

Southern Africa Consortium for Monitoring Educational Quality

(SACMEQ)

Pilot Study Manual for National Research Co-ordinators

(October 1994)

There are a number of tasks that you will need to attend to in order to ensure that the SACMEQ Pilot Study runs smoothly in your country. These tasks have been summarised as a “checklist” on pages 7 and 8 of this manual. Please read this checklist carefully. As you complete each task, make a tick in the appropriate position on the checklist. Please make certain that you complete ALL tasks!

1. Instruments

In addition to this Pilot Study Manual for National Research Co-ordinators, you should have received the following materials from the IIEP:

- (a) 100 Pupil Booklets (5 schools x 20 Pupil Booklets),
- (b) 25 Teacher Questionnaires,
- (c) 5 School Head Questionnaires,
- (d) 5 copies of the Pilot Study Manual for Data Collectors,
- (e) 5 copies of the Pupil Name Form,
- (f) 5 copies of the School Form,
- (g) some spare copies of each of the above documents, and
- (h) a revised version of the DEM software (including electronic codebooks with corresponding datafiles on the diskette that are designed to be used by you to enter data for the Pilot Study).

These materials have been provided so that you can undertake a Pilot Data Collection in five schools. The data will be used to guide the finalization of all instrumentation for the first major SACMEQ project which is due to be launched early next year.

Please check all materials in order to ensure that you have the correct number of each document and that there are no pages that are blank or missing. If any documents have errors, replace them by using the spare copies that have been provided. If there are still problems, fax Mioko Saito at the IIEP to ask for assistance.

Special Note:

The tests and questionnaire that have been sent to you are valuable research instruments. A great deal of effort and many thousands of dollars have been expended in preparing them for the SACMEQ project.

Please treat these instruments as confidential documents that should not be misplaced or copied. If they were to be distributed or misused by persons outside the SACMEQ project, they could lose their validity for the main data collection.

Make sure that your Data Collectors return all of the research instruments (completed and uncompleted) to you after they visit their school(s).

2. Selecting Five Schools for the Pilot Study

You will select a judgement sample of five schools to cover the variance of Grade 6 reading achievement in your country. Please use one of the following two methods to select the schools.

(a) Method A - The Preferred Method

You will need to obtain information about the average achievement levels of schools in your country. This information will either be in the form of exam results or standardised test scores for the upper end of the primary school system. Information should be available from the Examinations Unit

in your country. Typically these examination results or test scores will be reported with (or can be used to produce) a mean score for each school and a standard deviation that describes the variation among the school means. Using this information, select five schools as follows:

- School 1: at about +2 standard deviations
- School 2: at about +1 standard deviations
- School 3: at about the mean score for the examination or test
- School 4: at about -1 standard deviations
- School 5: at about -2 standard deviations

It is important to have a mixture of urban and rural schools in the sample. It is recognised that your Data Collectors cannot travel very far for the Pilot Study, but nevertheless there should be some rural schools within one to two hours journey from the capital city where you are located.

(b) Method B - The Alternative Method

If you are sure that no documented information is available that would allow you to use Method A, then it is suggested that you obtain information from the inspectorate. Ask the national inspectors of primary schools or, better still, of primary school reading for the required information. Refer them to Grade 6, and then ask them to identify, in terms of reading achievement:

- a very good school
- a fairly good school
- an average school
- a fairly poor school
- a very poor school

As for Method A, do not select schools from only an urban area but attempt to select one or two rural schools that are within one to two hours travelling distance from the capital city where you are located.

3. First Contact with Schools

Send an introductory letter (see model letter in Appendix A) to the Heads of the selected schools. If this is not possible, have the Pilot Study Data Collector or a District Education Officer take the letter to the school with the School Form (see Appendix B). The letter should explain the purpose of the testing program and the details of how and when the subsampling of 20 pupils will be carried out within the school. The letter should also include a request for the School Head to complete and return the School Form. The completed School Form should be mailed to your office or given to the Data Collector when he/she visits the school.

4. Prepare the Package of Instruments for Each School

From the School Form, you will be able to find out the number of teachers of reading in Grade 6 in each school. Put the instruments into five piles. Each pile should contain:

- 20 Pupil Booklets (Questionnaire and Test)
- The required number of Teacher Questionnaires
- 1 School Head Questionnaire
- 1 Pupil Name Form
- Some spare copies of each of the above

5. Select The Five Data Collectors

It is suggested that you select five people that will be involved in the Main Data Collection. These people can then be used during the training of other Data Collectors.

6. Train The Data Collectors

Organise a one day session where you take the selected Data Collectors through exactly what they have to do (see Pilot Study Manual for Data Collectors). The first task for this meeting is

to have the Data Collectors complete the ID numbers for all instruments that they will be taking to their designated school.

Please note that the Data Collectors must measure the height of each pupil. They must therefore be provided with a metre ruler and be given some practice in the measurement of children's height (in bare feet). They should be provided with some "sticky stuff" so that they can temporarily attach the ruler to a classroom wall. This will improve the accuracy of the measurements.

Further to what is in the Pilot Study Manual for Data Collectors, you should stress the following three points:

- (a) The Data Collectors must know how to get to the specified school before they set out.
- (b) They must check that they have all of the Pupil Booklets, the correct number of Teacher Questionnaires, the School Head Questionnaire, and the Data Collectors Manual before setting off.
- (c) When arriving at the school, they must have access to all Grade 6 registers. A check should be made that the registers cover only those pupils in Grade 6 (and not some other grade).

7. On the Return of Data

When the Data Collectors return the Booklets and Questionnaires from each school, check that all IDs are correct and check these against the appropriate Pupil Name Form to ensure that the two agree. If there are discrepancies, ask the Data Collector why this has occurred and let the IIEP know this. Similarly check that all School Head, Teacher, and Pupil Questionnaires are complete (i.e., no missing data). If there are missing data, ask the Data Collector why this was so and, again, let the IIEP know which problems resulted in missing data.

8. The Main Steps in Data Entry

- (a) You should install the revised version of DEM into the computer that you will be using for data entry as soon as you receive it. If you encounter any difficulties with the installation, please contact Mioko Saito immediately.
- (b) When you install the programme into the computer, you will automatically install three datafiles into which you will enter data. These files will appear on your screen as PUPIL.DBF, TEACHER.DBF, and SCHOOL.DBF when you choose "Open datafile" from the "File" menu by pressing <Enter> and then press the <Enter> key twice.
- (c) We suggest that you do all of your data entry on one computer so that all datafiles are stored in one place. That is, the data for all 100 Pupil Booklets, all Teacher Questionnaires, and the five School Head Questionnaires should be entered into the same computer.
- (d) Please note that a "check digit" will need to be inserted at three stages during the entry of the pupil reading test data. These check digits will be "5" after test item 20 (the last item in "Joseph and The Donkey"), "6" after test item 39 (the last item in "Carrots"), and "7" after test item 63 (the last item in "How to Read The Age of a Tree").
- (e) You may find that one or two of the valid ranges that you have been using have resulted in data being outside of the valid ranges that you prescribed. In this case you may wish to redefine the valid range. If so, please be sure to inform the IIEP of such changes in the documentation that you hand in.
- (f) When you have completed the data entry and corrected any errors in the data, you will need to make a copy of the three datafiles to be sent on diskette to Mioko Saito at the IIEP. To produce this diskette simply choose "Backup datafile" from the "Tools" menu, then press <Enter>. DEM will prompt you to insert a diskette in Drive A, and then ask you to press <Enter> in order to start the backup procedure.

- (g) When you have copied the three datafiles to a diskette, make a copy of the diskette which you can store in case the first diskette gets lost, or reaches the IIEP in a damaged condition.

9. Return of Data to IIEP

When all data have been entered to your complete satisfaction, please return the data on diskette to Mioko Saito at the IIEP together with the memo describing the subsampling of pupils within schools as well as any problem experienced in the Pilot Study.

Appendix A: Checklist for NRC's

Actions to be Taken <u>Phase 1: Before the Testing Session</u>	Tick
1. You have received from IIEP: 100 copies of the Pupil Booklet, 25 copies of the Teacher Questionnaire, 5 copies of the School Head Questionnaire, 1 copy of the Pilot Study Manual for NRC's, 5 copies of the Pilot Study Manual for Data Collectors, 5 copies of the Pupil Name Form, 5 copies of the School Form, and a revised version of the DEM software with datafiles.	
2. You have checked that there are no pages that are blank or missing in the Booklets, Questionnaires, and Manuals.	
3. You have selected a judgement sample of five schools to cover the variance of Grade 6 reading achievement.	
4. You have prepared a letter to be sent to the School Head of each school where you will be testing in order to explain the purpose of the study; to explain how and when subsampling of 20 pupils will be carried out; and to request completion and return of the School Form.	
5. You have received the School Form back from each School Head.	
6. You have prepared the package of instruments for each school.	
7. You have selected the Data Collectors.	
8. You have trained the Data Collectors according to the specifications in the Pilot Study Manual for Data Collectors.	
9. You have installed the Data Entry Manager software on one computer.	

<p style="text-align: center;">Actions to be Taken</p> <p style="text-align: center;"><u>Phase 2: During and After the Testing Session</u></p>	<p style="text-align: center;">Tick</p>
<p>1. You have checked that there are no discrepancies between the Pupil Name Form and the returned Pupil Booklets.</p>	
<p>2. You have checked that there are no missing data in the Teacher Questionnaire and School Head Questionnaire.</p>	
<p>3. You have trained the person(s) responsible for data entry in the use of DEM and in the use of its data cleaning procedures.</p>	
<p>4. You have returned the “cleaned” data set on diskette to IIEP.</p>	

Appendix B: Model Letter to School Heads

Dear School Head,

This letter is to inform you that your school has been selected as one of ____ schools to represent _____ (*fill in the name of your country*) in a Southern African Study of Grade 6 Reading. The other countries involved are: Kenya, Malawi, Mauritius, Namibia, Tanzania (Mainland), Tanzania (Zanzibar), Zambia, and Zimbabwe (*delete your country from this list*). The purpose of the study is to gather information that can be used to assist Ministries of Education and Culture with decisions aimed at improving: (a) the conditions of schooling; and (b) the reading achievement of Grade 6 pupils. It is extremely important that your school participates in this data collection because missing data for even a single school in our country could damage the validity of the study. I should stress that all results are confidential and will not be used by the Ministry of Education and Culture in judging your school.

Twenty Grade 6 pupils from your school will be asked to complete a Questionnaire and a Test. Questionnaires will also need to be completed by: (a) the English reading teachers of the selected pupils (about 30 minutes); and (b) you or your representative (about 45 minutes).

(NRC's note: Two possible options have been presented below. Each NRC will need to choose the most suitable option for his/her own country.)

Option 1: The Data Collector for this study will visit your school on two days. It is proposed that the first visit be on _____ (*fill in date*) at _____ (*fill in time*). On the first day, he/she will need to have access to all class registers for Grade 6 pupils. These class registers will be used to select a random sample of 20 pupils for testing when the Data Collector visits on the second day.

Option 2: The Data Collector for this study will visit your school on the morning of _____ (*fill in date*) at _____ (*fill in time*). He/she will need access to all class registers for Grade 6 pupils. These class registers will be used to select a random sample of 20 pupils for a testing session that will be held later in the day.

The testing of pupils will be in two sessions. Session 1 will last 75 minutes. There will then be a break of about 15 minutes and then another session of 90 minutes testing.

I would be grateful if you could arrange for a special room to be made available for the testing of the 20 selected pupils. It should be big enough to allow the pupils to sit comfortably and with enough space between them so that they cannot copy from each other. A library, school hall, separate classroom, or similar facility is what will be needed.

A School Form is attached and I would appreciate it if you could complete it and return it to reach me at the address given below by not later than _____ (*fill in date*).

At the same time, I would appreciate it if you could do some preliminary work before the Data Collector comes to your school:

1. Grade 6 Registers

Could you please check all Grade 6 registers for all shifts and make sure that they are up to date? Cross out the names of any pupils who have left the school and add the names of any pupils who have joined Grade 6 since the registers were made out. The Data Collector coming to your school will need these Grade 6 registers as soon as he/she arrives at your school.

2. Some Questions on the School Head Questionnaire for Which You Can Prepare Answers

There are two questions on the Questionnaire for the School Head for which you can prepare answers before _____ (*fill in the date of testing*).

a) What is the total inside area (in square metres) of all permanent and temporary classrooms in your primary school? Please measure the inside area of each classroom and calculate the square metres. Then add them up in order to have the total for the school. Do not include “outdoor” teaching areas in this calculation.

b) How many books are there in the School Library? This question refers to the school library and not classroom libraries. If you have a school library, could you please count the number of books you have in it and keep a note of this for when you complete your Questionnaire.

If you have any questions about any matters concerning this important study, please contact:

*(Insert name, address, and telephone number
of person to be contacted)*

Thank you for your co-operation.

Sincerely yours,

Appendix C

Country	□ □ □
Region	□ □
District	□ □
School	□ □ □ □ □ □
Instrument	4

**Southern Africa Consortium for Monitoring Educational Quality
and
International Institute for Educational Planning**

Grade 6 Reading Study

School Form

Name of School Head:
Name of School:
Full Address:
Telephone:
1. Total Enrolment of school (include all shifts):
2. Total Enrolment of Grade 6 (include all shifts):
3. Number of Grade 6 English teachers (include all shifts):

Class	Shift	No. of students	ID of teacher	Name of teacher
6A	1			
	2			
6B	1			
	2			
6C	1			
	2			
6D	1			
	2			
6E	1			
	2			
6 F	1			
	2			
6 G	1			
	2			
6 H	1			
	2			
6 I	1			
	2			
6 J	1			
	2			

Data Collector: _____