

# Within School Student Sampling Instructions for Inspectors

Solomon Islands  
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# Sample Design



- PILNA 2018 Sample is a two-stage stratified sample.
- First Stage: a total of 120 Schools selected **randomly** from all schools in the country are selected to participate in the assessment.
- Second Stage: Within the selected schools, 25 students are selected randomly from all eligible students. They will participate in the assessment.
- The sample design seeks to collect enough information about the population of interest without the need of a costlier census.

# Sample Design (II)



- Under these circumstances, the sample of schools and students is **representative** of the school and student population under assessment.
- A representative sample is one where we can infer the results of the sample (student achievement, etc.) to the general population from which it was drawn.
- The sampling method aims to reduce **bias** and increase the **accuracy** of the sample estimate.

# School Sample



- Stratification allows us to draw a representative sample of schools in the country based on characteristics of interest that, in view of authorities, might explain difference in student outcomes
  - Rural/Urban
  - Public / Private
  - Region (province)
- Each School in the sample is **representative** of 1 or more schools with similar characteristics in the country.
- Schools are selected **randomly** to give every school a chance to participate and to eliminate any discretion on the selection process.

# Student Sample



- Within each of the 120 Schools, 25 students from each grade (4 and 6) must be selected **randomly** to participate in the assessment
  - Schools with small number of students ( $\leq 25$ ) in each grade, all participate in the survey.
  - Schools with more than 25 students in each grade: only 25 participate, which must be selected randomly to avoid discretion on part of Test Administrator or School authority.

# Random Sampling Rationale



- The student sample is drawn randomly to ensure that every student in the target grade at selected schools has the same chance of participating.
- It may be that at your school we randomly chose a higher than average group of students and at another school we chose a lower than average group. That is what happens in random sampling!
- It is however essential for accurate estimates at the country level that the student sample within each school is truly random.
- It is very important that you **do not substitute or replace students under any circumstances**. Only the students listed on the Class Attendance Form can sit the assessment. If some students are absent then the assessment should proceed with a reduced number of students.

# Student Sample



- Under optimal circumstances and to ensure a random sample of students within a school some information should be available before the visit to schools:
  - National Coordinators receive from selected schools the list of students enrolled in selected school.
  - National Coordinators submit to EQAP these lists. EQAP draws a random sample of 25 students on the list if enrolment  $\geq 25$ .
  - EQAP returns to National Coordinators list of **sampled students** that will participate
  - National Coordinators send test Administrators to schools with list of sampled students.

# Student Sample – Other Scenarios



- In some circumstances, it's not possible to gather in anticipation the list of eligible students to draw the student sample.
- For these, the approach varies: the Test Administrator must replicate the student sampling process once he arrives to the school, rather from a list of students previously selected by EQAP.
- In this regard, it is essential to **avoid** as much as possible the **discretion** from any of the partners on the selection of students.
- Test Administrator must take control of the sampling process, and try to follow a set of consistent rules that don't favour any particular student



# Student Sample – No previous list



- So in case the only information we have about a particular school is only enrolment numbers:
  - EQAP will generate a Class Attendance List (CAL) with
    - Prepopulated ID codes
    - Placeholders for Student's demographic data (Name, gender, date of birth)
  - Also, they will send 25 test Booklets and Questionnaires with labels for the corresponding ID codes for each grade.
  - This information will be sent to the School with the Test Administrator.
  - Test administrator must fill out the information from the students.

# Arrival of Test Administrator in School



- In all scenarios, the Test Administrator must ask the School Principal on arrival of the school the list of all eligible students in both grades under assessment.
- From this list the students will be selected to sit the test.
- If student is not present in the day of the test, this must be recorded.
- Once the lists are gathered, they must follow the instructions in the next slides.

# Class Attendance List -Fill



## EDUCATIONAL QUALITY ASSESSMENT PROGRAMME CLASS ATTENDANCE LIST

Country: PAPUA NEW GUINEA

School

Grade: 4 Stream: 1

Class  
Teacher

PPIN	#	FIRST NAME	LAST NAME	DATE OF BIRTH	GENDER: B or G
184010001401001	1	F1 Eden	L1 Banuve	13/05/2006	B
184010001401002	2	F2	L2		
184010001401003	3	F3	L3		
184010001401004	4	F4	L4		
184010001401005	5	F5	L5		
184010001401006	6	F6	L6		
184010001401007	7	F7	L7		
184010001401008	8	F8	L8		
184010001401009	9	F9	L9		

Student ID  
for  
Tracking

Name Placeholder to fill out  
on day of test administration

Place to fill out  
Demographic information  
of the student

# Booklet Label

Name	<b>F1 L1</b>
Date of Birth	<b>[placeholder for DOB]</b>
Gender	<b>[placeholder for Gender]</b>
Stream	<b>1</b>
Teacher's Name	<b>CT1</b>
School	<b>Tahetahe Primary School</b>
Country	<b>PAPUA NEW GUINEA</b> 184010001401001

- Each Booklet will have a Label for identification with the student in the CAL
- The PPIN number highlighted here must match the one in the CAL.
- Each Booklet should be filled with the information filled out in the CAL

# Booklet Label – Fill with data from CAL



Country: PAPUA NEW GUINEA  
 Booklet Label Grade: 4 Stream: 1 Scho Class: Teasel

PPIN	#	FIRST NAME	LAST NAME	DATE OF BIRTH	GENDER: BOYS
184010001401001	1	F1 Eden	L1 Banuve	13/05/2006	B
184010001401002	2	F2	L2		
184010001401003	3	F3	L3		
184010001401004	4	F4	L4		
184010001401005	5	F5	L5		
184010001401006	6	F6	L6		

  

Name	F1 L1 Eden Banuve
Date of Birth	13/05/2006
Gender	Boy
Stream	1
Teacher's Name	CT1
School	Tahetahe Primary School
Country	PAPUA NEW GUINEA

Diagram showing data flow from CAL table to Booklet Label form:

- PPIN 184010001401001 (blue circle) → Country PAPUA NEW GUINEA (blue circle)
- Eden (red circle) → Name Eden Banuve (red circle)
- Banuve (red circle) → Name Eden Banuve (red circle)
- 13/05/2006 (green circle) → Date of Birth 13/05/2006 (green circle)
- B (yellow circle) → Gender Boy (yellow circle)
- 1 (from Stream) → Stream 1 (black text)
- CT1 (from Teacher's Name) → Teacher's Name CT1 (black text)
- Tahetahe Primary School (from School) → School Tahetahe Primary School (black text)

- Check that the PPIN in the CAL matches the one in the Booklet
- Fill out the Name of the Student in the Label
- Fill out the Date of Birth
- Fill out the Gender

# Arrival of Test Administrator in School



- Once test Administrator arrives in school he might face three distinct scenarios:
  1. School has one Class in Grade
    1. Number of students is 25 or less
    2. Number of students is larger than 25.
  2. School has more than one Class in Grade
    1. Class size is 25 or less
    2. Class Size is more than 25

# Scenario 1.1



- In this case, the school has one Class, and they have less than 25 students
- In this case, all students must participate
- Complete the CAL with the student names
- Update the student's data on the booklet labels according to the CAL
- Distribute the Booklets to the students to administer the test

# Scenario 1.2



- In this case, the school has one Class, and they have more than 25 students
  - Request the List of students for the grade
  - Select the first 25 students in alphabetical order
  - Fill the Student Names in the Class Attendance List



Grade 4

Class 1

#	First Name	Last Name
1	Randy	Adkins
2	Gladys	Alvarado
3	Mack	Andrews
4	Terrance	Arnold
5	Greg	Benson
6	Norma	Bryan
7	Leigh	Burgess
8	Pam	Cannon
9	Rosalie	Clarke
10	Everett	Crawford
11	Karen	Diaz
12	Bobbie	Fields
13	Taylor	Frank
14	Audrey	Freeman
15	Shane	French
16	Linda	Garner
17	Gwen	George
18	Kathleen	Guzman
19	Jeffery	Henry
20	Ashley	Hughes
21	Jaime	Jacobs
22	Lila	Jenkins
23	Jessie	Lopez
24	Sylvester	Mccormick
25	Molly	Mclaughlin
26	Lamar	Nash
27	Matt	Nichols
28	Freda	Norman
29	Darlene	Osborne
30	Geoffrey	Patterson



- From the List of the Class, the first 25 Students are selected for the test
- The information must be filled in the CAL and the corresponding Booklet Labels as indicated Before

Country: PAPUA NEW GUINEA  
 Grade: 4 Stream: 1



PPIN	#	FIRST NAME	LAST NAME	DATE OF BIRTH	GENDER: B or G
184010001401001	1	Randy	Adkins	9/03/2006	B
184010001401002	2	Gladys	Alvarado	22/06/2008	G
184010001401003	3	Mack	Andrews	29/03/2007	B
184010001401004	4	Terrance	Arnold	19/07/2007	B
184010001401005	5	Greg	Benson	26/01/2008	B
184010001401006	6	Norma	Bryan	18/05/2008	G
184010001401007	7	Leigh	Burgess	10/10/2007	B
184010001401008	8	Pam	Cannon	26/06/2007	B
184010001401009	9	Rosalie	Clarke	22/03/2007	G
184010001401010	10	Everett	Crawford	24/01/2007	B
184010001401011	11	Karen	Díaz	13/10/2007	G
184010001401012	12	Bobbie	Fields	29/09/2007	B
184010001401013	13	Taylor	Frank	22/02/2006	B
184010001401014	14	Audrey	Freeman	29/05/2007	G
184010001401015	15	Shane	French	11/08/2008	B
184010001401016	16	Linda	Garner	29/09/2007	G
184010001401017	17	Gwen	George	6/11/2006	G
184010001401018	18	Kathleen	Guzman	10/08/2008	G
184010001401019	19	Jeffery	Henry	31/03/2006	B
184010001401020	20	Ashley	Hughes	16/01/2006	G
184010001401021	21	Jaime	Jacobs	5/03/2006	B
184010001401022	22	Lila	Jenkins	7/02/2008	G
184010001401023	23	Jessie	Lopez	14/07/2006	G
184010001401024	24	Sylvester	Mccormick	16/09/2008	B
184010001401025	25	Molly	Mclaughlin	25/12/2006	G

- The data of the first 25 students must be filled in the CAL
- Once this is done, the corresponding Booklets must be assigned to each student in this list as explained before

# Scenario 2.1



- In this case, the school has more than one Class, and they have 25 students or less
  - In this case, an entire class must be selected first.
  - For this purpose, select the class of the teacher **whose last name is the first in alphabetical order.**
  - The corresponding class sits for the test.

# Class List - Selection

#	First Name	Last Name
1	Jamie	Hall
2	Sandra	Crawford
3	Katrina	Guerrero
4	Joseph	Graham

- This school has 4 classes (streams)
- Class 2 has the teacher with the first last name ordered alphabetically
- This Class is selected for the test
- All students in the class (25 or less) sit the test

# Scenario 2.2



- In this case, the school has more than one Class, and they have more than 25 students
  - In this case, an entire class must be selected first.
  - For this purpose, select the class of the teacher **whose last name is the first in alphabetical order.**
  - The corresponding class sits for the test.

# Conclusion



- More information can be seen in the following documents:
  - PILNA 2018 Instructions for TS-Only Scenario4.docx
  - Instructions for Test Administrators
  - Instructions for School Coordinators