somaligna version Q4 has an undeleted code 0 (ignore)
- Pupil literacy test Somaligna version Q27 The box to tick for the third possible choice, "I do not attend extra classes", is not on the same row of most of the text that illustrates the answer.
- Pupil literacy test Oromiffa version Q8 there is no translation of the word "people" (it remains written in English)
- Pupil literacy test Sidaminga version Q1 codes are missing

6. Pupil background questionnaires – fieldworker completed section questions are numbered with a missing part of the sequence i.e. 0.1, 0.3, 0.4, 0.7, 0.8 with 0.2 missing.

## Appendix: Random Number Lists 60-115 Pupils on Register Page 1

Total Pupils	60	65	70	75	80	85	90	95	100	105	110	115
Pupil #												
1	33	46	48	13	73	37	47	40	45	96	29	111
2	11	22	65	3	68	54	28	27	46	18	40	40
3	55	39	22	53	70	25	3	86	74	79	104	24
4	53	27	37	54	53	14	75	65	10	103	98	64
5	48	19	21	24	18	55	9	77	38	82	37	10
6	10	48	35	62	15	20	31	3	67	53	96	42
7	60	10	42	61	5	11	51	57	21	2	95	63
8	26	63	7	16	29	32	71	95	40	86	19	59
9	39	12	44	8	35	81	19	50	77	60	92	27
10	29	58	11	11	40	75	15	20	81	102	83	13
11	28	56	24	48	23	67	1	46	20	29	109	15
12	21	9	32	29	52	29	2	10	28	23	94	55
13	50	41	14	28	16	66	74	79	84	69	60	21
14	8	45	68	40	80	68	83	33	12	5	4	8
15	34	40	19	37	51	79	88	72	11	9	108	74
16	36	65	50	49	49	30	54	67	7	10	25	29
17	9	34	39	41	47	70	73	41	4	26	34	60
18	5	3	51	4	36	26	18	28	89	63	24	68
19	57	59	36	20	7	48	38	23	37	24	41	7
20	31	44	26	58	37	61	78	29	64	3	49	90
21	49	60	46	45	56	73	34	82	90	73	44	53
22	7	54	12	19	59	17	32	44	5	93	2	92
23	42	38	62	65	34	5	89	47	80	71	79	56
24	12	13	30	17	72	46	16	48	58	25	35	33
25	43	8	1	66	48	23	59	7	60	14	13	11
26	19	31	56	57	30	74	43	45	61	89	68	48
27	13	24	59	34	67	21	26	13	75	41	3	26
28	2	17	41	74	41	53	63	90	82	57	26	70
29	3	18	27	12	77	42	4	88	99	78	91	9
30	52	7	64	5	57	65	42	85	51	62	77	41
31	38	28	16	52	74	51	40	39	32	7	75	80
32	58	4	52	35	13	7	49	68	86	45	99	112
33	20	2	69	39	45	78	66	55	55	27	18	61
34	41	57	40	9	43	2	67	63	2	8	20	1
35	6	26	58	44	55	43	60	78	27	99	64	5
36	27	30	28	7	54	64	27	42	34	28	43	51
37	24	50	60	26	11	80	36	75	65	37	69	52
38	4	5	66	1	27	71	35	6	39	52	46	106
39	16	6	47	2	19	27	25	2	3	33	27	104
40	30	37	20	14	10	44	58	17	93	50	71	37
41	32	32	67	21	71	45	10	61	36	75	74	47
42	23	62	61	64	42	76	57	36	35	32	85	103
43	17	33	2	69	14	60	52	92	47	16	6	22
44	14	1	43	75	38	85	82	9	94	85	89	71
45	18	21	70	38	65	31	37	37	16	20	12	3
46	54	29	18	55	32	40	23	34	42	51	39	65
47	45	52	15	42	75	49	13	83	83	22	22	109
48	15	53	17	60	66	39	5	53	24	65	36	28
49	25	36	54	71	3	38	87	11	30	97	70	23
50	44	15	23	33	4	58	45	62	54	76	28	91

**Appendix: Random Number Lists 60-115 Pupils on Register Page2**

Total Pupils	60	65	70	75	80	85	90	95	100	105	110	115
Pupil #												
51	51	20	34	32	79	83	22	51	100	39	5	107
52	46	16	13	18	1	16	29	5	19	56	90	58
53	37	11	49	50	22	62	72	25	98	83	21	14
54	22	42	5	15	25	18	24	1	33	31	38	36
55	47	35	25	43	78	35	86	91	63	55	15	34
56	40	43	55	73	33	15	44	64	68	54	84	93
57	56	51	29	27	76	41	80	60	73	72	33	76
58	1	25	31	46	62	36	84	16	26	91	8	18
59	59	23	53	68	20	19	90	66	70	11	87	67
60	35	61	45	51	17	10	64	94	8	88	51	105
61		64	10	63	9	3	46	38	62	13	107	12
62		49	9	31	12	24	17	31	59	4	97	108
63		55	3	70	6	12	81	93	49	92	65	39
64		14	63	67	61	4	61	26	87	12	48	66
65		47	57	30	21	8	76	74	95	48	7	49
66			38	6	64	59	68	19	69	67	73	45
67			33	59	24	82	70	21	57	95	11	87
68			8	56	69	52	6	71	50	17	14	57
69			4	25	50	72	7	54	91	1	82	77
70			6	36	28	77	69	8	22	49	63	89
71				23	63	6	48	89	15	87	105	81
72				72	31	63	33	24	72	59	45	35
73				22	58	9	62	73	23	80	61	82
74				10	39	34	55	30	88	81	9	16
75				47	44	13	12	76	71	44	80	95
76					26	56	56	80	92	64	42	46
77					8	84	50	58	31	101	58	69
78					2	1	11	69	41	84	86	86
79					46	28	21	14	25	46	55	85
80					60	47	39	84	56	58	53	72
81						69	8	52	1	104	106	62
82						50	79	43	6	77	93	98
83						57	77	12	18	21	23	115
84						22	41	22	76	70	54	19
85						33	20	59	85	61	78	83
86							53	4	66	66	59	99
87							14	87	13	47	103	38
88							65	18	14	6	10	2
89							85	81	52	90	101	54
90							30	70	79	34	31	88
91								15	78	36	30	43
92								35	17	105	17	113
93								32	29	100	66	96
94								49	9	40	1	32
95								56	97	19	88	17
96									96	43	16	94
97									53	94	62	79
98									44	15	50	73
99									43	42	72	97
100									48	38	57	78
101										98	102	30
102										35	67	6
103										74	81	84
104										68	100	20
105										30	110	100
106											47	31
107											52	4
108											76	44
109											56	25
110											32	110
111												101
112												75
113												102
114												114
115												50

**Appendix: Random Number Lists 120-180 Pupils on Register Page1**

Total Pupils	115	120	125	130	135	140	145	150	155	160	165	170	175	180
Pupil #														
1	111	12	112	123	34	67	132	90	134	21	2	46	130	96
2	40	30	92	53	62	37	85	80	124	10	83	154	88	124
3	24	99	91	48	20	120	54	119	136	121	99	84	30	146
4	64	64	108	60	114	47	24	4	107	47	95	8	93	1
5	10	33	103	76	46	1	104	87	4	53	59	75	80	18
6	42	36	52	119	76	97	128	136	18	58	28	157	61	54
7	63	72	51	64	118	113	78	43	2	18	73	139	1	93
8	59	26	67	88	30	60	88	135	142	128	130	42	62	40
9	27	13	106	101	63	101	80	142	39	91	151	12	95	29
10	13	82	8	24	57	74	12	50	21	74	115	65	44	24
11	15	70	57	51	1	128	139	33	145	13	84	137	139	145
12	55	32	10	116	89	38	116	108	111	34	58	92	144	171
13	21	115	45	1	105	93	112	67	56	93	142	5	78	120
14	8	24	18	102	49	129	3	137	37	152	156	97	60	16
15	74	110	33	47	31	51	94	112	63	126	11	136	100	94
16	29	62	38	118	41	69	33	1	82	40	18	33	59	104
17	60	35	40	59	25	25	9	6	16	130	131	141	168	123
18	68	100	72	4	71	68	49	10	67	46	96	130	126	68
19	7	67	69	107	107	116	63	56	24	124	40	90	106	14
20	90	83	31	40	18	36	4	75	93	92	25	48	12	19
21	53	88	24	15	15	115	30	26	75	11	110	112	31	92
22	92	3	100	10	22	95	45	45	9	151	129	52	77	13
23	56	11	99	26	99	58	13	12	7	72	133	40	107	32
24	33	18	102	9	103	131	122	94	6	104	68	19	167	119
25	11	71	79	30	8	92	31	96	27	1	123	164	36	106
26	48	52	68	94	14	105	90	100	122	123	10	116	94	103
27	26	38	47	69	44	15	117	47	50	59	165	170	4	158
28	70	60	113	77	67	20	64	141	117	2	124	134	57	66
29	9	50	77	86	93	31	16	121	54	134	85	62	16	160
30	41	2	65	35	106	106	111	105	132	131	76	100	127	139
31	80	76	63	16	23	62	124	64	129	86	163	109	120	173
32	112	79	20	74	21	87	62	34	10	138	63	28	7	25
33	61	63	125	100	9	54	130	114	3	55	74	57	163	157
34	1	57	39	114	87	39	44	31	26	42	17	49	43	22
35	5	31	12	62	13	132	142	32	138	3	117	108	169	127
36	51	73	93	20	92	46	77	83	76	57	31	151	9	134
37	52	103	70	37	60	4	21	81	133	23	67	13	32	109
38	106	25	50	79	47	7	93	111	53	66	154	58	47	34
39	104	105	107	2	55	98	138	99	152	111	144	37	123	71
40	37	117	90	54	27	136	19	123	106	114	119	60	75	15
41	47	94	105	125	132	53	7	85	109	100	70	105	63	65
42	103	56	48	61	84	117	40	3	130	49	86	103	51	144
43	22	85	83	27	110	66	65	93	25	117	162	99	171	55
44	71	10	4	96	51	10	97	23	77	7	87	25	27	141
45	3	92	101	78	73	42	140	22	126	68	147	145	150	116
46	65	81	13	128	11	73	118	68	48	160	15	1	66	161
47	109	98	53	22	123	81	5	28	79	129	97	77	128	125
48	28	20	30	56	85	110	113	127	131	48	100	79	35	121
49	23	47	73	41	102	18	120	18	62	145	24	156	149	46
50	91	111	42	5	29	78	70	63	36	27	6	118	113	26

## Appendix: Random Number Lists 120-180 Pupils on Register Page2

Total Pupils	120	125	130	135	140	145	150	155	160	165	170	175	180
Pupil #													
51	22	123	29	112	19	73	25	118	83	75	147	154	69
52	42	119	28	97	103	106	95	12	132	14	122	20	102
53	48	86	12	129	23	59	30	96	44	82	119	68	168
54	51	3	104	3	21	15	132	116	77	37	127	136	85
55	87	124	14	64	56	23	134	153	101	43	30	65	126
56	120	54	33	128	88	102	57	17	87	78	91	45	147
57	15	7	127	111	124	22	130	69	22	51	86	121	117
58	7	23	65	33	77	125	122	43	107	77	64	86	111
59	90	97	23	5	8	2	16	13	31	109	47	6	20
60	6	84	3	90	134	71	98	102	33	79	128	83	178
61	34	26	55	68	61	108	109	101	9	55	61	89	48
62	59	34	106	70	16	121	86	72	147	146	31	69	101
63	14	96	72	134	43	52	97	68	141	22	121	81	30
64	65	82	31	124	52	129	35	110	97	108	165	29	162
65	45	43	67	65	138	42	148	149	157	33	87	37	89
66	53	22	81	40	14	66	147	120	63	30	120	53	78
67	119	1	99	126	41	36	124	40	30	158	68	152	77
68	27	41	73	37	55	99	78	70	32	155	70	119	72
69	112	61	66	36	125	91	69	19	14	127	124	11	80
70	75	59	84	50	114	74	55	92	84	47	74	110	31
71	114	37	45	7	70	10	92	44	36	36	39	8	114
72	116	85	17	61	5	48	5	80	51	164	73	159	170
73	9	120	82	130	102	135	82	1	56	38	106	112	7
74	96	111	38	10	72	144	66	99	78	141	71	74	21
75	17	76	43	80	83	75	143	125	112	3	138	147	6
76	8	44	75	53	13	123	53	127	69	71	29	54	130
77	66	25	39	94	112	38	145	105	39	42	153	76	41
78	86	66	63	122	75	114	138	22	146	152	104	99	174
79	40	15	7	54	12	83	79	139	120	46	115	52	63
80	80	27	130	86	45	89	54	59	79	116	159	145	36
81	1	6	105	35	65	82	102	97	150	94	125	102	164
82	106	14	25	91	139	47	41	65	115	49	98	103	131
83	95	81	8	43	107	14	40	78	136	12	24	24	84
84	16	95	129	6	109	76	74	148	80	69	144	111	81
85	84	64	109	104	133	60	21	141	25	72	163	55	70
86	68	122	93	96	96	141	36	94	26	98	114	122	159
87	78	117	71	24	127	109	146	55	103	118	72	18	107
88	44	114	115	98	79	57	117	57	76	143	16	21	39
89	49	62	19	28	121	96	59	123	156	39	93	151	154
90	19	94	117	59	30	81	101	20	88	29	7	115	172
91	21	58	83	108	29	1	62	88	148	114	63	104	10
92	4	35	58	121	111	133	113	121	24	19	10	50	83
93	91	49	32	69	94	25	84	144	37	150	78	15	137
94	89	98	21	127	85	95	48	83	29	60	169	42	62
95	102	75	121	82	33	43	129	113	50	54	150	25	50
96	108	56	70	74	3	39	76	103	52	26	66	40	112
97	41	19	85	117	44	92	20	45	95	140	88	137	17
98	54	74	50	56	122	32	19	15	62	137	82	23	75
99	61	5	113	119	32	11	88	5	61	27	94	56	74
100	39	78	11	17	49	61	125	34	119	64	41	160	42
101	113	60	122	115	35	127	27	42	4	105	56	116	143
102	58	55	111	100	89	35	52	114	19	160	21	172	108
103	37	36	46	66	24	110	29	155	98	8	11	73	166
104	69	28	120	75	48	41	46	60	108	81	6	162	28
105	23	2	124	4	2	79	71	100	35	16	96	143	110
106	97	110	34	78	76	115	60	8	154	57	3	71	175
107	107	32	6	45	100	26	9	14	135	159	17	129	98
108	74	11	90	88	130	8	139	33	60	9	2	132	151
109	46	29	112	101	9	17	51	51	20	139	107	166	47
110	5	118	49	79	40	55	131	71	5	65	113	131	90
111	77	80	57	38	11	143	14	23	17	106	54	109	67
112	104	104	89	133	126	46	106	91	102	138	162	72	58
113	55	116	95	120	90	87	37	115	155	91	160	5	129
114	118	115	91	58	59	86	7	140	65	101	15	138	57
115	101	21	87	131	118	119	118	61	45	34	132	19	51

### Appendix: Random Number Lists 120-180 Pupils on Register Page3

Total Pupils	120	125	130	135	140	145	150	155	160	165	170	175	180
Pupil #													
116	29	109	68	83	17	131	104	108	158	149	161	98	64
117	43	88	36	32	108	50	65	35	139	112	35	97	45
118	28	71	126	39	80	107	91	90	28	66	167	173	61
119	109	9	13	19	34	100	89	28	144	5	117	64	128
120	93	46	103	95	123	27	15	86	71	88	80	175	148
121		89	97	26	27	37	110	73	113	161	123	105	152
122		17	18	135	22	105	2	137	82	125	9	79	118
123		87	42	72	57	58	128	74	75	23	129	14	115
124		16	80	125	82	103	11	38	96	7	89	164	163
125		121	44	48	63	51	61	30	137	20	59	96	122
126			98	77	86	29	144	85	143	53	34	142	132
127			110	16	26	136	150	95	122	122	149	92	95
128			108	12	140	34	13	143	116	104	146	117	35
129			52	42	84	137	42	147	140	111	102	10	56
130			92	2	91	53	38	29	105	48	168	3	23
131			52	119	126	116	81	99	132	43	82	33	
132			116	71	134	126	151	109	90	36	156	156	
133			81	6	68	107	47	94	92	23	135	11	
134			113	135	101	77	104	81	145	27	158	135	
135			109	64	18	140	146	15	1	38	58	82	
136				99	98	133	128	54	135	51	140	149	
137				28	20	115	150	6	107	83	13	87	
138				104	56	72	64	16	113	85	70	60	
139				50	84	24	112	73	62	110	157	155	
140				137	145	70	11	90	126	53	87	177	
141					6	120	119	142	148	18	28	5	
142					72	44	89	43	121	26	2	52	
143					67	73	135	118	56	4	34	153	
144					69	58	31	38	93	166	161	169	
145					28	103	49	12	103	101	26	97	
146						17	58	64	35	14	39	59	
147						39	87	106	41	20	124	179	
148						8	98	8	128	148	114	88	
149						49	32	159	21	152	165	49	
150						149	41	149	120	22	146	38	
151							154	89	52	45	153	176	
152							84	133	13	32	125	105	
153							66	153	44	131	155	133	
154							46	127	4	44	133	150	
155							52	110	50	140	141	53	
156								125	80	143	101	3	
157								41	61	135	49	12	
158								70	134	133	174	100	
159								85	153	142	85	142	
160								67	89	95	118	113	
161									136	50	22	43	
162									45	55	67	2	
163									157	81	108	79	
164									32	158	33	167	
165									102	67	84	99	
166										155	46	44	
167										76	41	8	
168										69	148	9	
169										126	48	180	
170										111	38	165	
171											134	73	
172											91	138	
173											90	37	
174											17	91	
175											170	27	
176												140	
177												136	
178												76	
179												86	
180												4	

