

# DATA MANAGEMENT MANUAL PART I

**Assessment of Minimum Proficiency Level (AMPL)**

**May 2023**

The Global Education Monitoring (GEM) Centre drives improvements in learning by supporting the monitoring of educational outcomes worldwide. The GEM Centre is a long-term partnership between the Australian Council for Educational Research (ACER) and the Australian Government's Department of Foreign Affairs and Trade (DFAT).

**This manual is applicable to ACER Maple  
version 2.17 or higher.**

## Acknowledgments

This project, Development of an Assessment of Minimum Proficiency Level (AMPL) is aligned to Global Proficiency Framework (GPF). This UNESCO Institute for Statistics (UIS) project is funded by the Bill & Melinda Gates Foundation.

The Australian Council for Educational Research (ACER) is the technical partner for this project. Support is provided from ACER's Global Education Monitoring Centre (GEM Centre), an ACER initiative in partnership with the Australian government's Department of Foreign Affairs and Trade.

# Table of Contents

- Acknowledgments ..... 2
- About this manual ..... 5
- 1 INTRODUCTION TO DATA MANAGEMENT ..... 8**
  - 1.1 Overview of data management tasks ..... 8
  - 1.2 Terminology..... 11
  - 1.3 Data management staff employed by NCs ..... 13
  - 1.4 Communication protocols ..... 13
- 2 ACER MAPLE ..... 14**
  - 2.1 Overview of ACER Maple ..... 14
  - 2.2 System requirements ..... 15
  - 2.3 PC Setup ..... 17
  - 2.4 Initial data readiness ..... 22
  - 2.5 ACER Maple despatch..... 29
  - 2.6 ACER Maple installation ..... 29
  - 2.7 Access, exit and back-up..... 37
  - 2.8 Updating ACER Maple data ..... 44
  - 2.9 User Settings..... 45
  - 2.10 Navigation and functions of ACER Maple ..... 50
- 3 NECESSARY DOCUMENTATION..... 54**
  - 3.1 Initial Data ..... 54
  - 3.2 Field operation forms and ACER Maple functions ..... 56
  - 3.3 Codebook and format files for field operation forms ..... 58
  - 3.4 Keeping track of school participation ..... 63
- 4 DATA ADMINISTRATOR TRAINING ..... 64**
  - 4.1 Data administrator training agenda..... 64
  - 4.2 Preparation for data administrator training ..... 65
  - 4.3 Training setup..... 65
  - 4.4 Prepare training List of Classes data ..... 66
  - 4.5 Prepare training List of Students data ..... 67
  - 4.6 Prepare updated STF ..... 72
- 5 PREPARING AND IMPORTING DATA FOR SAMPLING..... 74**
  - 5.1 Class and student sampling logistics..... 75
  - 5.2 Preparing LCL data for import ..... 76
  - 5.3 Preparing LST data for import ..... 82
  - 5.4 Importing Data for Sampling ..... 89
  - 5.5 Import Field Data Validity Report ..... 92
  - 5.6 Caution against Re-Importing Field Data ..... 99

<b>6</b>	<b>SAMPLING .....</b>	<b>102</b>
<b>7</b>	<b>POPULATING SCF AND STF TEMPLATES WITH SAMPLING DATA .....</b>	<b>105</b>
7.1	Populating SCF and STF templates with data from ACER Maple.....	105
7.2	Export Field Data Checks .....	111
<b>8</b>	<b>LABELING AND PACKAGING ASSESSMENT MATERIALS .....</b>	<b>113</b>
8.1	Using Mail Merge Function in Microsoft Word .....	113
8.2	Exporting labelling forms.....	113
8.3	Creating Labels .....	115
8.4	Labelling and Packaging Materials for Test Administrators.....	118
<b>9</b>	<b>RECEIPT OF MATERIALS AFTER THE ASSESSMENT .....</b>	<b>119</b>
9.1	Preparing Student Assessment Instruments for Data Entry .....	119
9.2	Conducting Internal STF Data Checks .....	121
9.3	Receiving AMPL School Questionnaires.....	123
9.4	Updating Data from Tracking Forms in ACER Maple.....	123
9.5	Update Field Data Validity Report .....	127
9.6	Updating School Participation .....	134
9.7	Update Institution Participation Validity Report .....	137
<b>10</b>	<b>DATA ENTRY .....</b>	<b>142</b>
10.1	Data Entry Organisation .....	142
10.2	Entering Responses into ACER Maple.....	157
10.3	Validating Respondent List .....	171
10.4	Respondent List Validity Report .....	173
<b>11</b>	<b>FINAL TASKS .....</b>	<b>176</b>
11.1	Explaining Warnings .....	176
11.2	Data submission .....	183
11.3	Data Cleaning Participation .....	185
<b>APPENDIX 1</b>	<b>DATA SUBMISSION CHECKLISTS .....</b>	<b>186</b>
A1.1	Item Information for Cleaning .....	186
A1.2	Data Submission Checklist.....	190
<b>APPENDIX 2</b>	<b>TROUBLESHOOTING.....</b>	<b>192</b>
A2.1	Installation troubleshooting .....	192
A2.2	Resetting forgotten password .....	195
A2.3	Restoring data in ACER Maple .....	198
A2.4	Extracting anonymised database for troubleshooting.....	198
A2.5	Re-sampling students.....	199
<b>APPENDIX 3</b>	<b>BLIND SAMPLING .....</b>	<b>202</b>
<b>APPENDIX 4</b>	<b>INDEX OF TABLES .....</b>	<b>203</b>
<b>APPENDIX 5</b>	<b>INDEX OF FIGURES .....</b>	<b>205</b>

## About this manual

This data management manual will explain in detail all data management procedures for the *Assessment of Minimum Proficiency Levels (AMPL)*.

**Chapter 1** is an introductory chapter. In this chapter the data management tasks for AMPL are outlined, the roles of different data management staff are defined, and the terminology used in this manual is explained.

**Chapter 2** gives a short overview of the data management software, ACER Maple and describes its installation, initialisation, and user settings. The main ACER Maple functions available to AMPL users are also outlined in this chapter.

**Chapter 3** details all the documentation that is necessary for data management.

**Chapter 4** explains how to prepare for data administrator training.

**Chapter 5** first provides instructions on checking and importing List of Classes<sup>1</sup> and List of Students data into ACER Maple to be sampled for assessment.

When these data are imported, ACER Maple performs some data checks and if discrepancies are found, produces the *Import Field Data Validity Report*. The second part of chapter 5 explains how to resolve these discrepancies.

**Chapter 6** provides instructions on how to undertake class and student sampling in ACER Maple.

**Chapter 7** provides instructions on how to populate tracking form templates with data from ACER Maple. The tracking form Excel templates that are despatched with ACER Maple are used for this process. Any discrepancies that may be produced in the *Export Field Data Validity Report* are also explained.

**Chapter 8** provides instructions on labelling and packaging materials.

**Chapter 9** that explains procedures related to the receipt of materials after the assessment:

- First it provides instructions on how to check the materials received from Test Administrators,
- then it explains how to check and import updated tracking form data into ACER Maple, and the errors and warnings that may be listed in the *Update Field Data Validity Report*.
- Finally, it describes how to update the School Participation Form and what to do with the *Update Institution Participation Validity Report* which may be generated if there are discrepancies in the school participation data.

**Chapter 10** that explains how to organise data entry of responses after the assessment and provides instructions for data entry operators that can be used for their training.

**Chapter Error! Reference source not found.** is the data submission chapter. It describes the tasks for explaining any discrepancies remaining in the data and then submitting the data to ACER for further processing.

**Appendix 1** contains checklists that have to be filled when data is ready to be submitted to ACER.

**Appendix 2** contains troubleshooting advice.

**Appendix 3** contains procedures for 'blind' sampling.

---

<sup>1</sup> In this manual, *student* refers to a learner or a pupil to be assessed and *class* refers to a grouping of students in the same grade level, taught by the same teacher

**Appendix 4** contains an index of tables.

**Appendix 5** contains an index of figures.

This manual uses acronyms and technical terms. You can find the list of the most common [acronyms](#) at the end of this section. The terms are explained when they are first used.

Throughout the manual, important notes and warnings are indicated using the following formatting:



This is an important note or an ACER Maple tip. Many of these notes are AMPL requirements.



This is a warning. Information in these boxes are crucial for correct procedures and must be read and followed carefully.



This is a note to National Centres participating **or** not participating in certain options agreed upon with ACER.

In this manual, screenshots are used to illustrate examples of how the different ACER Maple features are used.



Please note that although ACER Maple functionality in screenshots corresponds to version 2.16 or higher, some details, like version number, user details, or template column names can be different from what you will see on your screen.

### *Acronyms used in this manual*

ACER	Australian Council for Educational Research
AMPL	Assessment of Minimum Proficiency Level
AMPLa	AMPL design a is intended for the students from the end of lower primary school
AMPLb	AMPL design b is intended for the students from the end of upper primary school
AMPLab	AMPL design a+b is intended for the students from the end of upper primary school with the link to the students from the end of the lower primary school.
DMR	Data Management Resources are various Excel templates and Word documents that are necessary to complete data management tasks.
DMTP	Data Management Training Package Part 1 contains a Power Point presentation and other materials related to the data management tasks to be completed by the National Centre before the assessment.
LCL	List of Classes from which a class eligible to participate in the AMPL is sampled
LSS	List of Sampled Schools agreed between ACER and the National Centre and imported into ACER Maple by ACER
LST	List of Students from the sampled class. Only these students are eligible to participate in the AMPL.
MRWF	Main and Replacement Warning Form – one of the ACER Maple forms used to explain warnings produced when field data is imported or updated.

NC	National Centre
PAWF	Participation& Attendance Warning Form – one of the ACER Maple forms used to explain warnings produced when field data is imported or updated.
PC	Personal Computer running a Microsoft® Windows operating system (laptop or desktop)
QAS	Questionnaire Adaptation Spreadsheet agreed between ACER and the NC
QSA	Questionnaire Structural Adaptation form agreed between ACER and the NC and imported into ACER Maple by ACER
RLWF	Respondent List Warning Form - the ACER Maple form used to explain warnings produced when response data is checked against tracking data
SC	School Coordinator
SCF	Sampled Class Form is filled with the details about sampled class
SEN	Special Education Needs
SALF	Student Assessment Labelling Form used to label student assessment instruments
SPF	School Participation Form used to register school participation status
SQTF	School Questionnaire Tracking Form used to label School Questionnaires and to record the receipt of the School Questionnaires
SCQ	School Questionnaire filled by school principals
STF	Student Tracking Form populated with sampling data from ACER Maple and used by Test Administrators to record student attendance and participation.
STQ	Student Questionnaire administered after the AMPL test
TA	Test Administrator
TCS	Target Cluster Size
VM	Virtual Machine Oracle VM VirtualBox software <b>version 6.1.42</b> ( <a href="https://www.virtualbox.org/wiki/Download_Old_Builds_6_1">https://www.virtualbox.org/wiki/Download_Old_Builds_6_1</a> )

# 1 INTRODUCTION TO DATA MANAGEMENT

## 1.1 Overview of data management tasks



Data management with ACER Maple is a **requirement** for AMPL.

Data management is a critical part of the AMPL data collection. It is preceded by school sampling, AMPL questionnaire adaptations, and preparation of all assessment instruments for printing. Once school sampling and all adaptations have been completed and all assessment instruments have been prepared for printing, the ACER data management team customises the data management software, ACER Maple for your National Centre (NC).

When the ACER data management team complete customisation of ACER Maple for your NC, you will be notified that a pre-configured version of ACER Maple for your NC has been uploaded to the *MS>teams>AMPL Partner Collaboration >Country Folder>Data management (Maple)*. ACER will also explain how to download ACER Maple from this folder.



Please make sure that **well before** you start on any other data management tasks, the *List of Sampled Schools* (LSS) and the *Questionnaire Structural Adaptations* (QSA) have been agreed between your NC and ACER; and you are familiar with the contents of these files (see section 2.4 for details).

The entire data management process involves the following major tasks performed at the NC:

### Before the assessment

1. Installation and initialisation of ACER Maple (chapter 2).
2. Checking documentation and training test administrators (chapters 3 and 4).
3. Checking and importing data for sampling (chapter 5).
4. Class and student sampling (chapter 6).
5. Populating tracking form templates with data from ACER Maple (chapter 7).
6. Labelling assessment instruments (chapter 8).

### After the assessment

7. Updating data from tracking forms in ACER Maple (chapter 9).
8. Organising data entry and entering response data (chapter 10).
9. Data submission to ACER and data cleaning participation (chapter 11).

The sequence of all data management tasks is illustrated in Figure 1. This figure shows which tasks are performed **before** the assessment and which are performed **after** the assessment. It also shows that different tasks are performed by different personnel: data manager, data administrators and data entry operators. Their roles are defined in section 1.3.



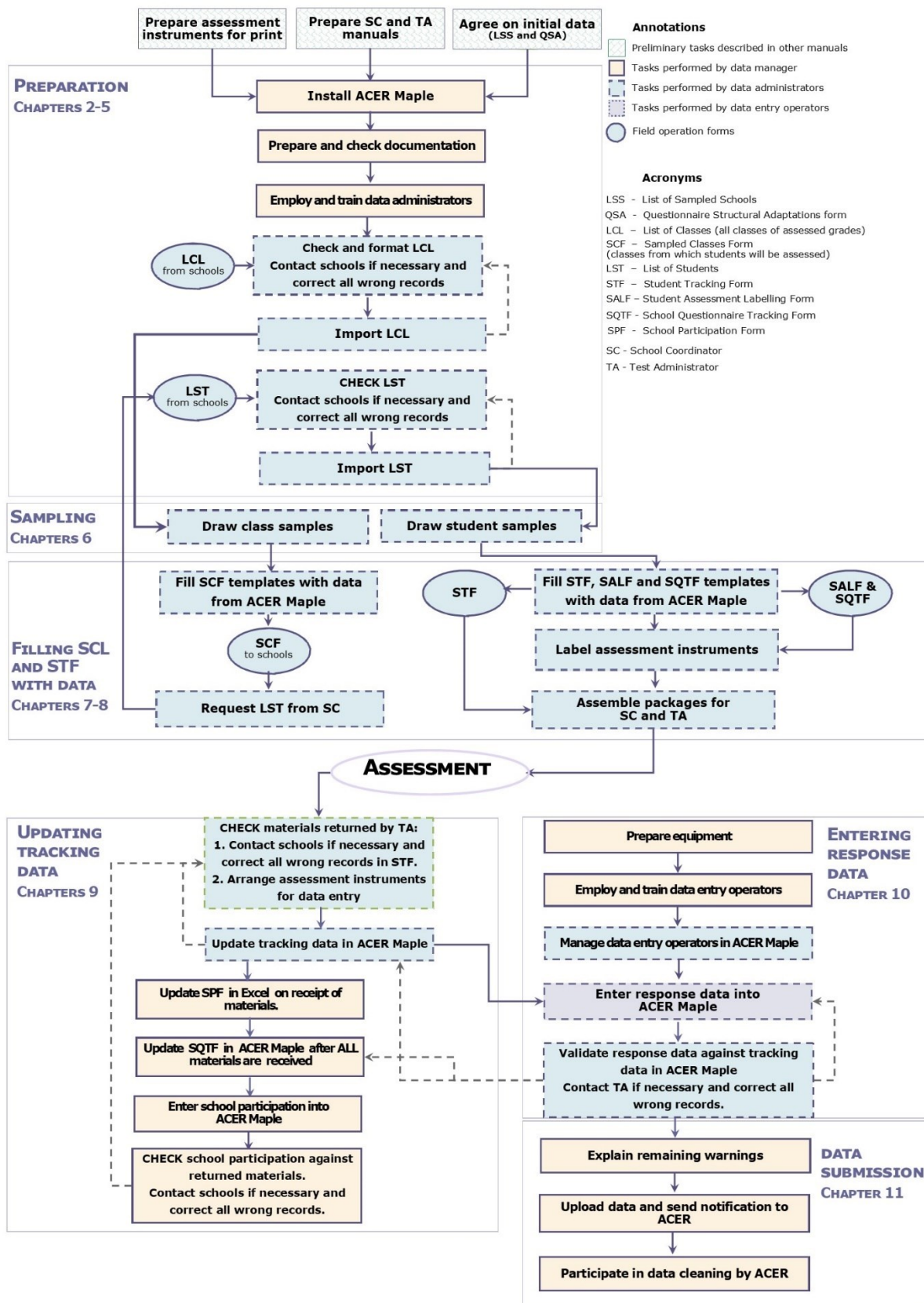


Figure 1: Data management tasks for the AMPL

All tasks illustrated in Figure 1 are outlined in this chapter and explained in detail in subsequent chapters of this manual.

**Before the assessment:**

**A) Make sure:**

- you have enough workstations for data administrators;
- the PC on which you intend to install ACER Maple (called the *host* PC) satisfies all system requirements (section 2.2);
- check the PC set-up (section 2.3);

ACER Maple should then be downloaded from the [MS Teams>AMPL Partner Collaboration >Country Folder>Data management \(Maple\)](#), installed and initialised (sections 2.5 -2.10).

**B) After you download and initialise ACER Maple, you need to prepare and check all materials necessary for student sampling and data entry. These are:**

- initial data:
- templates for field operation forms such as List of Classes (LCL), List of Students (LST) and Student Tracking Forms (STF); and
- the data entry screens for the AMPL assessment instruments such as tests and questionnaires.

Chapter 3 explains how to prepare and check necessary materials.

**C) After ACER Maple has been installed on a host PC and all materials have been prepared and checked, the data manager can train data administrators (chapter 4).****D) After data administrators have been trained, they will check class lists received from schools and format them into LCL files, then import the LCL data into ACER Maple (sections 5.2 and 5.4).****E) After data from the LCL have been successfully imported into ACER Maple, class sampling is undertaken, which results in the one class being sampled (chapter 6) and SCF form populated with the sampled class data (chapter 7).****F) The School Coordinator (SC) must be contacted to obtain student lists from the sampled class. Data administrators will check and format the student lists received from schools into the LST files, then import the LST data into ACER Maple (sections 5.3 and 5.4).**

**Import validation for steps D and F:** Each time the data is imported into ACER Maple, the software will check the imported data for inconsistencies. Detected inconsistencies will be listed in the *Import Field Data Validity Report*. Some of these inconsistencies may be errors that must be corrected before student sampling can proceed, while others may be warnings of missing data that can be completed later by Test Administrators on the tracking forms (section 5.5).



Data will only be transferred into the ACER Maple database when all errors have been corrected.

**G) After data from the LST have been successfully imported into ACER Maple, student sampling is undertaken in order to produce tracking forms with student identification and instrument allocation designated to each student (chapter 6).****H) After students are sampled, the data from ACER Maple is used to fill:**

- the STF Excel template (chapter 7) and
- the SALF and SQTF templates used to label assessment instruments (chapter 8).

STFs that have been pre-populated with data from ACER Maple are then sent to the SC to be checked and updated before the assessment. Once finalised, the STF is then sent, together with other materials, to the TA to be used during the assessment.

**After the assessment:**

**A)** The materials received from Test Administrators are checked, further updated (if necessary) and prepared for processing in ACER Maple (chapter 9). This involves:

- Checking all student assessment instruments (Test Forms and questionnaires) against the STF and arranging assessment instruments for data entry (section 9.1).
- Updating student demographic data (if corrected by the TA/SC) and participation data in ACER Maple, from the returned STF checked against student assessment instruments. This is usually done school by school. Errors that appear in the *Update Field Data Validity Report* must then be corrected in the data. Records that are classified as warnings and found to be true do not need to be corrected (see details in sections 9.2, 9.4, and 9.5).
- Maintaining the School Questionnaire Tracking Form (SQTF) on receipt of the School Questionnaire. The SQTF is also updated by the data administrator in ACER Maple after all materials are returned and all student tracking data has been updated. Errors that appear in the *Update Field Data Validity Report* must then be corrected in the data. Records that are classified as warnings and found to be true do not need to be corrected (sections 9.3 and 9.5).
- Maintaining the school participation status for each school during field operations. The School Participation Form (SPF) is updated by the data manager in ACER Maple after all student tracking data and the SQTF have been updated. Errors that appear in the *Update Institution Participation Validity Report* must then be corrected in the data. Records that are classified as warnings and found to be true must be explained (sections 9.6 and 9.7).

**B)** While students are being assessed, office space and PCs for data entry operators must be prepared, and data entry operators should be employed and trained (section 10.1).

**C)** When most of the materials have been received, checked, and prepared, data entry of responses can commence (section 10.2).

**D)** After data entry is completed, it must be validated in ACER Maple against the updated tracking data. Errors that appear in the *Respondent Validity Report* must be corrected in the data. Warnings found to be true must be explained (sections 10.3 and 10.4).

**E)** After all data has been checked, corrected, and warnings have been explained (where necessary), the data is submitted to ACER. The data manager then works with a member of the ACER data management team to verify the data further (chapter **Error! Reference source not found.**).

## 1.2 Terminology

---

This section provides definitions for terms that are used throughout the manual that have not been explained in the previous section.

### 1.2.1 Domain (Survey ID, Entity ID and Admin ID)

Due to the secure nature of the AMPL data, each member of the NC data management team will only be able to access part of the AMPL database. The part of the database to which an ACER Maple user has access is called the *domain*.

**Domain** is defined by a combination of identification variables: *Survey ID*, *Entity ID* and *Admin ID*.

**Survey ID** for the AMPL is defined as **033**.

**Entity ID** is a 6-digit string based on your country 3-digit ISO code (see Table 1). One NC can have one or more entities depending on their national options.

**Table 1: Entity IDs for countries participating in the AMPL**

Country	Grade	Test design	Entity ID	Language
India	3	a	To be advised	ENG
	5	b		ENG
	5	b		HIN
Kenya	6	ab	040400	ENG
Lesotho	7	ab	042600	ENG
The Gambia	3	a	027000	ENG
Zambia	4	a	089400	ENG
	7	ab		

**Admin ID** is an administrative set of schools within each entity. The Admin ID values are assigned in the *List of Sampled Schools* (LSS). Each set of schools is assigned a different two-digit Admin ID value (starting from '01') within each entity as required. This is done to allow several data administrators to work simultaneously across a set of schools within a particular Admin ID.



In addition to the Admin ID values assigned in LSS, a special value of Admin ID='00' is used by the data manager for operations related to all schools in the entity. This value is not used in LSS.

### 1.2.2 Templates and related terms

An *Excel template* is an Excel file that has been formatted in a particular way. ACER Maple uses two types of Excel templates:

1. **Input template** is an Excel file intended to be populated with data by users and imported into ACER Maple, for example:
  - ▶ LSS and QSA templates: ACER populates these with initial data (in consultation with NCs) and imports them into ACER Maple before the software is despatched to NCs; or
  - ▶ LCL and LST templates: The SC fills this spreadsheet with details, which are then imported into ACER Maple by the data manager for sampling.
2. **Output template** is an Excel file intended to be populated with data by ACER Maple as a result of sampling or validation. For example, STF templates are populated with sampling data by ACER Maple and later updated by Test Administrators.

An Excel template can have several worksheets. A worksheet containing sections that need to be filled with data is called a *data worksheet*. The section containing data is called a *data section*.

**Field operation forms** comprise LCL, LST, SCF, STF, SQTF, SALF and SPF.

An *ACER Maple template* is a software structure that corresponds to a data worksheet within an Excel template. It enables ACER Maple to either import data from a corresponding input template into ACER Maple, or to populate a corresponding output template with data from ACER Maple.

### 1.2.3 Discrepancies in validity reports

The various validity reports generated during the data management process lists discrepancies found in the data by ACER Maple. Validity reports are generated whenever a user attempts to import data

from Excel, when students are sampled, or when a user attempts to export data to Excel. There are two types of discrepancies:

- **Errors** are incorrect records that must be corrected, for example, ID discrepancies.
- **Warnings** are inconsistent records that may be correct but must be double-checked and either corrected or explained.

Resolution of discrepancies involves correcting all incorrect records and providing an explanation as to how any correct but inconsistent records have occurred, for any remaining warnings. Explanations are required by ACER as a part of the data submission task which is explained in detail in Chapter **Error! Reference source not found.** .

### 1.3 Data management staff employed by NCs

NCs are advised to employ the following staff:

- **One data manager per entity:** this is the person responsible for all data management operations in the *entity* (see section 1.2.1 on page 11 for definition of an entity). The data manager must be trained by ACER staff for all data management procedures. One NC can have one or more entities depending on their national options and as many data managers as there are entities<sup>2</sup>.
- **As many data administrators per entity as agreed with ACER sampling team:** these staff members are trained by data managers and work under their instruction. Data administrators assist the data manager with operations designated on Figure 1, page 9 in blue boxes ( ). If necessary, the data manager can work as one of the data administrators<sup>3</sup>.
- **Data entry operators:** up to ten data entry operators can work under the instruction of each data administrator. Data entry operators are employed for a short period of time to enter test and questionnaire responses into ACER Maple after assessment. Data entry operators must be trained by the data manager.

### 1.4 Communication protocols

If you require help when operating ACER Maple:

- contact ACER Helpdesk at [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org), (cc Alla Routitsky at [alla.routitsky@acer.org](mailto:alla.routitsky@acer.org));
- specify your 3-letter country code and subject in the subject line of the e-mail;
- include in the e-mail:
  - ▶ detailed description of the problem;
  - ▶ screenshots and excel files if required.

We'll send you confirmation that we have received your e-mail and may ask for more information. At this stage you may need to send us your anonymised data. See Appendix 2, section 0 on how to extract this data.

<sup>2</sup> If there is one data manager in your NC and more than one entity, this data manager will need to login to ACER Maple with different login details for every grade level and language of assessment he /she is managing.

<sup>3</sup> If there are no data administrators in your NC, the data manager will still need to create an administrator login when initialising ACER Maple and use this login for various ACER Maple functions as instructed throughout this manual. However, this will slow down student sampling and reduce the number of data entry operators that can enter data simultaneously and delay the completion of data management tasks.

## 2 ACER MAPLE

2.1	Overview of ACER Maple .....	14
2.2	System requirements .....	15
2.2.1	ACER Maple on a virtual machine.....	15
2.2.2	System requirements for the host PC.....	16
2.2.3	System requirements for all user PCs.....	16
2.2.4	Security recommendations .....	16
2.3	PC Setup .....	17
2.3.1	Download and install VirtualBox software on a host PC.....	17
2.3.2	Defining your default browser .....	21
2.3.3	Disabling browser default download location.....	21
2.3.4	Checking display and resolution.....	22
2.4	Initial data readiness .....	22
2.4.1	Understanding the LSS and checking it against School Tracking Form.....	23
2.4.2	Comparing the QSA to the agreed national versions of the questionnaires. ....	26
2.5	ACER Maple despatch.....	29
2.6	ACER Maple installation .....	29
2.6.1	Initial checks before installation of ACER Maple .....	29
2.6.2	Different modes of ACER Maple VM deployment.....	30
2.6.3	Installation instructions .....	30
2.7	Access, exit and back-up.....	37
2.7.1	Starting ACER Maple VM on the host PC.....	37
2.7.2	Accessing ACER Maple Login window .....	39
2.7.3	Information section on the left-hand side of the Login screen.....	40
2.7.4	Closing a connection to an active ACER Maple session and creating a back-up.....	40
2.7.5	Closing ACER Maple interface on a host PC and creating a back-up.....	41
2.7.6	Closing ACERMapleVM (UBUNTU) on a host PC.....	42
2.7.7	Exporting ACER Maple database backup for archiving/storage .....	43
2.8	Updating ACER Maple data .....	44
2.9	User Settings.....	45
2.9.1	First login .....	45
2.9.2	Changing your password (all users) .....	47
2.9.3	Creating and deleting data administrator logins.....	48
2.10	Navigation and functions of ACER Maple .....	50
2.10.1	The ACER Maple Main screen .....	50
2.10.2	Main functions of ACER Maple .....	51
2.10.3	Returning to the ACER Maple Main screen (Back button) .....	52
2.10.4	Session timeout.....	53

### 2.1 Overview of ACER Maple

The data management software, ACER Maple is a tool that is used to complete the following data management tasks:

- **Before** the assessment, ACER Maple is used to:

1. import list of classes and sample a class of students to be assessed in each grade level agreed with ACER;
  2. import list of students from the sampled class(es), sample students, and allocate survey instruments to the sampled students;
  3. populate preconfigured tracking form templates with sampling data from ACER Maple.
- **After** the assessment, ACER Maple is used to:
    1. import tracking data collected by Test Administrators into ACER Maple;
    2. enter responses from paper-based instruments into ACER Maple;
    3. validate response data against the tracking data; and
    4. submit anonymised data to ACER for further processing and analysis.

ACER Maple is developed in R programming language and runs as a host-user system. The host is a PC that runs an R session that operates ACER Maple. Installation of R is provided in the ACER Maple package. ACER Maple has two databases: a confidential database that is available to the NCs and an anonymised database that is submitted to ACER for further processing.

This chapter describes the system requirements, installation steps, user settings and general navigation rules for ACER Maple.



Throughout the manual, screenshots are used to illustrate various functions of the ACER Maple software. Some details, like version number, or user details, or column names in some templates on the screenshots may vary, but illustrated functions are the same as in the version you are going to use.

## 2.2 System requirements

### 2.2.1 ACER Maple on a virtual machine

For the AMPL survey, the preferred mode of deployment for ACER Maple is through a Linux-based virtual machine. Specialised software, VirtualBox, is installed on a dedicated host PC, which hosts the virtual machine. ACER Maple software is then loaded onto the virtual machine using a disk image. The dedicated host PC will always keep the virtual machine running, and users (single or multiple) can access ACER Maple from either the same host PC or separate PCs at any time using the IP address specified by ACER Maple, in a web-based browser. Using ACER Maple in this mode requires that:

- all user PCs and the host PC be within the same LAN;
- the IP address and port of the host PC is fixed (permanent); and
- within the LAN, access to the host PC is not blocked by a firewall or network policy.



You may need to ask your IT department to ensure that the LAN requirements described in this section, and the PC requirements described in sections 2.2.2 and 2.2.3, are met.

## 2.2.2 System requirements for the host PC

The host PC must have:

- Microsoft Windows 64-bit version;
- a standard installation of Microsoft Office (no earlier than Office 2013), since data is imported into and exported from ACER Maple in Excel format;
- preferably **Mozilla Firefox** browser; and
- Oracle VM VirtualBox software **version 6.1.42** downloaded from [https://www.virtualbox.org/wiki/Download\\_Old\\_Builds\\_6\\_1](https://www.virtualbox.org/wiki/Download_Old_Builds_6_1).
- Recommended 80GB disk space (minimum 50GB) and 16GB of RAM (minimum 8GB) to download and install ACER Maple in VirtualBox software:
  - ▶ Installation of VirtualBox software and disk image to install ACER Maple requires at least 23GB of disk space.
  - ▶ Users will need additional hard disk space to be available for database backups.
  - ▶ The ACER Maple VM (virtual machine) will utilise approximately half of the host PC's total RAM for optimum performance. For example, on a host PC with 16GB RAM, the VM will only utilise 8GB.



Google Chrome is also acceptable. However, it tends to have problems with exporting data from ACER Maple. If you encounter such problems, please switch to **Mozilla Firefox**.

**NO other browsers are supported**



Make sure that the chosen browser is the default internet browser on the user's PC and that the browser's default download location is disabled.

## 2.2.3 System requirements for all user PCs

All user PCs (connected to the host PC via LAN) must have:

- Microsoft Windows 64-bit version;
- a standard installation of Microsoft Office no earlier than Office 2013. This is necessary because data is imported into ACER Maple from Excel and also exported from ACER Maple into Excel; and
- preferably **Mozilla Firefox** internet browser (see warnings in section 2.2.2 above).

## 2.2.4 Security recommendations

The following security recommendations apply to all PCs within the LAN that will be used to access ACER Maple:

- all PC drives are encrypted using BitLocker or similar;
- the host PC firewall is deployed so that HTTP ports are accessible from other machines on the same network.
- the PC hosting the ACER Maple VM should be either:
  - ▶ a dedicated server; or
  - ▶ a desktop PC; or



- ▶ if it is a laptop, the firewall rule for exposing the HTTP ports must be specific to the LAN where the work is performed;
- all PCs have **reliable**<sup>4</sup> antivirus systems which are kept up to date;
- all PCs are subject to a patching schedule for the operating system and any other relevant software;
- all PCs must be used for work purposes only; and
- **ACER Maple is not accessible from outside the LAN.**



Note that although Mozilla Firefox or Google Chrome internet browser is a requirement, an internet connection is NOT REQUIRED. In the case of PCs involved in data management operations, an internet connection is NOT RECOMMENDED for security reasons.

## 2.3 PC Setup

Before downloading ACER Maple, check that the system requirements are met on all PCs intended for the use of ACER Maple (see sections 2.2.2 and 2.2.3 for details). Once this has been confirmed, follow the instructions in this section to set up each of the PCs for ACER Maple.

### 2.3.1 Download and install VirtualBox software on a host PC



Before you start download check that you have:

- enough space on your PC (see section 2.2);
- good internet connection; and
- administrative rights to download software.

You may need to clean up space and/or ask your IT department to download VirtualBox software on a host PC, if one of the above is not met

---

<sup>4</sup> Some antivirus systems interfere with ACER Maple functionality (e.g. Kaspersky). If you find that your antivirus systems prevent you from using ACER Maple or corrupt the software, you will need to switch to another antivirus system.

To download Oracle VM VirtualBox software and install it on the host PC:

1. Navigate to the website [https://www.virtualbox.org/wiki/Download\\_Old\\_Builds\\_6\\_1](https://www.virtualbox.org/wiki/Download_Old_Builds_6_1) in your internet browser (Figure 2).



Figure 2: VirtualBox website landing page

2. Click the **Download VirtualBox 6.1** button in the middle of the page (see Figure 2). You will be taken to the **Downloads** page.

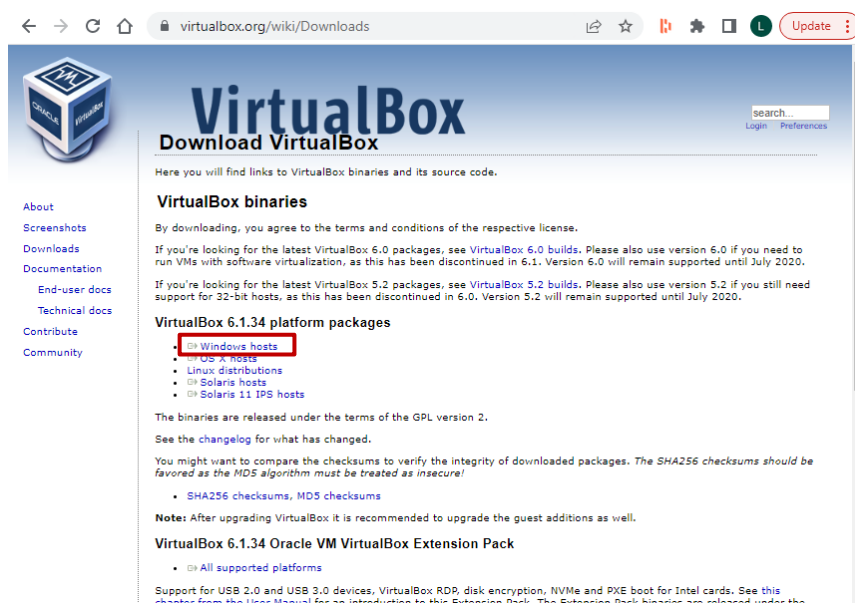


Figure 3: VirtualBox website Downloads page

3. Click on the *Windows hosts* option under **VirtualBox ... platform packages** (Figure 3).
4. You will be prompted to download the software installer. Save it in an appropriate location then run it. The VirtualBox setup wizard will open (Figure 4). Click **Next** to start the setup process.



Figure 4: VirtualBox setup wizard screen 1

5. On the next two screens that appear, click **Next** and **Next** without changing any options (Figure 5).

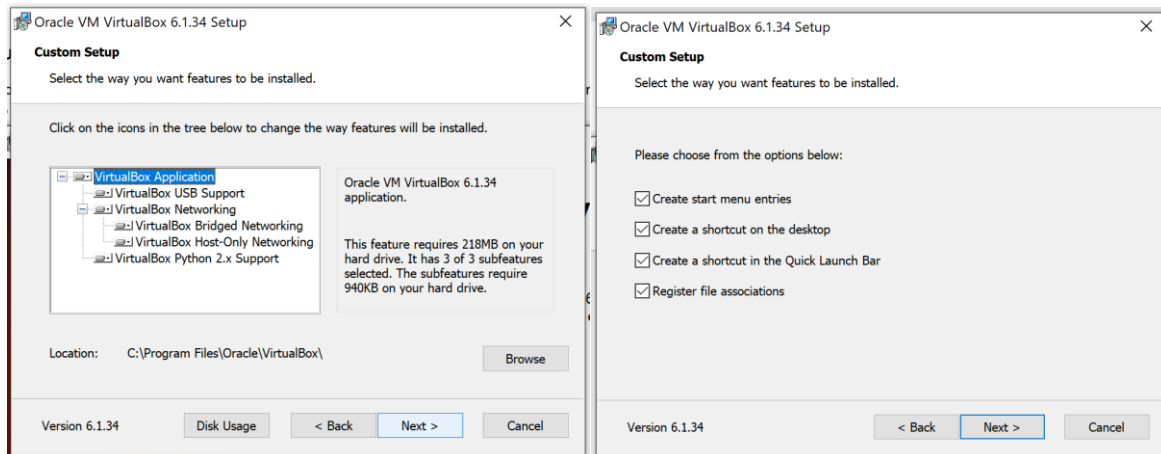


Figure 5: VirtualBox setup wizard screens 2 and 3

6. The next screen will display a warning that installing the VirtualBox Networking feature will reset your network connection and temporarily disconnect you from the network. Click **Yes** to proceed (Figure 6).

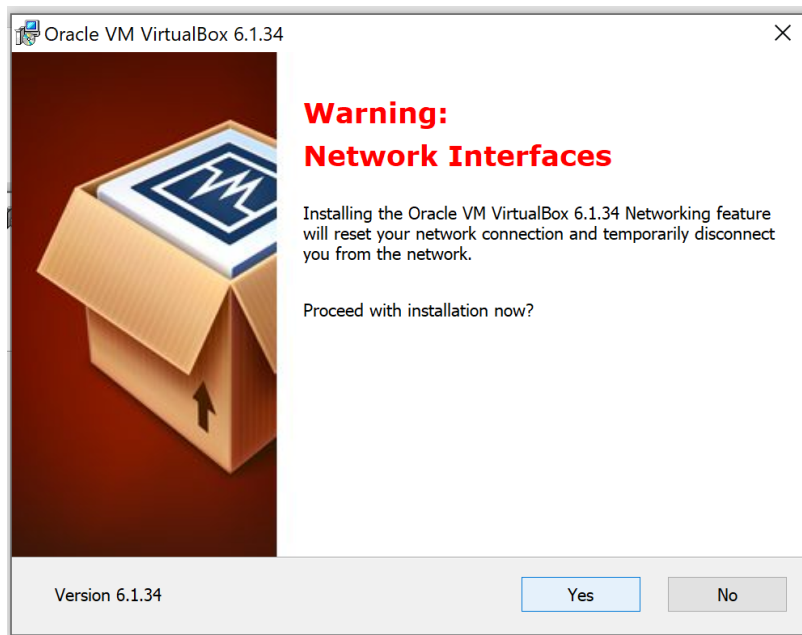


Figure 6: Networking feature warning

7. Click **Install** on the *Ready to Install* screen that appears. (Figure 7)

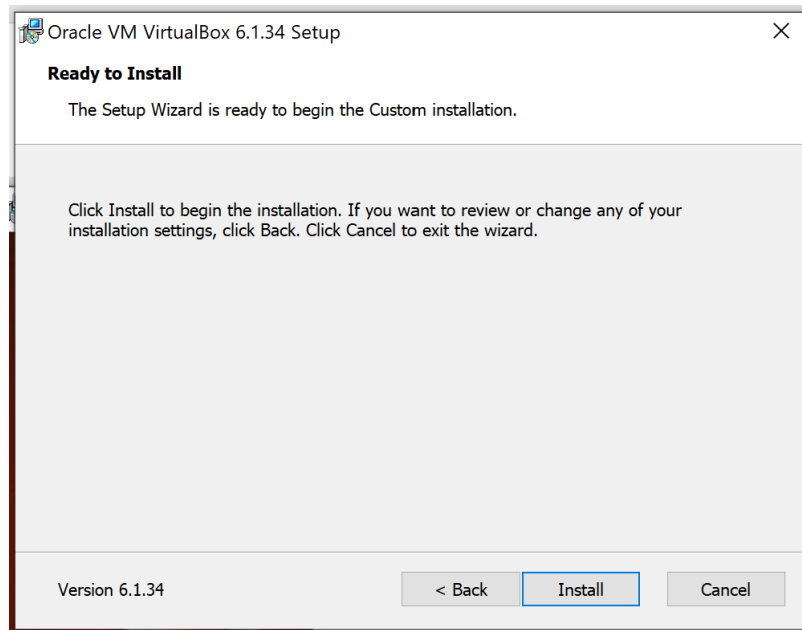


Figure 7: VirtualBox setup wizard screen 5

8. Once the installation is complete, click 'Finish' (Figure 8).




Figure 8: VirtualBox setup complete

### 2.3.2 Defining your default browser


Preferably **Mozilla Firefox** should be used for ACER Maple<sup>5</sup>.

To set **Mozilla Firefox** as your default browser:


1. Open Mozilla Firefox.
2. In the top right corner of the screen click .
3. Click **Options** in the middle of the list.
4. In the *General* > *Startup* section click **Make default**.

### 2.3.3 Disabling browser default download location<sup>6</sup>

To disable the default download location in **Mozilla Firefox**:

1. Open Mozilla Firefox.
2. In the top right corner of the screen click .

<sup>5</sup> If you use **Google Chrome** as your default browser:



1. Open Google Chrome.
2. In the top right corner of the screen click .
3. Click **Settings** near the bottom of the list.
4. Scroll down to **Default browser**.
5. Click Make default.

Then in **Settings**:

6. <sup>6</sup> Scroll down to the bottom and click **Advanced**.
7. Scroll down to the Downloads section.
8. Click **Ask where to save each file before downloading**.

3. Click **Options** in the middle of the list.
4. Scroll down to the *Files and Applications > Downloads* section.
5. Select **Always ask you where to save files**.

### 2.3.4 Checking display and resolution

1. In the Windows taskbar click **Start** ()
2. Click **Settings** ()
3. Click **System**.
4. On the *Display* page, in the *Scale and layout* section ensure that:
  - ▶ the “...(Recommended)” options are selected under the **Change size of text, apps and other items** drop-down list; and
  - ▶ the **Display resolution** drop-down list. Repeat this step for all monitors that are connected to your PC by selecting the corresponding numbered display listed at the top of the screen.

## 2.4 Initial data readiness

At the beginning of the sampling process, sampling tasks containing country-specific sampling information are agreed between your NC and ACER and uploaded onto ACER Teams. This process is finalised by agreement of the *School Tracking Form*. Excerpt from the School Tracking Form is imported into ACER Maple as a *List of Sampled Schools (LSS)*. LSS will be uploaded for you to check into the following MS Teams folder:

*MS°teams>AMPL Partner Collaboration >Country Folder>0.3 Sampling.*

Please check the data in the **LSS** carefully **before** any data is imported into ACER Maple. After checking the **LSS** (see section 2.4.1 for details):

- If you think that minor changes to the *School Tracking Form* are still required, the LSS can be re-negotiated by send an e-mail to Clare Ozolins at [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org).
- Otherwise send e-mail to Clare Ozolins at [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org) and Alla Routitsky [Alla.Routitsky@acer.org](mailto:Alla.Routitsky@acer.org) with the subject line: *AMPL <CNT> LSS agreed*, where CNT is you country 3-letter code.

At the same time, your *Questionnaire Adaptation Spreadsheet (QAS)* must be agreed with ACER. Excerpt from the QAS is imported into ACER Maple as a *Questionnaire Structural Adaptations (QSA)*. SS will be uploaded for you to check into the following MS Teams folder:

*MS°teams>AMPL Partner Collaboration >Country Folder>0.5 Questionnaire.*

Please check the data in the **QSA** carefully **before** any data is imported into ACER Maple. After checking the **QSA** (see section 2.4.2 for details):

- ▶ If you think that minor changes to the QSA are still required, the QAS can be re-negotiated by sending an e-mail to Jennifer Hong at [Jennifer.Hong@acer.org](mailto:Jennifer.Hong@acer.org).
- ▶ Otherwise send e-mail to Jennifer Hong at [Jennifer.Hong@acer.org](mailto:Jennifer.Hong@acer.org) and Alla Routitsky [Alla.Routitsky@acer.org](mailto:Alla.Routitsky@acer.org) with the subject line: *AMPL <CNT> QSA agreed*, where CNT is you country 3-letter code

The data from LSS and QSA are imported into ACER Maple by the ACER data management team before a customised national version of ACER Maple for your NC is uploaded to ACER Teams.



ACER Maple cannot be customised and despatched to the NC until the **School Tracking Form** and **QAS** are agreed between your NC and ACER



If the **School Tracking form** or **QAS** are **re-negotiated after LSS and QSA have been imported into ACER Maple** the re-negotiated file must be re-imported into ACER Maple by ACER.

**Try to avoid this situation by carefully checking the LSS and QSA files beforehand.**



If the **School Tracking form** is **re-negotiated after LSS and QSA have been imported into ACER Maple** please let Alla Routitsky at [Alla.Routitsky@acer.org](mailto:Alla.Routitsky@acer.org) (cc to Maple Helpdesk [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org) and Clare Ozolins [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org)) immediately.



If the **QAS** are **re-negotiated after LSS and QSA have been imported into ACER Maple** please let Alla Routitsky at [Alla.Routitsky@acer.org](mailto:Alla.Routitsky@acer.org) (cc to Maple Helpdesk [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org) and [Jennifer.Hong@acer.org](mailto:Jennifer.Hong@acer.org).) immediately.



If you have received and downloaded ACER Maple before realising the LSS or QSA needs to be changed:

- wait for ACER to notify you that an updated version of the database can be downloaded;
- download, and replace database as explained in **-[###]-**.

### 2.4.1 Understanding the LSS and checking it against School Tracking Form

**Survey ID** is a within-school sampling variable that distinguish the AMPL survey from other surveys using ACER Maple. It does not appear in the School Tracking Form.

**Survey ID=033** for the AMPL.

**CNT** is your NC 3-letter code. Check that it corresponds to your country as indicated in Table 2.

**Entity 6-digit code, Class option** and **Combined option**. Different NCs selected different combinations of test design, grade level to be assessed, number of students to be sampled, and (TCS) from each class (see Table 2):

- Each NC must export and check as many LSS files as they are assigned entities (see Table 2). For most NCs this is **one file**.
- Each **Entity ID** is a 6-digit number based on the countries 3-digit ISO code.
- **Class option** is '2' for all known entities.
- Each **Combined option** is based on test designs selected and TCS. It is equals to your country standard ISO code unless otherwise agreed upon.

Table 2: LSS codes with respect to national options

Country	LSS variables				National options		
	CNT	Entity 6-digit code	Class option	Combined option	Grade	Test design	TCS
Kenya	KEN	040400	2	404	6	ab	25
Lesotho	LSO	042600	2	426	7	ab	22
The Gambia	GMB	027000	2	270	3	a	
Zambia	ZMB	089400	2	894	4,7	a & ab	20
India	QIN	To be advised			To be advised		
Fictitious country	ZZA	098100	2	220	4,6	a & ab	20

Check that **Entity ID** and corresponding **Class option** and **Combined option** match the national options you selected.

#### Number of schools in the LSS, their identification, and their distribution:

1. Each LSS must contain ALL schools selected for you by ACER.
2. Check that **School names** and their **National IDs** correspond to **Stratum ID**, and **School within stratum** assigned by ACER sampling team exactly the same way as agreed in the School Tracking Form.
3. Check that **Admin ID** is assigned to the schools the way you agreed with ACER sampling team and that you have as many values as the number of data administrators you intend to use.
4. Check that the **AMPL School No.** values are unique. Ensure that you and data administrators know which **AMPL School No.** values assigned to the schools they are responsible for.

Table 3 contains examples of excerpts from LSS file for ZZA (a fictitious country).

Any arrangements must be agreed with the ACER sampling team.



Table 3: LSS example for ZZA grade 6

1	Survey ID	CNT	Entity 6-digit code	Admin ID	Stratum ID	School within stratum	School Name	National ID	AMPL School No.	Class option	Combined Option
2	033	ZZA	098100	01	01	0001	School 123	ZZA123	1	2	220
3	033	ZZA	098100	01	01	0002	School 124	ZZA124	2	2	220
4	033	ZZA	098100	01	01	0003	School 125	ZZA125	3	2	220
5	033	ZZA	098100	01	01	0004	School 126	ZZA126	4	2	220
6	033	ZZA	098100	01	01	0005	School 127	ZZA127	5	2	220
7	033	ZZA	098100	02	02	0001	School 128	ZZA128	6	2	220
8	033	ZZA	098100	02	02	0002	School 129	ZZA129	7	2	220
9	033	ZZA	098100	02	02	0003	School 130	ZZA130	8	2	220
10	033	ZZA	098100	02	02	0004	School 131	ZZA131	9	2	220
11	033	ZZA	098100	02	02	0005	School 132	ZZA132	10	2	220

### 2.4.2 Comparing the QSA to the agreed national versions of the questionnaires.

All questionnaires require cultural and linguistic adaptations. However, some questions may require *structural adaptations*, meaning that the number of response categories and the meaning of these categories may change. These adaptations will be extracted by ACER questionnaire team into the Questionnaire Structural Adaptation (QSA) form and imported into ACER Maple to enable data entry as specified in the adaptations.

The questions that may require structural adaptations in the Student Questionnaire are:

ST03: ***What is the main language that you speak at home?***

ST06: ***What is the highest level of formal education completed by your mother or female guardian?***

ST08: ***What is the highest level of formal education completed by your father or male guardian?***

The questions that may require structural adaptations in the School Questionnaire are:

SC04: ***What is the highest level of education you have completed?***

SC08: ***What is the primary language of instruction at your school?***

Check in the QSA that:

- the response categories listed in the **National category label** column correspond to the categories in your agreed national versions of the questionnaires as indicated in Table 4; and
- in addition to questionnaire response categories check that QSA data contain auxiliary values for each question type. Auxiliary values for QSA items are listed and their usage is explained in Table 5.

**Table 4: QSA Question type ID for questionnaire items**

Question type ID	Questionnaire items
1	ST03
2	ST06 and ST08
3	SC04
4	SC08

**Table 5: Auxiliary values added to the questionnaire items in the QSA**

International category label	Data entry code	Usage
N/A	97	Item has not been printed properly
Invalid	98	More than one response is provided where only one is required
Missing	99	Response is not provided

Example of QSA for ZZA grade 6 (fictitious country) is provided in Table 6. The columns that require checking are highlighted in blue.

For example, ZZA data manager need to check that in their Student Questionnaire, question about language spoken at home (**Question type ID=1**), has response categories as follows: 01-English; 02-Kiswahili, 03-Other languages. In addition, he/she needs to check, that Auxiliary codes 97,98,99 are present in QSA for this question type. Similarly, every question listed above must be checked.

Table 6: QSA Example (ZZA, grade 6)

1	Survey ID	Entity 6-digit code	Question type ID	Question type label	International category label	Data entry code	National category label	National category label (eng)	International code
2	033	098160	1	Language spoken at home	Language of assessment	01	English	English	eng
3	033	098160	1	-//-	Language 2	02	Kiswahili	Swahili	swh
4	033	098160	1	-//-	Other languages	03	Other languages	Other languages	qot
5	033	098160	1	-//-	N/A	97			qna
6	033	098160	1	-//-	Invalid	98			qin
7	033	098160	1	-//-	Missing	99			qms
8	033	098160	2	Parent education	ISCED level 6 or higher	01	Completed undergraduate or higher	Completed undergraduate or higher	600
9	033	098160	2	-//-	ISCED level 4 or 5	02	Completed middle level college (e.g. technical course, diploma course, certificate course)	Completed middle level college (e.g. technical course, diploma course, certificate course)	400
10	033	098160	2	-//-	ISCED level 3	03	Completed secondary school	Completed secondary school	398
11	033	098160	2	-//-	ISCED level 1	04	Completed primary school	Completed primary school	100
12	033	098160	2	-//-	Did not complete ISCED level 1	05	Did not complete primary school	Did not complete primary school	099
13	033	098160	2	-//-	N/A	97			997
14	033	098160	2	-//-	Invalid	98			998
15	033	098160	2	-//-	Missing	99			999
16	033	098160	3	Principal education	ISCED level 7 or 8	01	Completed higher degree (e.g. Master's degree, Post graduate degree)	Completed higher degree (e.g. Master's degree, Post graduate degree)	700
17	033	098160	3	-//-	ISCED level 6	02	Completed university level (e.g. Bachelor's degree)	Completed university level (e.g. Bachelor's degree)	600
18	033	098160	3	-//-	ISCED level 4 or 5	03	Completed middle level college (e.g. technical course, diploma course, certificate course)	Completed middle level college (e.g. technical course, diploma course, certificate course)	400
19	033	098160	3	-//-	ISCED level 3	04	Completed secondary school	Completed secondary school	398

1	Survey ID	Entity 6-digit code	Question type ID	Question type label	International category label	Data entry code	National category label	National category label (eng)	International code
20	033	098160	3	-//-	ISCED level 2 or below	05	Did not complete secondary school	Did not complete secondary school	200
21	033	098160	3	-//-	N/A	97			997
22	033	098160	3	-//-	Invalid	98			998
23	033	098160	3	-//-	Missing	99			999
24	033	098160	4	Language of instruction	Language of assessment	01	English	English	eng
25	033	098160	4	-//-	Language 2	02	Kiswahili	Swahili	swh
26	033	098160	4	-//-	Other languages	03	Other languages	Other languages	qot
27	033	098160	4	-//-	N/A	97			qna
28	033	098160	4	-//-	Invalid	98			qin
29	033	098160	4	-//-	Missing	99			qms

## 2.5 ACER Maple despatch

The ACER Maple software for the AMPL, can be downloaded from the following MS Teams folder:

[MS Teams>AMPL Partner Collaboration > Data Management Resources](#).

It contains:

- Six files that must be:
  - ▶ downloaded separately into convenient location on the C-drive of the host PC;
  - ▶ zipped files unzipped after they are downloaded;
  - ▶ software installed as instructed in section 2.6

The software is first used for training. After all documentation required for customisation of ACER Maple to your NC requirements are agreed with ACER you will receive your national database that should be used to update data in the previously installed ACER Maple as explained in section 2.8.

## 2.6 ACER Maple installation



Policies and procedures for the purpose of supporting local security and privacy legislation for individual ACER Maple deployments are **outside** the scope of this document.

To install ACER Maple:

1. Check that you are ready to use ACER Maple (section 2.6.1).
2. Decide on the mode of deployment (section 2.6.2).
3. Download **all** files from [MS Teams>AMPL Partner Collaboration > Data Management Resources](#) one at a time.
4. Set up ACER Maple in the VM deployment configuration (section 2.6.3).

### 2.6.1 Initial checks before installation of ACER Maple

Before downloading ACER Maple, ensure that the system requirements and PC setup tasks described in sections 2.2– 2.3 have been completed on all PCs to be used for ACER Maple.



You will not be able to use ACER Maple if the system requirements are not met.

ACER will notify your NC by email when your customised national version of data for ACER Maple is ready and has been uploaded to [MS Teams>AMPL Partner Collaboration >Country Folder>Data management \(Maple\)](#). This email will also contain instructions for downloading ACER Maple from this site. Check with your NPM when this is scheduled.



ACER Maple cannot be customised until the data from LSS and QSA have been agreed and uploaded into ACER Maple by ACER (see section 2.4 for details).



**Note to the India NC:** In addition to the above, ACER Maple cannot be customised until Hindi assessment instruments are:

1. prepared for printing (but not printed);
2. sent for final optical check to ACER;
3. agreed upon.

Hindi assessment instruments must be sent for final optical check at least two month before the start of the assessment and should not be printed until final optical check is agreed upon.

## 2.6.2 Different modes of ACER Maple VM deployment

ACER Maple VM can be deployed either:

- for a single user for the purposes of accessing the system and data solely on one workstation. No other users or workstations are connected to the local area network (LAN) and the workstation is not connected to the internet while ACER Maple is running; or
- for multiple LAN users for the purposes of accessing the system using their workstations. One of the workstations will host the ACER Maple VM; or
- on a dedicated server which hosts the ACER Maple VM, which can be accessed from a single or multiple PCs within the same LAN.

In each of these settings, the ACER Maple VM is installed on a single host PC/server (laptop or desktop). A user (or users) within the same LAN can then connect to the ACER Maple VM using an internet browser. In this way, multiple users can access ACER Maple (at the same time, if necessary) to perform all required data management tasks, without needing the ACER Maple VM to be installed on every PC. ACER Maple can also be accessed by a user directly on the host PC. Network security and firewall rules should allow other PCs within the LAN to connect to the ACER Maple host PC.

A NC can have as many data administrators for each entity as there are values in the Admin ID column in the agreed LSS for this entity.



If Admin ID is '01' for all schools in the LSS , contact Clare Ozolins at [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org). Your LSS should then be re-negotiated and re-uploaded into ACER Maple by ACER to accommodate the number of data administrators you are employing.


## 2.6.3 Installation instructions

To install ACER Maple on a virtual machine:

1. Create a directory on the host PC named **C:\MapleFiles**. This will be a shared folder accessible by both the host PC and the VM.
2. Download the VM image shared by ACER (through [MS Teams>AMPL Partner Collaboration>Data Management Resources](#)) to a convenient location. It may take a while to download depending on your internet connection.



The VM image is a large file of around 5GB. After the image is unpacked by VirtualBox it will require around 20GB of storage space and 2GB of RAM allocated to the ACER Maple VM on the host PC.

- Open Oracle VM VirtualBox software if it is not already open, either through the **Start** (  ) menu or the icon on desktop (Figure 9).

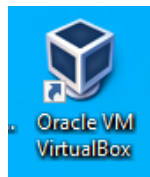


Figure 9: VirtualBox desktop icon

- Click on **File > Import Appliance**, or the **Import** button (Figure 10).

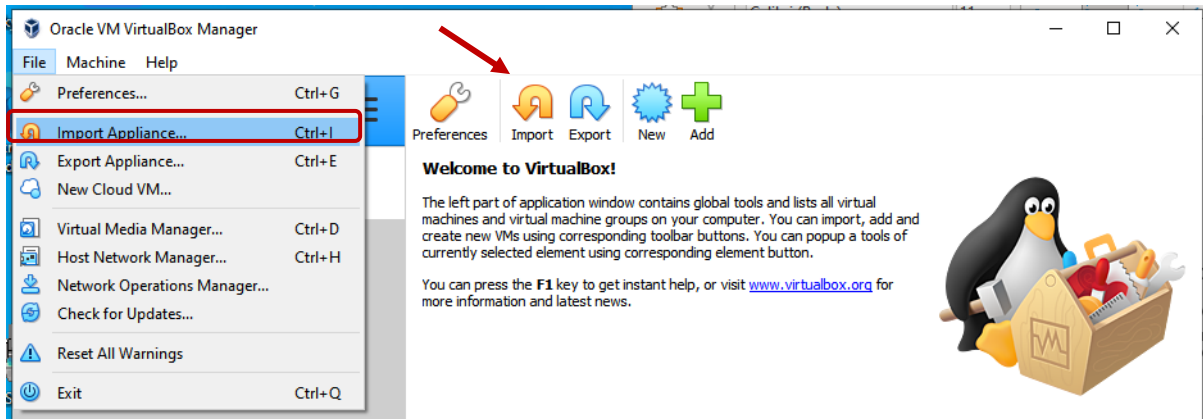



Figure 10: The Oracle VM VirtualBox Manager screen

- Another window will appear asking you to choose the appliance to import (Figure 11). Under **Source** select **Local File System**.
- Under **File** manually enter or navigate (using the  button) to the location where the VM image shared by ACER was saved in step 2.

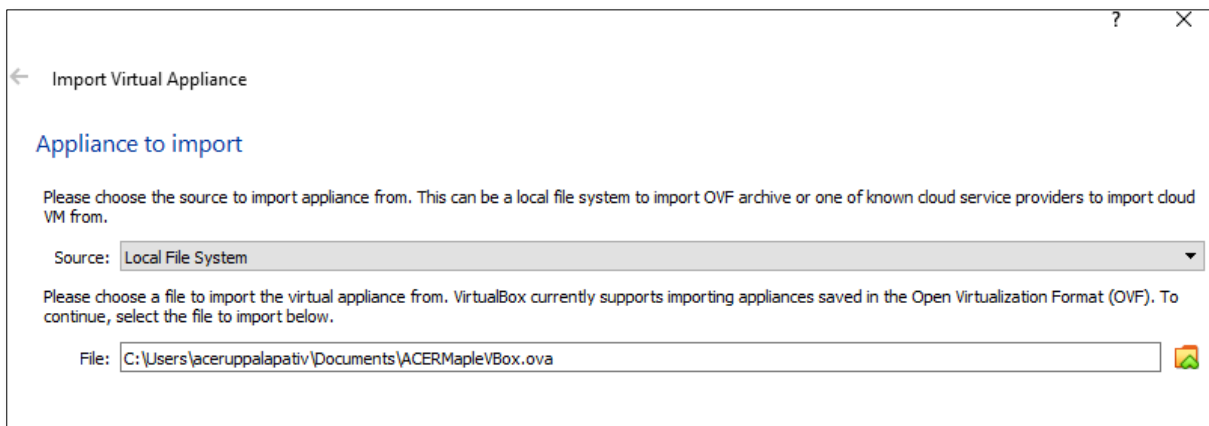


Figure 11: Select appliance to import screen

- Click **Next**. A screen will appear specifying the appliance settings (Figure 12).

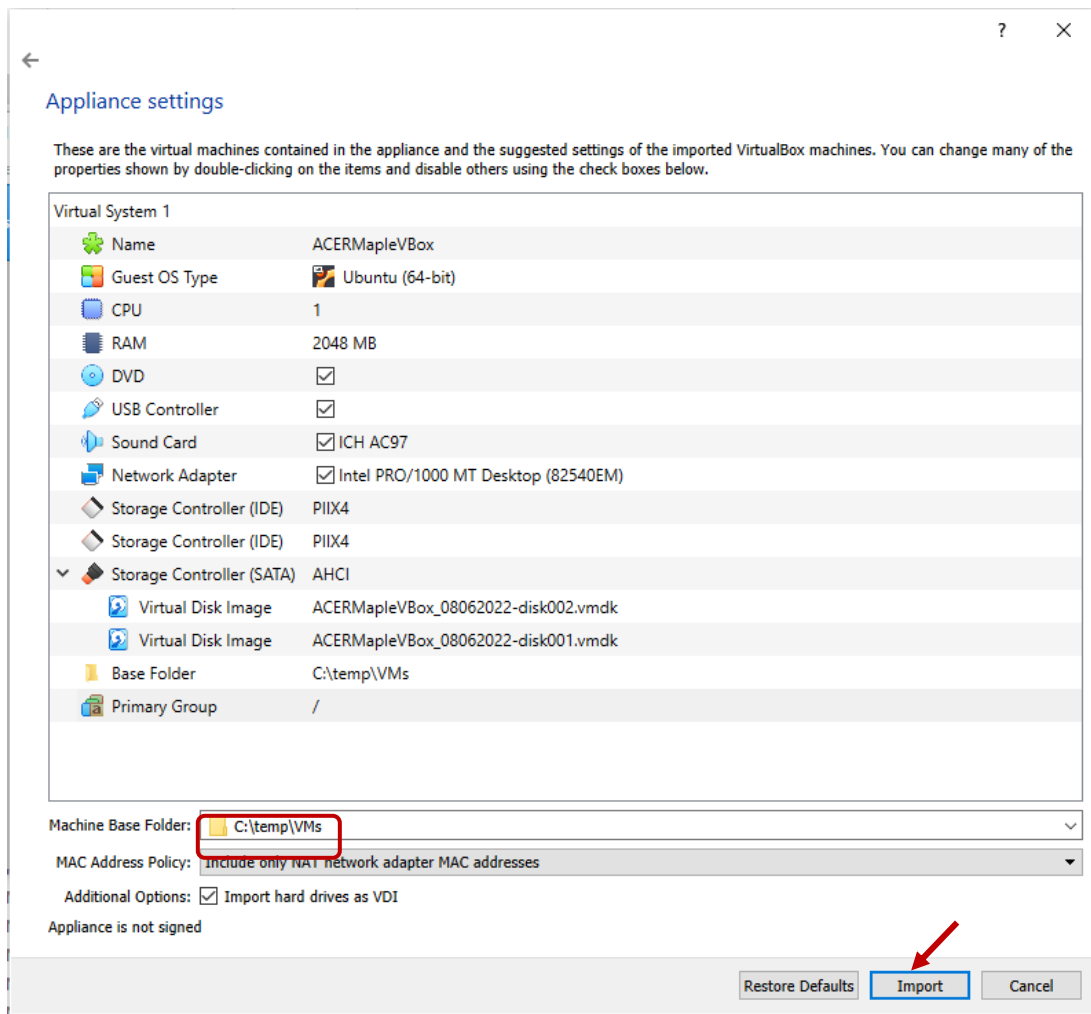


Figure 12: Appliance settings screen

8. In the Machine Base Folder field, specify an appropriate location for the VM base folder where the VM resides on the host PC (see Figure 12). Note it must be a different location to the C:\MapleFiles folder created in step 1. The folder will be created automatically if it does not already exist.
9. Click **Import**.
  - The ACERMapleVBox VM will be imported into the Oracle VM VirtualBox Manager environment (it may take a few minutes depending on your PC).
  - Note that an error will occur if the **C:\MapleFiles** directory was NOT created in step 1 (page 30). If this occurs, you will need to:
    - ▶ click **OK** to dismiss the error message (Figure 13);

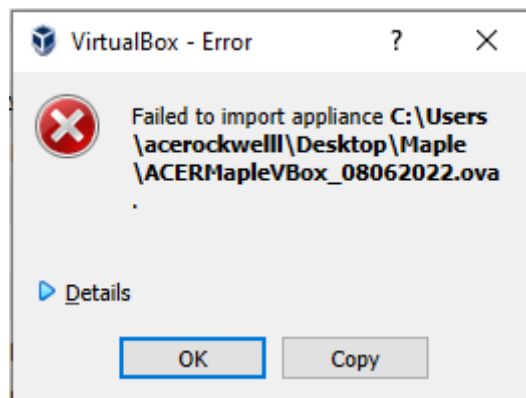


Figure 13: ACERMapleVBox VM import error



- ▶ create the missing directory, and
  - ▶ delete anything in the VM base folder (i.e. C:\temp\VMs) before attempting to import the VM image again.
10. Once the import process is completed, the name of the ACERMapleVbox will appear in the list of available virtual machines (Figure 14).

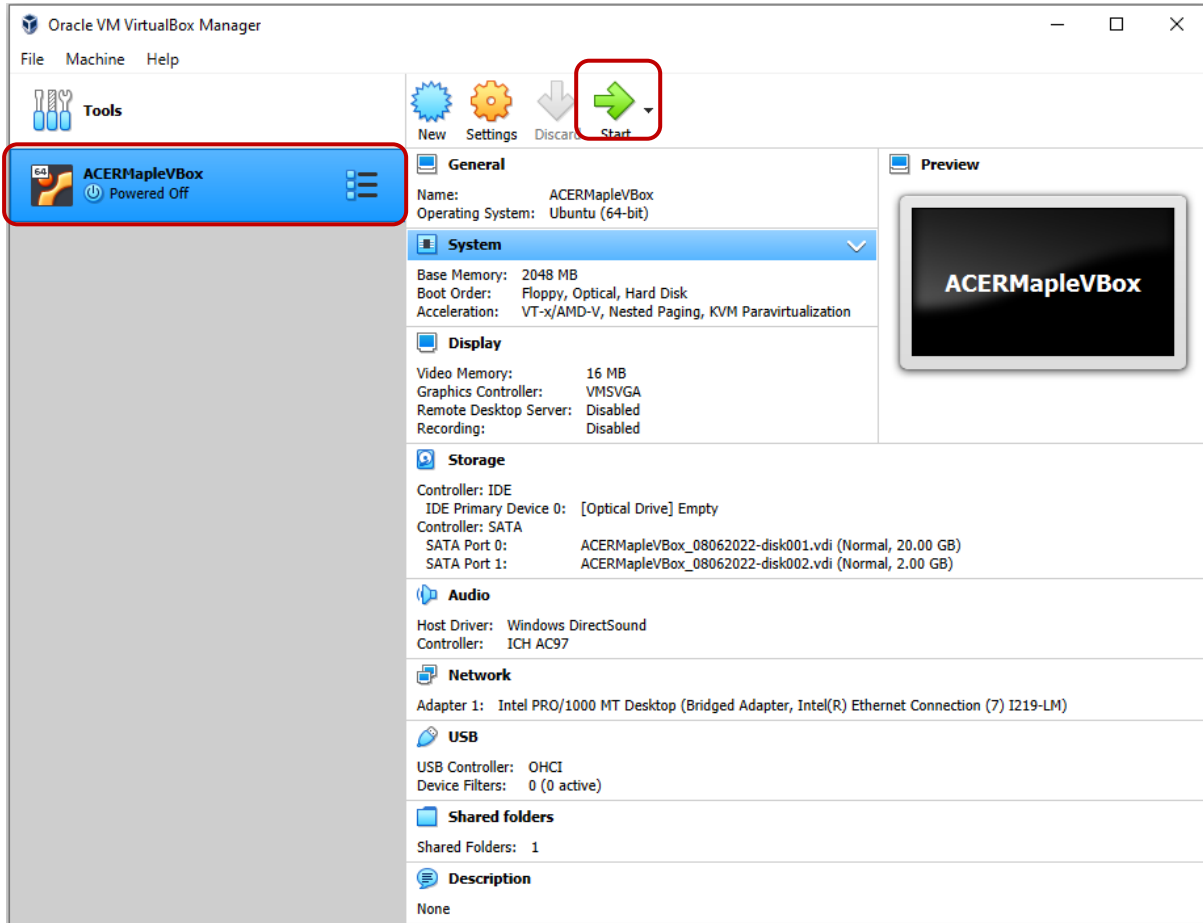


Figure 14: ACERMapleVBox VM loaded in VirtualBox

11. Click on the ACERMapleVBox machine on the left-hand side of the screen to select it and click **Start** (see Figure 14).
12. If initiating the ACERMapleVBox machine for the first time it will likely display an error message saying that the network adapter settings need to be changed (Figure 14)

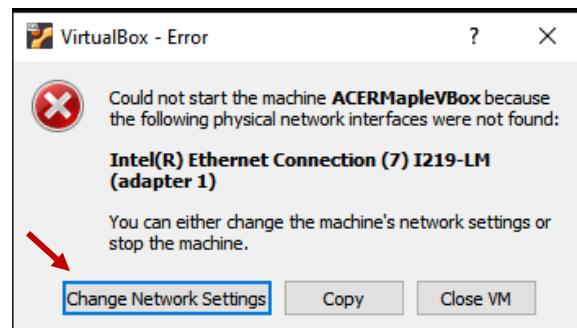


Figure 15: Network adapter settings error message

13. Click **Change Network Settings** (see Figure 15) to open the network settings screen (Figure 16).

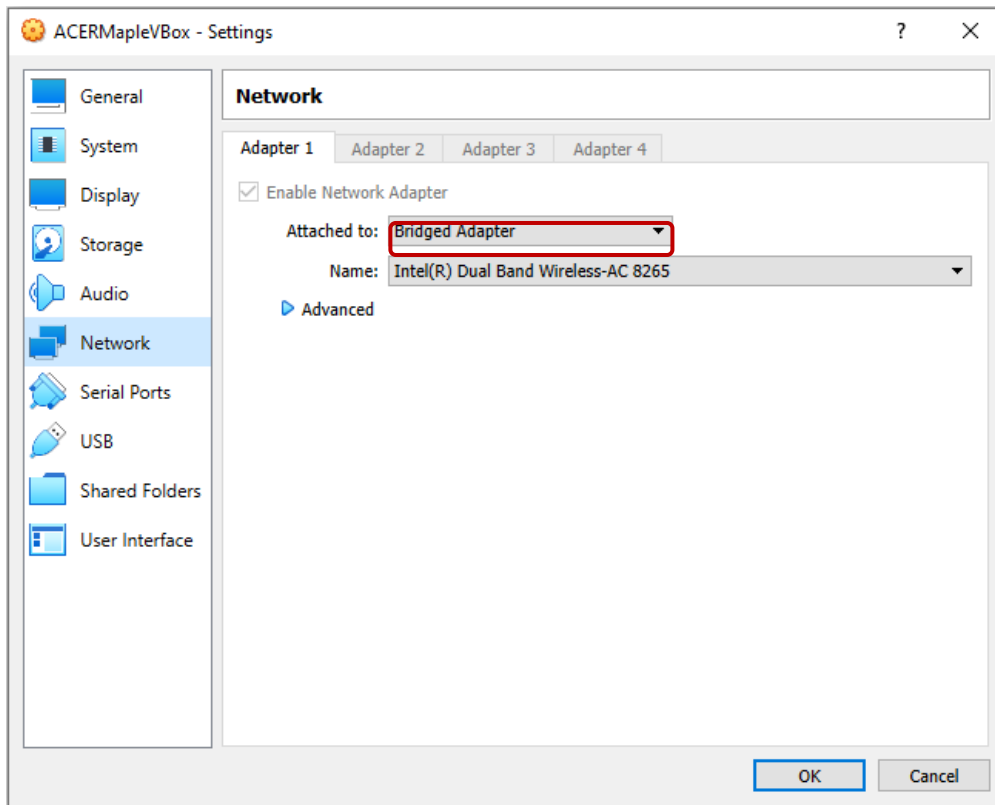


Figure 16: ACERMapleVBox VM network settings screen

14. Make sure that “Bridged Adapter” is selected (see Figure 16) then click **OK**.
15. Once the network adapter is configured properly a new window will appear displaying the Oracle VM VirtualBox loading screen followed by the Ubuntu loading screen (Figure 17).



Figure 17: Oracle VM VirtualBox and Ubuntu loading screens

16. Once the VM has finished loading the ACERMapleVBox VM login screen will appear (Figure 18). The ACERMapleVBox VM is running successfully. Dismiss any messages that appear at the top of the screen<sup>7</sup>.

<sup>7</sup> If instead of UBUNTU screen a pop-up errors message appears saying “Not in a hypervisor partition”, see section A2.1, Appendix 1 for instructions.

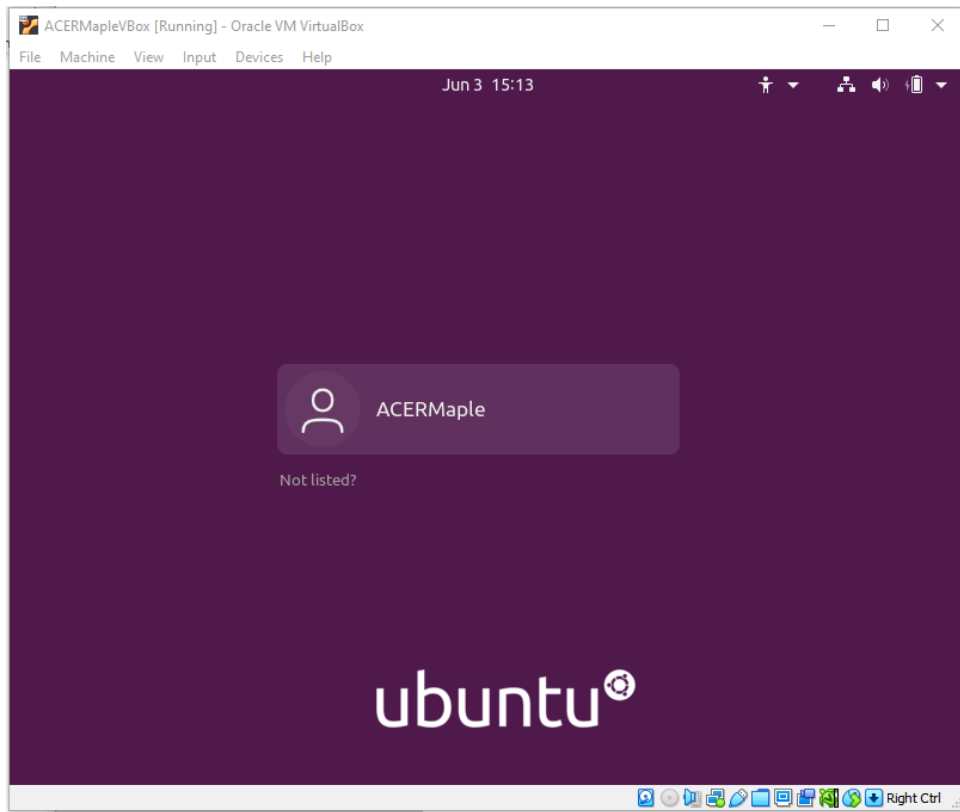


Figure 18: ACERMapleVBox VM login screen



The ACERMapleVBox VM login screen can be minimised but must remain open while ACER Maple is in use. **Closing this window will shut down ACER Maple and all unsaved work will be lost.**

17. The VM will be registered within your Local Area Network (LAN) in accordance with LAN policies, and it will obtain a local IP address. This IP will need to be used by all users to connect to the host PC.
18. Run the **start\_MAPLE.bat** that was provided with the ACER Maple installation package (see section 2.5). This will automatically obtain the IP address of the VM and open it in your default browser.
19. The first time a user connects to the IP address of the VM, a warning about the connection not being private (Figure 19) is displayed<sup>8</sup>. To dismiss the security certificate warning click **Advanced**.

---

<sup>8</sup> The security warning is displayed because the ACER Maple VM is configured with a self-signed security certificate supplied by ACER. It is possible to replace the self-signed certificate supplied by ACER with your organisation's security certificate.



## Your connection is not private

Attackers might be trying to steal your information from **10.0.0.243** (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR\_CERT\_AUTHORITY\_INVALID



To get Chrome's highest level of security, [turn on enhanced protection](#)

Advanced

Back to safety

**Figure 19: VM security certificate warning**

20. Click **Proceed** on the *Advanced* screen (see Figure 20).



## Your connection is not private

Attackers might be trying to steal your information from **10.0.0.243** (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR\_CERT\_AUTHORITY\_INVALID



To get Chrome's highest level of security, [turn on enhanced protection](#)

Hide advanced

Back to safety

This server could not prove that it is **10.0.0.243**; its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.

Proceed to 10.0.0.243 (unsafe)

**Figure 20: VM security certificate warning advanced**

21. The ACER Maple *Login* screen will be displayed (Figure 21).

Figure 21: ACER Maple Login screen

## 2.7 Access, exit and back-up

### 2.7.1 Starting ACER Maple VM on the host PC

To start up the ACER Maple VM on the host PC:

1. Open Oracle VM VirtualBox software if it is not already open, either through the **Start** (Windows icon) menu or the icon on desktop (Figure 22).

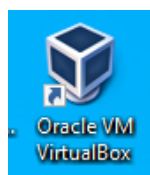


Figure 22: VirtualBox desktop icon

2. Click on the ACERMapleVBox machine on the left-hand side of the screen to select it and click **Start** (Figure 23).

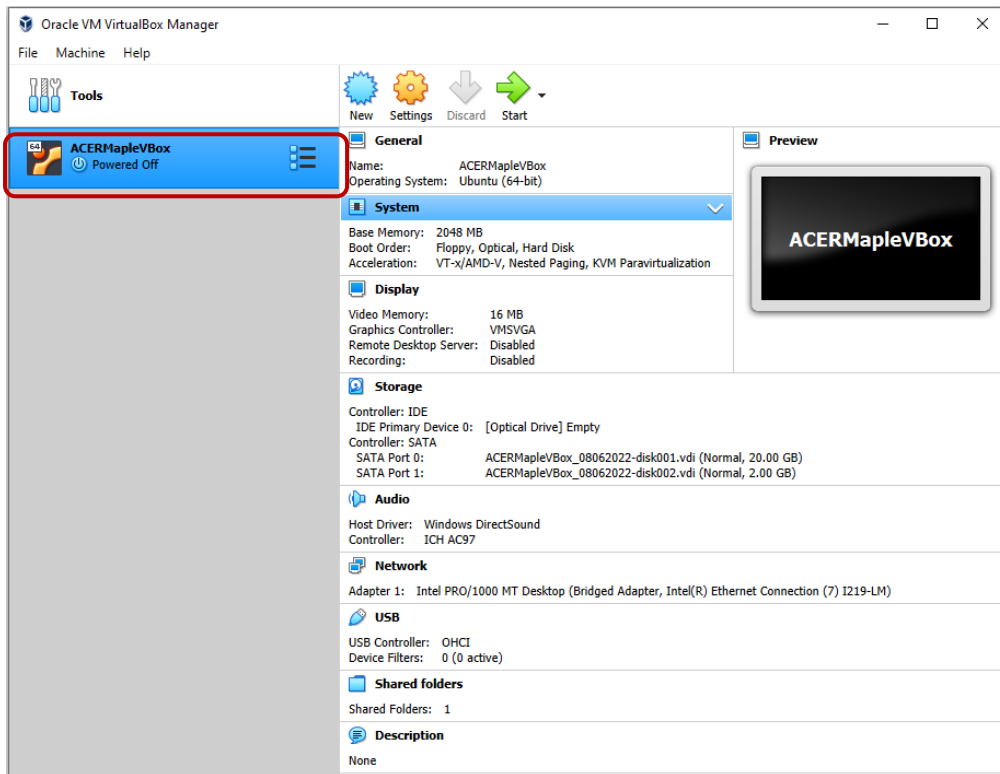


Figure 23: ACERMapleVBox VM loaded in VirtualBox

- Once the VM has finished loading the ACERMapleVBox VM login screen will appear (Figure 24). The ACERMapleVBox VM is running successfully. Dismiss any messages that appear at the top of the screen.

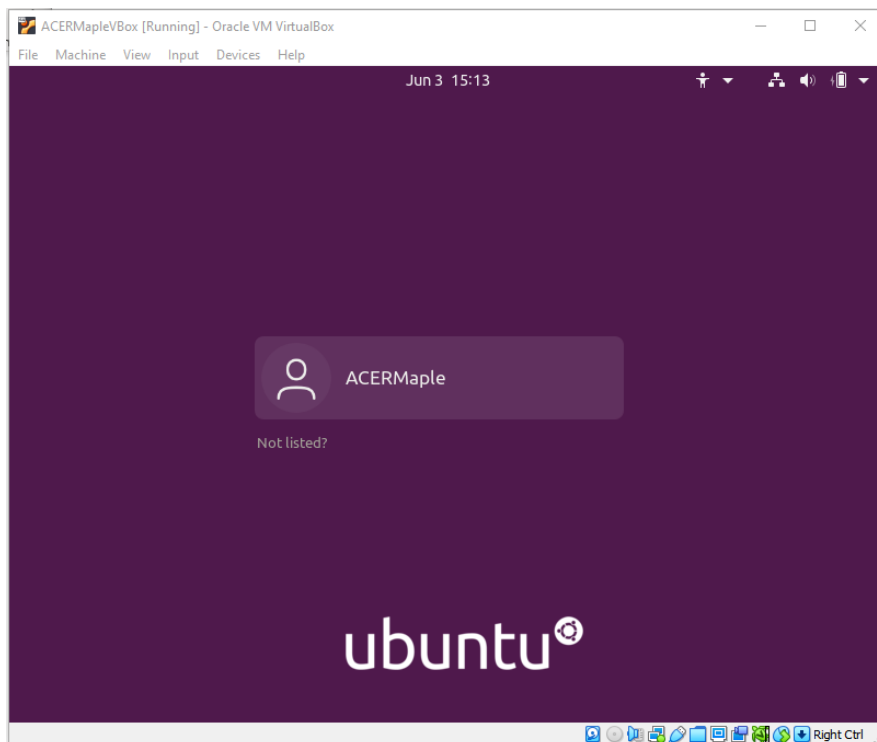


Figure 24: ACERMapleVBox VM login window



The ACERMapleVBox VM login screen can be minimised but must remain open while ACER Maple is in use. **Closing this window will shut down ACER Maple and all unsaved work will be lost.**

- Double click on the **start\_MAPLE.bat** file that was provided with the ACER Maple installation package.



The VM will be registered within your Local Area Network (LAN) in accordance with LAN policies. It will obtain a local IP address. **This IP address will need to be used by all users to connect to the host PC**

- Disregard the warning by clicking **Advanced** (Figure 25), then click **Proceed to..**

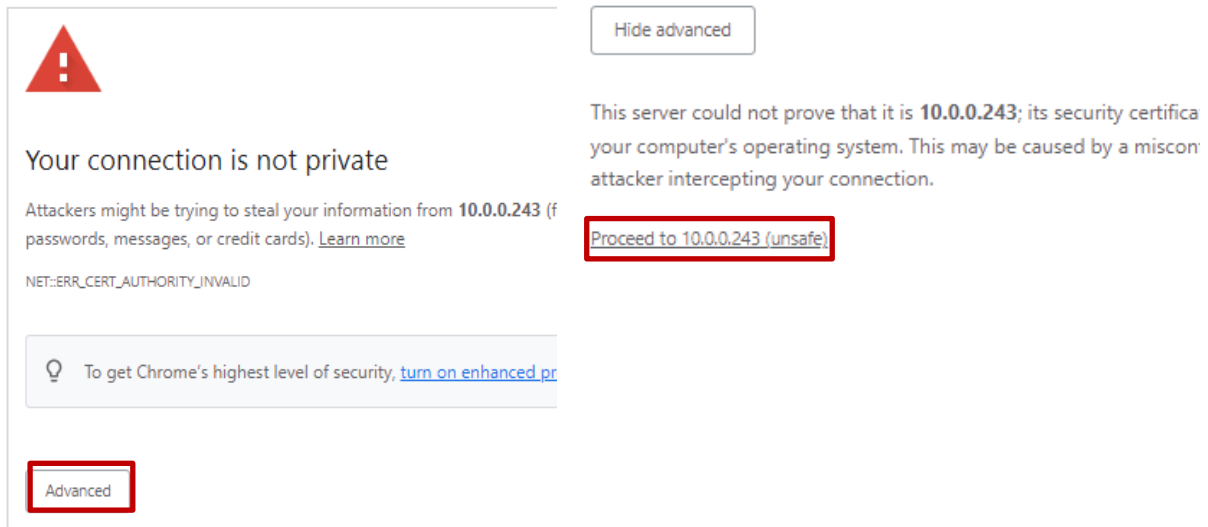


Figure 25: Obtaining IP address



The numeric value in Figure 25 is an example. The **value displayed on your machine** can be **different** and can change over time if LAN configuration had been changed (e.g. more PCs are added)

- You can now access ACER Maple Login window on the host PC as well as on any other PC within the local area network

### 2.7.2 Accessing ACER Maple Login window

To access ACER Maple Login screen when the **ACER Maple webpage is closed**:

- Ensure that the ACERMapleVBox VM login window UBUNTU (Figure 24) is open on the host PC.
- Enter the IP address of the VM (from step **Error! Reference source not found.** on page **Error! Bookmark not defined.**) in the address bar of a new **Mozilla Firefox** browser. The ACER Maple *Login* screen will appear (Figure 26).

This can be done either on the host PC or any other PC within the same LAN as the host PC.

Figure 26: The ACER Maple *Login* screen

To access ACER Maple session when the **ACER Maple webpage is greyed out** indicating that session has been timed out:

1. Ensure that the ACERMapleVBox VM login window UBUNTU (Figure 24) is open on the host PC.
2. Refresh the browser (see section 2.10.4, page 53 for details).

### 2.7.3 Information section on the left-hand side of the Login screen

The information section on the left-hand side of the login screen (Figure 26) contains three important messages related to ACER Maple access from any PC on the same LAN as the host PC:

**IP address of host:** <IP>. This is the IP address of the ACER Maple VM. Data managers must make it available to data administrators.



The numeric value in Figure 26 is an example. The **value displayed on your machine** can be **different** and can change over time if LAN configuration had been changed (e.g. more PCs are added)

**You are currently connected to ACER Maple over LAN.** This message is displayed on all PCs accessing the ACER Maple VM, including the PC hosting the VM, even if the host PC is a stand-alone PC.

**To access this application...** This message repeats the IP address of the host PC within the LAN with instructions on how to access ACER Maple from any PC within the LAN.

### 2.7.4 Closing a connection to an active ACER Maple session and creating a backup

To close a connection to an active ACER Maple session:

1. Click the **Quit** button at the top right of the page. A message will appear asking if you are sure you want to quit.
2. Click **Confirm**. A second message will appear asking if you want to create a database backup (Figure 27).



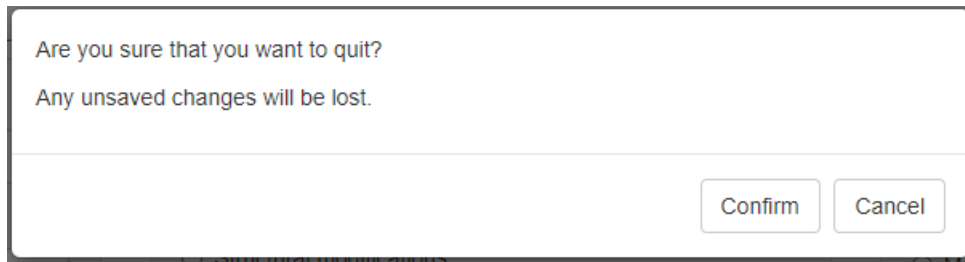


Figure 27 Quit confirmation prompt

3. Click **Yes (Error! Reference source not found.)**. The background of the page used to quit the session will become grey.

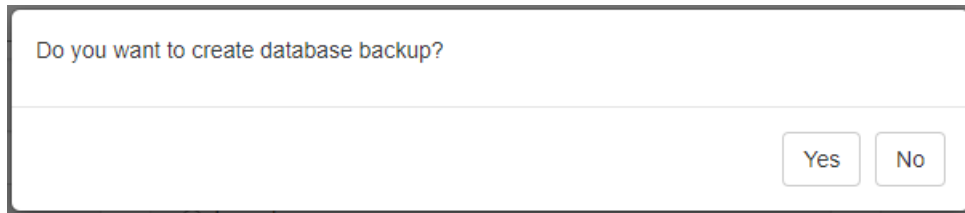



Figure 28 Database backup prompt



It is recommended that backups are created from every PC **at least twice a day**. For example, when a user takes a lunch break and at the end of the working day.

Please note that these backups are created within the VM infrastructure on the host PC and overwrites the previous updates.

It is recommended as an important risk management procedure that, while ACER Maple is being actively used, **database backups are exported from the ACER Maple VM** to the local hard drive of the host PC **at least twice a day** (see section 2.7.7, page 43 for details).

### 2.7.5 Closing ACER Maple interface on a host PC and creating a back-up

To close ACER Maple interface on a host PC:

4. Click the **Quit** button at the top right of the ACER Maple screen. A message will appear asking if you are sure you want to quit (Figure 30).

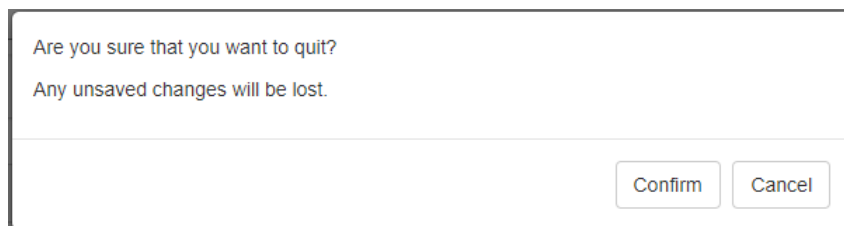


Figure 29 Quit confirmation prompt

5. Click **Confirm**. A second message will appear asking if you want to create a database backup (**Error! Reference source not found.**).

Figure 30 Database backup prompt

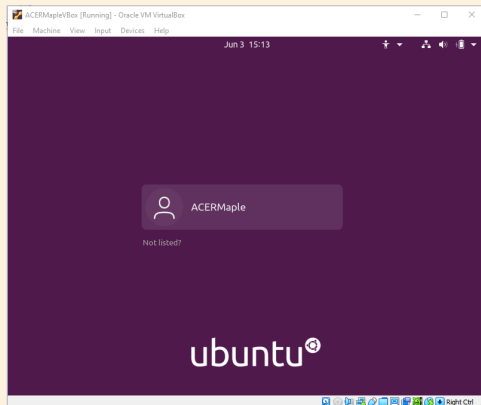
6. Click **Yes**. The background of the ACER Maple screen will become grey.
7. Export current database backup as explained in section 2.7.7 on page 43.



It is recommended as an important risk management procedure that, while ACER Maple is being actively used, **database backups are exported from the ACER Maple VM** to the local hard drive of the host PC **at least twice a day** (see section 2.7.7, page 43 for details).



**DO NOT SHUT DOWN ACER Maple VM (UBUNTU) UNLESS ALL USERS** connected to the ACER Maple interface **HAVE LOGGED OUT.**



### 2.7.6 Closing ACERMapleVM (UBUNTU) on a host PC

The ACERMapleVM can be shut down ONLY IF ALL USERS CONNECTED TO THE ACER MAPLE DATABASE HAVE LOGGED OUT.



Before powering off the ACER Maple VM, make sure that all users connected to the ACER Maple interface have logged out. **Powering down the VM without logging out all users can corrupt the ACER Maple database which may result in significant data loss.**

After you made sure that all users connected to the ACER Maple interface have logged out, the ACER Maple VM can be shut down as follows:

1. Close the ACER MapleVBox VM login window (Figure 24, page 38), then
2. Select **Power off the machine** on the *Close Virtual Machine* window (Figure 31).

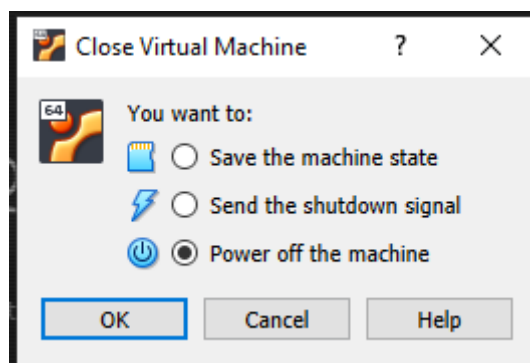


Figure 31: Close Virtual Machine window

### 2.7.7 Exporting ACER Maple database backup for archiving/storage



The following procedure is recommended to be performed **at least twice a day** as an important part of risk management. The exact timing of when the database backups should be exported will depend on your working environment and personal preferences and/or organisational practices

To export ACER Maple database backup to the host computer for archiving/storage:

1. Generate a backup from within the ACER Maple software interface by following the instructions in section 2.7.5 on page 41.
2. Navigate to the **C:\MapleFiles** directory that was created when the VM was installed ( section 2.6.3 step 1 on page 30) and manually create a new folder called 'backup' (Figure 32).

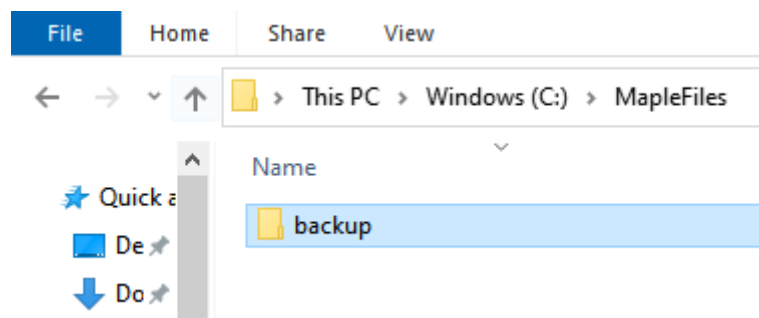


Figure 32: User-created “backup” folder in C:\MapleFiles directory

3. Within 5 minutes the directory will be automatically renamed to “backup\_<date>\_<time>” (Figure 33).

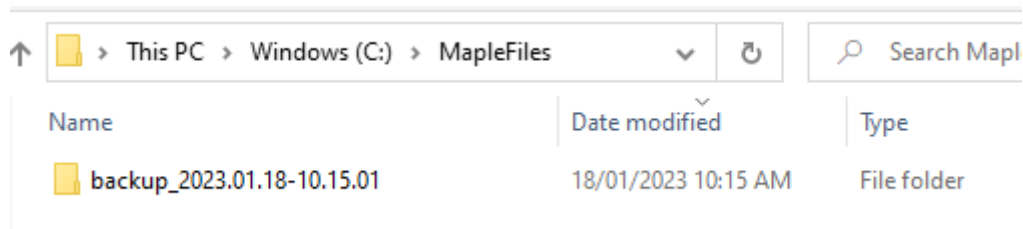


Figure 33: System-created “backup\_<date>\_<time>” folder in C:\MapleFiles directory

If the folder doesn't automatically rename within 10 minutes please contact ACER Helpdesk at [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org).

4. Open the renamed folder.
  - If the database had been backed up the day it is exported, then inside the renamed folder there should be a password-protected zip file named db\_backup\_<date>.zip (Figure 34).

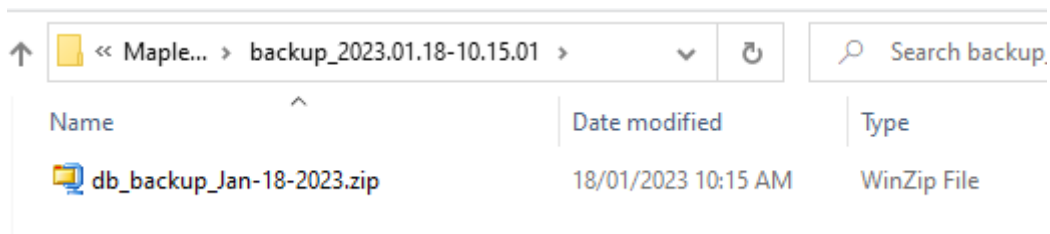


Figure 34: Password-protected zip file containing database backup

- If there is no database backup in the ACER Maple VM for the current day, the zip file exported to the “backup\_<date>\_<time>” folder will be called NoTodaysBackupFound.zip (Figure 35).

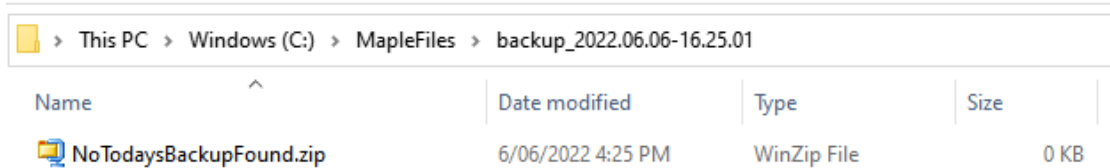


Figure 35: NoTodaysBackupFound.zip file

- If this is the case repeat steps 1 - 4 of this instruction.
5. Open the db\_backup\_<date>.zip file:
    - ▶ If it contains a folder named ‘shiny’ (Figure 36), go to the next step.

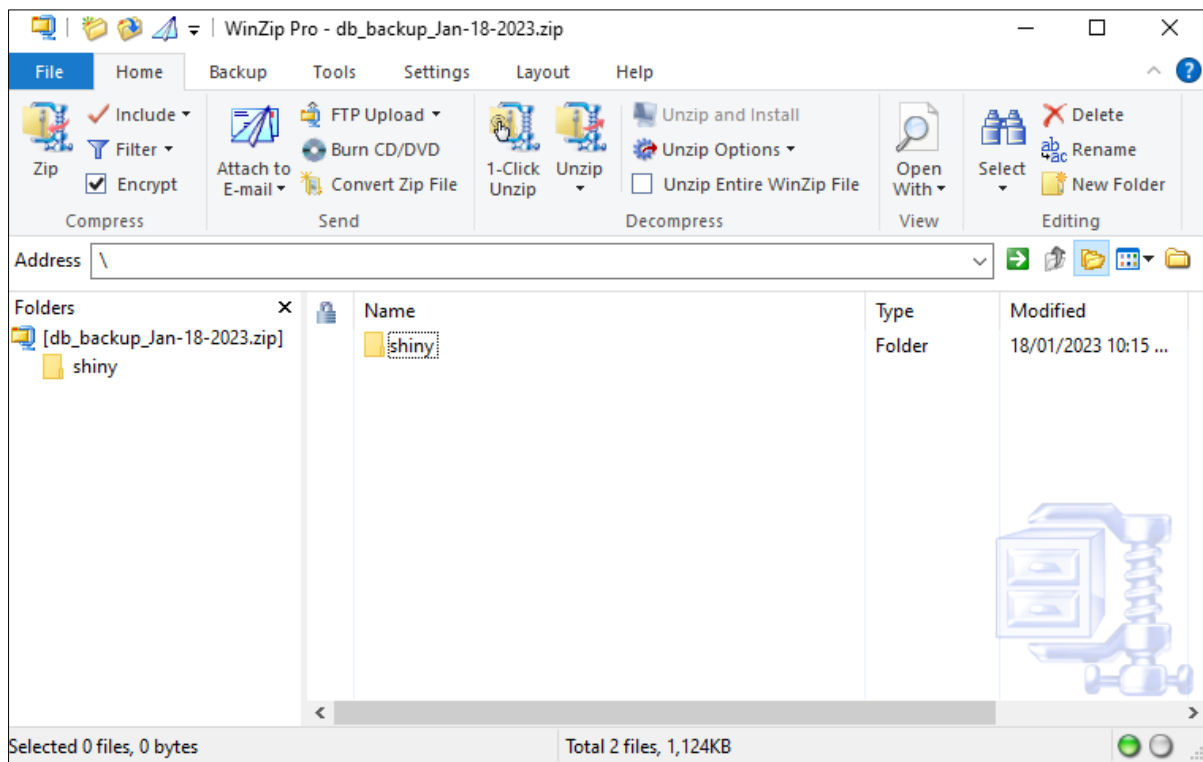


Figure 36: Contents of db\_backup zip file

- ▶ If the ‘shiny’ folder is not in the zip file, repeat steps 1 - 5 of this instruction
6. Once the db\_backup\_<date>.zip file has been successfully created, the “backup\_<date>\_<time>” folder can be moved or copied to an alternative location (e.g. USB or HD that is physically secured against unauthorised access).









Please note that **if an error does occur with the ACER Maple software, any data that has not been backed up may be permanently lost.**

## 2.8 Updating ACER Maple data

Sometimes ACER Maple data have to be updated either with the data that had been backed up by the NC or with the data sent to your NC by the ACER data management team.

- If the current data is updated with the data sent to you by ACER:

1. Open Oracle VM VirtualBox software if it is not already open, either through the **Start** () menu or the icon on desktop. 
  2. Click the start button. 
  3. Copy `Maple_update.zip` from the *MS Teams>AMPL Partner Collaboration >Country Folder>Data management (Maple)* into the `C:\MapleFiles` folder created when ACER Maple had been installed (see 2.6.3)
  4. Within 5 minutes the ACER Maple VM will be updated with the database files with the files from the zip file.
  5. If update was successful, the zip file will be renamed automatically to `Maple_Update_<Date>-<Time>.zip`
- If the current data is updated with the data previously backed up:
    1. Open Oracle VM VirtualBox software if it is not already open, either through the **Start** () menu or the icon on desktop. 
    2. Click the start button. 
    3. Rename a back-up file into `Maple_update.zip` and copy it into the `C:\MapleFiles` folder created when ACER Maple had been installed (see 2.6.3)
    4. Within 5 minutes the ACER Maple VM will be updated with the database files with the files from the zip file.
    5. If update was successful, the zip file will be renamed automatically to `Maple_Update_<Date>-<Time>.zip`

## 2.9 User Settings

### 2.9.1 First login

Due to the secure nature of the AMPL data, ACER Maple is login protected. In order to login to ACER Maple, you need to know your domain (see section 1.2.1), username and login code.

If you are a **data manager**, your domain consists of:

- Survey ID: 033;
- Entity ID: (Kenya 040400; Lesotho 042600; Zambia 089400; India tba) and
- Admin ID: **00**.

The data managers' secure usernames and temporary login codes will be emailed to your NC by ACER together with a notification that your customised national version of ACER Maple is ready to be downloaded from *MS Teams>AMPL Partner Collaboration >Country Folder>Data management (Maple)*. Each NC can have one or more data managers depending on their national options.

If you are a **data administrator**, your domain consists of:

- Survey ID: 033;
- Entity ID (Kenya 040400; Lesotho 042600; Zambia 089400; India tba); and
- Admin ID: 2-digit number assigned to you by your data manager.

The data administrator's secure username and login code will be provided by the data manager after he/she has created data administrator login details as described in section 2.9.3.

To login for the first time:

1. Open ACER Maple by pasting the IP address of the host PC into the address bar of an internet browser (**only Mozilla Firefox or Google Chrome**). The *Login* screen will appear (Figure 37).

**Figure 37: First time login function on the ACER Maple Login screen**

2. On the left-hand side of the *Login* screen under 'Help', click **First time login**. The *Password Creation* screen will appear (Figure 38).

**Figure 38: Password Creation screen**

3. Enter your Survey ID (033), Entity ID (6 digits) and Admin ID (2 digits).
4. Enter your secure username and the login code.
5. Create your password. The password must be at least 11 characters long and contain:
  - ▶ at least one upper-case letter;
  - ▶ at least one lower-case letter;

- ▶ at least one number; and
  - ▶ at least one punctuation character (e.g., !, @, #, \$, %).
6. Enter the password again.
  7. Click **Create Password**.
  8. Click **Back** to return to the *Login* screen (Figure 37).
  9. On the top right-hand side of the *Login* screen, Enter your Survey ID (033), Entity ID (6 digits) and Admin ID (2 digits).
  10. Enter your username and your new password.
  11. Click **Login**. The ACER Maple Main screen will appear (Figure 39).

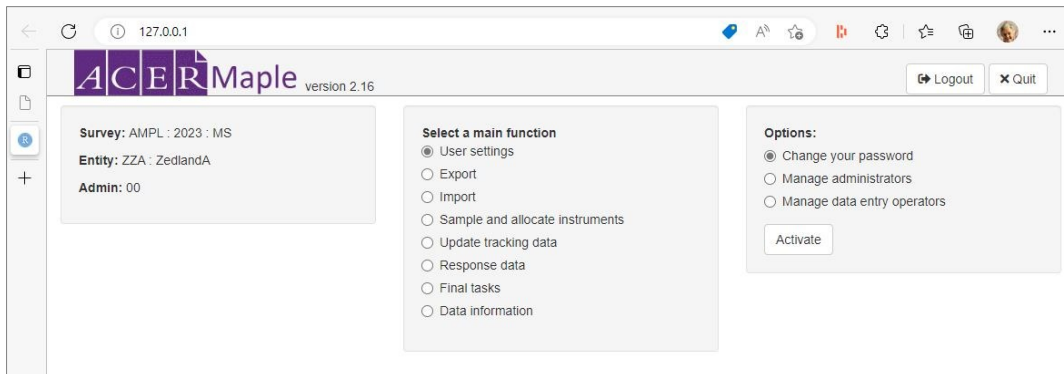


Figure 39: ACER Maple Main screen

### 2.9.2 Changing your password (all users)

To change your own password:

1. On the Main screen select **User settings > Change your password** and then click **Activate**. The *Change your password* screen will appear (Figure 40).

**Change your password**

**Enter your old password**

The password must be at least 11 characters long and contain:

- at least one upper-case letter;
- at least one lower-case letter;
- at least one number; and
- at least one punctuation character (e.g., !, @, #, \$, %).

**Enter your new password**

**Enter your new password again**

Figure 40: *Change your password* screen

2. Enter your current password.
3. Enter your new password. The password must be at least 11 characters long and contain:
  - ▶ at least upper-case letter;
  - ▶ at least one lower-case letter;
  - ▶ at least one number; and
  - ▶ at least one punctuation character (e.g., !, @, #, \$, %).

4. Enter your new password again.
5. Click **Confirm** (in the bottom right corner of the screen). A message confirming the update will appear.
6. Click **Dismiss**.

### 2.9.3 Creating and deleting data administrator logins



The data manager must create **exactly** as many data administrator logins as there are Admin ID values in the LSS.

#### Creating new data administrator logins

To create new data administrator logins:

1. On the *Login* screen enter your domain: Survey ID (033), Entity ID (6 digits) and Admin ID (00).
2. On the Main screen select **User settings > Manage administrators** and then click **Activate**. The *Manage data administrators* screen will appear (Figure 41).

Figure 41: *Manage data administrators* screen

3. Ensure that 'Create' is selected on the left-hand side of the screen.
4. In the '**Number of new users**' field, select the number of new administrator logins you wish to create. The '**New administrators**' table on the right is automatically updated with the required number of rows (Figure 42).

	Admin ID	User name	User affiliation
1	01		
2	02		
3	03		
4	04		
5	05		

Figure 42: Number of new users selected



- In the '**New administrators**' table, enter the *User name* and *User affiliation* for each new administrator login (Figure 43).

	Admin ID	User name	User affiliation
1	01	Admin1	ZZA
2	02	Admin2	ZZA
3	03	Admin3	ZZA
4	04	Admin4	ZZA
5	05	Admin5	ZZA

Figure 43: New administrators' table




Each Admin ID must be assigned a **unique** 'User name'.

- Click **Save** in the right bottom corner of the screen. A message confirming the creation of the new data administrators will appear.
- Click **Confirm**. Another confirmation message will appear.
- Click **Dismiss**. In the **Existing administrators** table, a row will appear for each new data administrator that has been created (Figure 44).  
The 'First time login code (internal)' column contains automatically generated first time login codes that each administrator will need the first time they login to ACER Maple (section 2.9.1).

	Admin ID	User name	User affiliation	First time login code (internal)
1	01	Admin1	ZZA	zQu[Kh*>Wv9
2	02	Admin2	ZZA	[N{2Vgg(~,p
3	03	Admin3	ZZA	u*Gs)DU@H_0
4	04	Admin4	ZZA	5ODH}%<)gj?
5	05	Admin5	ZZA	ze+ZWx7c<0Z

Figure 44: Newly created data administrator logins in the *Existing administrators* table

- Click the  button under the **Existing administrators** table and save an Excel file in the location designated for data administrator training. You will need to provide each data administrator with their usernames and first-time login codes at the time of data administrator training (see more details about training in Chapter 4).

### *Deleting data administrator logins*

To delete data administrator logins:

- On the *Login* screen enter your domain: Survey ID (033), Entity ID (6 digits) and Admin ID (00).
- On the Main screen select **User settings > Manage administrators** and then click **Activate**. The *Manage data administrators* screen will appear.
- Ensure that 'Delete' is selected on the left-hand side of the screen (Figure 45).
- In the **Existing administrators** table a new 'Delete' column will appear. Check the box beside any data administrator to be deleted.

	Delete	Admin ID	User name	User affiliation	First time login code (internal)
1	<input checked="" type="checkbox"/>	01	Admin1	ZZA	fr*SC20/=v

**Figure 45: Deleting data administrator logins in the *Manage data administrators*' screen**

5. Click **Save**. A message confirming the deletion of the selected data administrator logins will appear.
6. Click **Confirm**. A confirmation message will appear.
7. Click **Dismiss**.

## 2.10 Navigation and functions of ACER Maple

### 2.10.1 The ACER Maple Main screen

At the top of the Main screen of ACER Maple (Figure 46), next to the ACER Maple logo, is the ACER Maple version number.



The version number on the *Main* screen **must** be the same as in the despatch email or higher.

If the version number on the *Main* screen is lower than in the despatch email:

- Make sure that you have downloaded the latest despatch from the dedicated website.
- If the latest despatch contains a version lower than indicated in the despatch email, contact ACER Helpdesk at [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org), specifying your 3-letter country code and subject (Despatch version) in the subject line of the e-mail.

Also, at the top of the Main screen, on the right-hand side, there are two buttons: **Logout** and **Quit**.

- The **Logout** button allows a user to log out from ACER Maple without shutting down the application.
- The **Quit** button shuts down the application.

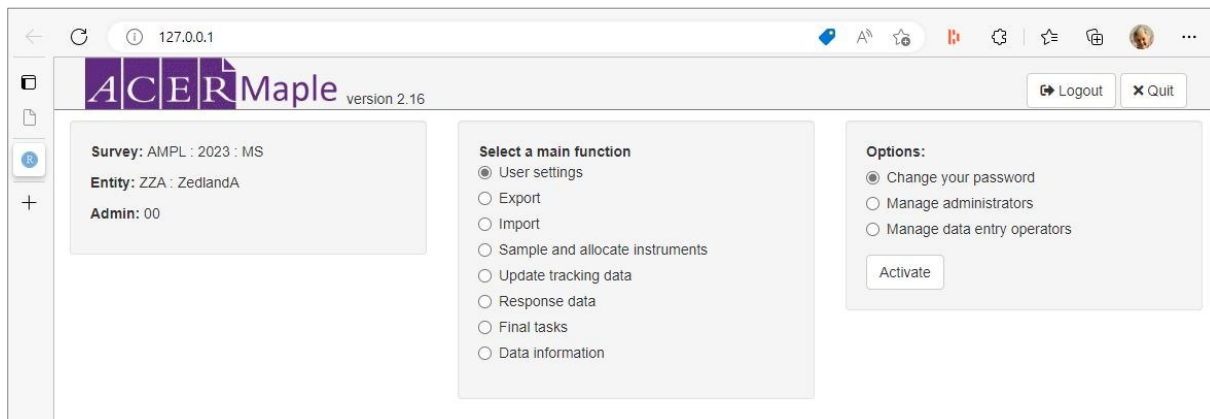
Listed directly beneath the ACER logo is the domain to which the currently logged-in user has access. Each AMPL user has access to the following domains depending on their affiliation (e.g. entity) and status:

- ▶ **Survey:** AMPL: 2023: MS
- ▶ **Entity:** your country 3-letter code and country name; and
- ▶ **Admin:** 00 for data managers and 01, 02 etc. for data administrators.

The middle section of the Main screen contains a list of *main functions* and the section on the right lists any *options* that are available for each of the main functions. Section 2.10.1 lists all of the functions

and associated options, and whether a data manager or data administrator login must be used to access them.

After a main function and an option are selected, the **Activate** button must be clicked to initiate the function.



**Figure 46: ACER Maple Main screen**

### 2.10.2 Main functions of ACER Maple

All of the ACER Maple main functions are accessed from the list of main functions on the Main screen (Figure 46). These functions and all related options are listed in Table 7. The last column in this table indicates whether a data manager or a data administrator must be logged in to ACER Maple to be able to use the listed function. Data administrators can only access a limited selection of main functions compared to data managers, and data entry operators can only key in data.

Any options that are shaded green in Table 7 **must be performed using a data administrator login**, even though these options also appear in the list of main functions available to data managers. Similarly, **a data entry operator login must be used only for keying in responses** (yellow shading in Table 7).

**Table 7: ACER Maple functionality in relation to different users**

Main function	Options	User
<b>User settings</b>	Change your password	All users
	Manage administrators	Data manager
	Manage data entry operators	Data administrator
<b>Export</b>	Initial data	Data manager
	Template documentation	Data manager
	Field data	Data administrator
	List of candidates	Data manager and data administrator
	Institution list	Data manager
	Remaining warnings	Data manager
<b>Import</b>	Field data	Data administrator
<b>Sample and allocate instruments</b>	Sample and allocate	Data administrator
<b>Update tracking data</b>	Field operation forms	Data administrator
	Institution participation form	Data manager

Main function	Options	User
Response data	Export data entry documentation	Data manager
	Key in responses	Data entry operator
	Upload responses	Data administrator
	Validate respondent list	Data administrator and data manager
	Export response data	Data manager
Final tasks	Explain warnings	Data manager
	Submit data	Data manager
Data information	WIS data	Data manager
	Response data	Data manager

### 2.10.3 Returning to the ACER Maple Main screen (Back button)

After a main function and an option are selected and **Activate** is clicked, you will be transferred to the corresponding function screen. In the top right corner of any function screen there is a **Back** button which allows you to return to the Main screen (Figure 47), beside the **Logout** and **Quit** buttons.



Figure 47: ACER Maple Back, Logout and Quit buttons

Any time you click **Back** you will be asked to confirm that you wish to go back to the Main screen and warned that any unsaved changes will be lost (Figure 48).

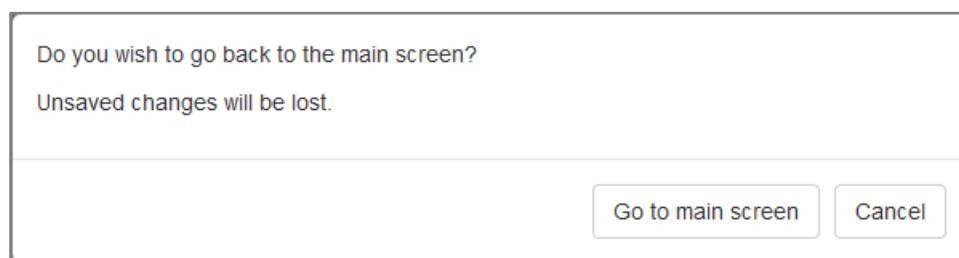


Figure 48: Back confirmation message

#### **Take this warning seriously:**

- if all changes have been saved, click **Go to main screen**; or
- if all changes have **not** been saved, click **Cancel** and save your changes before returning to the Main screen.



For navigation between ACER Maple screens **only use the buttons within ACER Maple.**

The **Go Forward** (→) and **Go back** (←) browser buttons will trigger going to the next/previous browser page that was open before you logged in to ACER Maple and therefore your connection with ACER Maple will be **lost**. If there was any unsaved work this will also be **lost**. **There will be no message warning about unsaved changes if the browser buttons are used.**

### 2.10.4 Session timeout

If you are logged in to ACER Maple but have been inactive for 2 hours or more you will automatically be logged out. The browser page will appear greyed out and a message will appear explaining that the session has timed out (Figure 49).

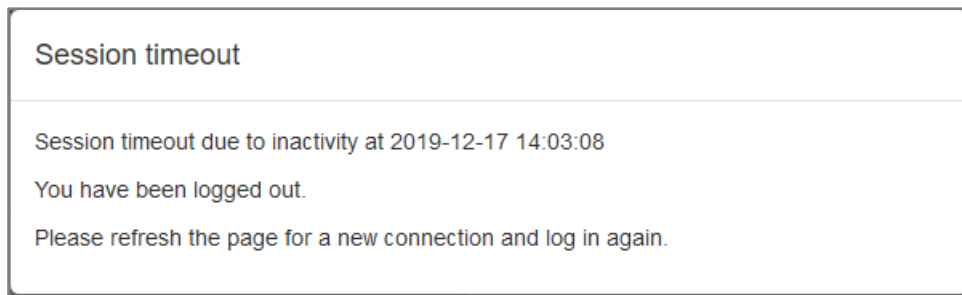



Figure 49: Session timeout message

In this case:

1. Click the refresh button in your browser (  ) to refresh the page and re-activate ACER Maple;
2. Login to ACER Maple.



Use the refresh button in the browser **only** if the session has timed out or the Quit button has been used. The browser refresh button initiates a new session in ACER Maple. If your session was active at the time it will not be ended properly, and any unsaved or unfinished work will be **lost**.

When you try to login again after refreshing the page, you may see a message warning that the user is already logged in. In this case click the ACER Maple **Quit** button, refresh the page again and login again.

## 3 NECESSARY DOCUMENTATION

3.1	Initial Data .....	54
3.1.1	Checking Initial data.....	54
3.1.2	Exporting initial data.....	55
3.2	Field operation forms and ACER Maple functions .....	56
3.3	Codebook and format files for field operation forms .....	58
3.3.1	Exporting template codebook and format files .....	58
3.3.2	Interpreting codebooks.....	59
3.4	Keeping track of school participation .....	63

### 3.1 Initial Data

During the school sampling process sampling tasks containing country-specific sampling information are agreed between your NC and ACER and uploaded onto ACER Teams. This process is finalised by agreement of the School Tracking Form. Excerpt from the School Tracking Form is imported into ACER Maple as a List of Sampled Schools (**LSS**) (see section 2.4.1 for details).

At the same time, your Questionnaire Adaptation Spreadsheet (QAS) must be agreed with ACER. Excerpt from the QAS is imported into ACER Maple as a Questionnaire Structural Adaptations (**QSA**) (see section 2.4.1 for details).

After LSS and QSA are agreed and before the ACER Maple is despatched to your NC for field operations, these files are imported into ACER Maple by the ACER data management team.

#### 3.1.1 Checking Initial data

Before using ACER Maple for the rest of your field operations, you need to:

1. Export initial data (section 3.1.2)
2. Compare the exported LSS data to the LSS data agreed during school sampling process and saved in *MS>teams>AMPL Partner Collaboration >Country Folder>Sampling*. The files must match exactly:
  - ▶ check these files carefully;
  - ▶ make sure that you understand the data in the LSS; and
  - ▶ keep the LSS and the agreed School Tracking Form handy during within-school sampling.



If the two LSS files does NOT match exactly let Alla Routitsky know immediately ([Alla.Routitsky@acer.org](mailto:Alla.Routitsky@acer.org) cc to Maple Helpdesk [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org)).

3. Compare the exported QSA data to the QSA data agreed during questionnaire adaptation process and saved in *MS>teams>AMPL Partner Collaboration >Country Folder>Questionnaires*. The files must match exactly:
  - ▶ check these files carefully;
  - ▶ make sure you understand the data in the QSA; and
  - ▶ keep the QSA handy for data entry.



If the two QSA files does NOT match exactly, let Alla Routitsky know immediatly ([Alla.Routitsky@acer.org](mailto:Alla.Routitsky@acer.org) cc to Maple Helpdesk [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org)).

### 3.1.2 Exporting initial data



The data manager login must be used for the following function.

To export all initial data from ACER Maple in Excel format:

1. On the *Main screen* select **Export > Initial data** and then click **Activate**. The *Export Initial Data* screen will appear (Figure 50).



Figure 50: Export Initial Data screen

2. Click **Export**. All initial data files will be combined into one zip file which will be available for download (Figure 51).

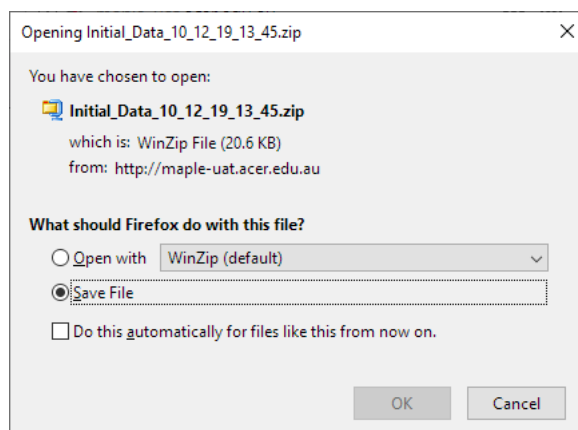


Figure 51: Initial data download pop-up

3. Select 'Save File' and save the zip file in an appropriate location and then unzip it.



Keep the initial data files handy. You will need to be familiar with this data throughout the data management operations.

## 3.2 Field operation forms and ACER Maple functions

The *MS Teams>AMPL Partner Collaboration >Data Management Resources> Field Operation Forms* folder contains the following Excel files:

- List of Classes (AMPL\_LCL)
- Sampled Class Form (AMPL\_SCF)
- List of Students (AMPL\_LST)
- Student Tracking Form (AMPL\_STF)
- School Questionnaire Tracking Form (AMPL\_SQTF)
- Student Assessment Labelling Form (AMPL\_SALF)
- School Participation Form (AMPL\_SPF)

Locate these forms and familiarise yourself with them prior to the data administrator training. For brevity only the second part of the acronym is used in this manual.

The **LCL**, **SCF**, **LST**, **STF**, and the **SQTF** templates are used by data administrators.

The **SALF** is filled with data by either data managers or data administrators and then used to label assessment materials.

The **SPF** is used by data managers to record school participation after the assessment.

Table 8 contains an overview of the data source(s) for each field operation form. It also explains how these forms relate to ACER Maple functions.



The LCL and the LST *Information* worksheet will require linguistic adaptations which are explained in the *Note to NC*. Talk to your NPM if adaptations had not been done.



**Note to the countries, where the word 'class' is used for grouping of students in the same grade level, taught by the same teacher.** Make sure that in the *Information* worksheet of the LCL and the LST the adaptations in row 6 are made and the *Note to NC* is deleted (see examples in Table 13 and Table 15). Talk to your NPM if the changes had not been done.



**Note to the countries, where the word 'class' is NOT used for grouping of students in the same grade level, taught by the same teacher.** Make sure that in the *Information* worksheet of the LCL and the LST the word 'class' is explained in row 6 and the *Note to NC* is deleted. Talk to your NPM if the changes had not been done.



Table 8: Overview of field operation forms and ACER Maple functions

Field operation form to be used	Data source	ACER Maple function
<b>List of Classes (LCL)</b>	Completed List of Classes provided by schools.	Use <b>Import &gt; Field data</b> to import List of Classes data either school-by-school or for multiple schools simultaneously.
<b>Sampled Classes Form (SCF)</b>	After class sampling, ACER Maple generates data with which this form is populated.	After class sampling, use <b>Export &gt; Field data</b> to export sampled class data into the sampled class template.
<b>List of Students (LST)</b>	Completed List of Students provided by schools.	Use <b>Import &gt; Field data</b> to import List of Students data either school-by-school or for multiple schools simultaneously.
<b>Student Tracking Form (STF)</b>	Before the assessment: After student sampling, ACER Maple generates student tracking forms populated with sampled students' data.	Before the assessment: After student sampling, use <b>Export &gt; Field data</b> to export sampled students' data into the student tracking form template.
	During the assessment: TA adds student participation and updates student demographic data with help from SC.	After the assessment: Use <b>Update tracking data &gt; Field Operation Forms</b> to update student participation and demographic data.
<b>School Questionnaire Tracking Form (SQTF)</b>	Before the assessment: ACER Maple populates this form with the list of school principals for schools in each domain. Completed by the data administrator for each domain on receipt of materials.	Use <b>Export &gt; Candidate List</b> to populate the template with the data from ACER Maple.
	After the assessment: Completed by the data administrator for each domain on receipt of materials.	Use <b>Update tracking data &gt; Field Operation Forms</b> to update school questionnaire receipt after the assessment.
<b>Student Assessment Labelling Form (SALF)</b>	After student sampling and before the assessment, ACER Maple generates student SALF populated with sampled students' data	Use <b>Export &gt; Candidate List</b> to populate the template with the data from ACER Maple.
<b>School Participation Form (SPF)</b>	Before the assessment: Exported from ACER Maple by the data manager.	Use <b>Export &gt; Institution list</b> to export list of schools eligible to participate.
	After the assessment: Completed by the data manager on receipt of materials.	Use <b>Update tracking data &gt; Institution participation form</b> to import school participation data.



The processes of collecting class and student lists from schools and using tracking forms by TA and SC are explained in the relevant field operation manuals. Please ask your NPM for an adapted version of the manual required.

## 3.3 Codebook and format files for field operation forms

### 3.3.1 Exporting template codebook and format files

*Codebook* files describe the internal structure of ACER Maple templates and give information about the variables in them. Codebook files are exported in Excel format.

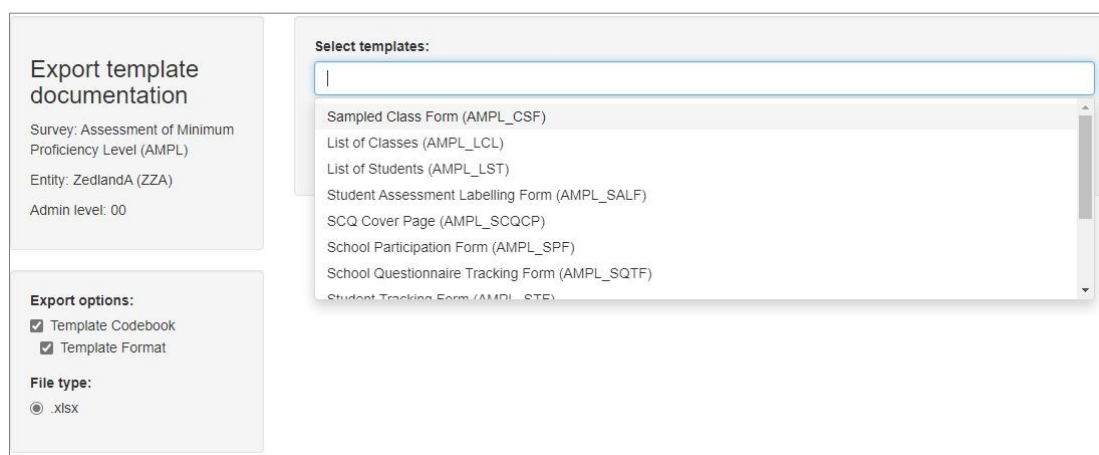
*Format* files contain only column headings. They are useful to check that column headings in the corresponding worksheet of the Excel template match the column headings in ACER Maple. Format files are exported in Excel format.



The data manager login must be used for the following function.

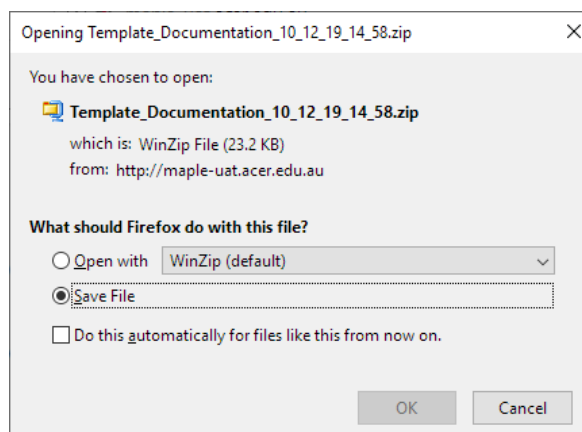
To export template codebook and format files:

1. On the Main screen select **Export > Template documentation** and then click **Activate**. The *Export template documentation* screen will appear (Figure 52).



**Figure 52: Export template documentation screen**

2. From the **Select templates** drop-down list select following templates: LCL, SCF, LST, STF, and SQTF.
3. In the **Export options** list de-select any export options that are not required. By default, both template codebook and template format options are selected.
4. Click **Export**. All codebook and/or format files will be combined into a single zip file which you will be prompted to download (Figure 53).



**Figure 53: Template documentation zip file**

5. Select **Save File** and click **OK** to save the zip file. Manually enter or navigate to an appropriate location to save the file.
6. Once the file has downloaded, open it and extract the files to an appropriate location.
7. Prepare sufficient number of copies for data administrators to use during training.
8. Proceed to section 3.3.2 to learn how to interpret codebooks.

### **3.3.2 Interpreting codebooks**

Each Excel codebook file contains two worksheets:

1. a list of all variables in the template and information about them (e.g. formats);
2. value labels for selected variables.

The worksheet containing variables has 10 columns of data. The data in each column is explained in Table 9 (page 60). The provided examples are excerpts from the codebook of the standard List of Students (LST) template presented in Table 10.

Value labels are not required for every value of every variable, but only for those values whose meaning could not be provided by the variable labels or column headings. Table 11 shows value labels for some variables in the standard List of Students (LST) template.

Table 9: Codebook columns in the worksheet containing variables

Column	Column heading	Description
A	Column/Row headings	The column heading as it appears in the Excel template.
B	Variable type	There are four variable types: fixed-width string (e.g. Line No.), long string (e.g. Student Name), integer (e.g. Study programme), and numeric (e.g. AMPL School No.). The variable type determines how the validation rule is defined in the next five columns.
C	Variable min	These two columns define the range of values for any variables that can be defined with a range of values (e.g. for Month of Birth the possible range of values is from 01 to 12). If the validation rule is not defined with a range of values, such as for a long string variable, Min=Max=0.
D	Variable max	
E	Out-of-range values	Any valid values not included in the range are listed (if required). E.g. Gender has an additional value of 9 –'Missing' added to the range of 1-3. This column in the codebook is left blank if there is no out-of-range values.
F	Variable width	For fixed-width string variables this is the exact number of characters that the variable can have (e.g. Gender must have exactly one character). For all other variables this is the maximum number of characters that the variable can have (e.g. Student Name can have up to 60 characters, but does not need to use all of them).
G	Decimal places	For numeric variables this column lists the number of decimal places that are saved in the data. For all other variables It is 0.
H	Variable label	A short description of the variable.
I	Variable name	A short alphanumeric string. The variable name must be unique. It is used in a number of different places, particularly in SPSS and SAS control files when data is downloaded.
J	Table acronym	The acronym of the ACER Maple table (internal) which contains the data for this variable.

Table 10: LST template codebook – variables worksheet

	A	B	C	D	E	F	G	H	I	J
1	Column/Row headings	Variable type	Variable min	Variable max	Out-of-range values	Variable width	Decimal places	Variable label	Variable name	Table acronym
2	AMPL School No.	numeric	0	99999999		8	0	Institution tracking	srtrack	MPT2
3	Line No.	fixed-width string	00000	99998		5	0	Input line number	idinp	MPT2
4	Lower Grade	integer	0	1		1	0	Pop 1 eligibility	mpop1	TCD2
5	Upper Grade	integer	0	1		1	0	Pop 2 eligibility	mpop2	MPT2
6	Student Name	long string	0	0		180	0	Record name in TCD	tcname	MPT2
7	Gender	fixed-width string	1	3	9	1	0	Gender	mpin01	MPT2
8	Month of Birth	fixed-width string	01	12	[97;98;99]	2	0	Date of birth-month	mpin04	MPT2
9	Year of Birth	fixed-width string	1920	2599	[9997;9998;9999]	4	0	Date of birth-year	mpin05	MPT2
10	SEN	integer	0	6		1	0	SEN	mpin14	TCD2
11	Class Name	long string	0	0		10	0	Group name	mpin07	
12	Grade Level	numeric	0	20	[96;97;98;99]	2	0	Year level	mpin06	
13	Class ID	integer	0	95		2	0	Group ID	mpin12	

Table 11: LST template codebook – value labels worksheet

	A	B	C	D	E
1	Column/Row headings	Variable name	Variable label	Value	Value label
2	Gender	mpin01	Gender	1	Female
3	Gender	mpin01	Gender	2	Male
4	Gender	mpin01	Gender	3	Other
5	Gender	mpin01	Gender	9	Missing
7	Lower Grade	mpop1	Pop 1 eligibility	0	Ineligible for sampling
8	Lower Grade	mpop1	Pop 1 eligibility	1	Eligible for sampling
10	Upper Grade	mpop2	Pop 2 eligibility	0	Ineligible for sampling
11	Upper Grade	mpop2	Pop 2 eligibility	1	Eligible for sampling
12	Month of Birth	mpin04	Date of birth-month	97	N/A

13	Month of Birth	mpin04	Date of birth-month	98	Invalid
14	Month of Birth	mpin04	Date of birth-month	99	Missing
15	Year of Birth	mpin05	Date of birth-year	9997	N/A
16	Year of Birth	mpin05	Date of birth-year	9998	Invalid
17	Year of Birth	mpin05	Date of birth-year	9999	Missing
18	Grade	mpin06	Year level	96	Ungraded
19	Grade	mpin06	Year level	97	N/A
20	Grade	mpin06	Year level	98	Invalid
21	Grade	mpin06	Year level	99	Missing
22	Grade Level	mpin06	Year level	96	Ungraded
23	Grade Level	mpin06	Year level	97	N/A
24	Grade Level	mpin06	Year level	98	Invalid
25	Grade Level	mpin06	Year level	99	Missing
26	Class ID	mpin12	Group ID	0	N/A, no group sampling required
27	SEN	mpin14	SEN	0	Default, no SEN
27	SEN	mpin14	SEN	1	Functional disability
29	SEN	mpin14	SEN	2	Cogn., behav. or emot. disability
30	SEN	mpin14	SEN	3	Limited language experience
31	SEN	mpin14	SEN	4	No materials in respondents' language
32	SEN	mpin14	SEN	5	Survey specific
33	SEN	mpin14	SEN	6	Survey specific
34	No. of students	mpin15	Group size	997	N/A
35	No. of students	mpin15	Group size	998	Invalid

### 3.4 Keeping track of school participation

During the field operations stage of the AMPL, the data manager should ensure that school participation status is tracked. A code for each school should be recorded either:

- in the School Participation Form exported from ACER Maple;
- OR
- in a file where all other information about AMPL schools is recorded.

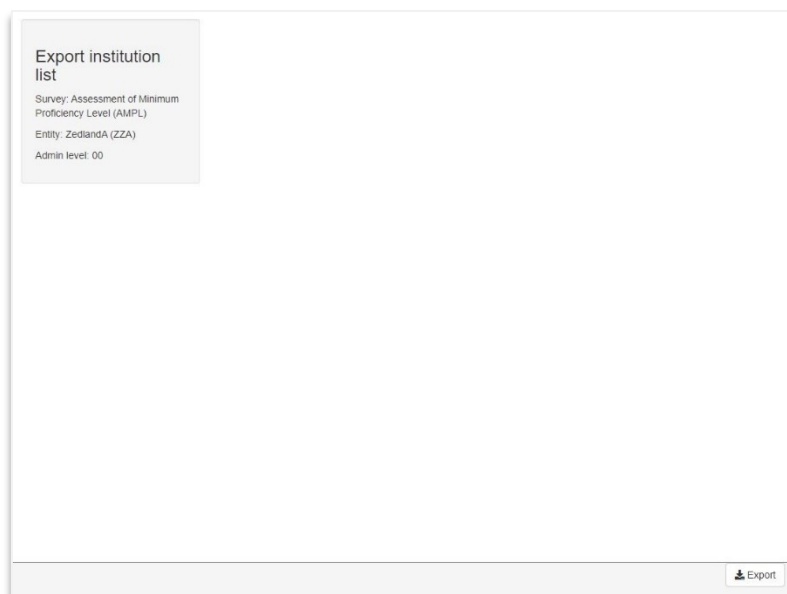
School participation should then be updated in ACER Maple **after** all STF data from all participating schools) have been updated, **and before** the data is submitted to ACER (see details in section 9.6). The advantage of recording participation codes in the School Participation Form is that this form can be imported later into ACER Maple without any additional work. If school participation information is recorded elsewhere, the data needs to be manually transferred into the School Participation Form before it can be imported into ACER Maple.



The data manager login must be used for the following function.

To export the School Participation Form (SPF) listing all AMPL schools for your NC:

1. On the Main screen select **Export > Institution list** and then click **Activate**. The *Export institution list* screen will appear (Figure 54).



**Figure 54: Export institution list screen**

2. Click **Export**. You will be prompted to save a zip file containing the School Participation Form.
3. Manually enter or navigate to an appropriate location to save the file and click **Save**.
4. Once the file has downloaded, open it and extract the School Participation Form to an appropriate location.



Keep the the School Participation Form handy. You will need to provide a code for each school, including all replacements, as soon as you know the school's participation status. School participation codes can be found in section 9.6.1.

# 4 DATA ADMINISTRATOR TRAINING

- 4.1 Data administrator training agenda.....64
- 4.2 Preparation for data administrator training .....65
- 4.3 Training setup.....65
- 4.4 Prepare training List of Classes data .....66
- 4.5 Prepare training List of Students data .....67
- 4.6 Prepare updated STF .....72

## 4.1 Data administrator training agenda

Data managers are required to train data administrators before the assessment in how to use ACER Maple. For the purposes of training data administrators, data managers are advised to adapt materials in the *MS Teams>AMPL Partner Collaboration > Data Management Resources* and other training materials provided by ACER. However, not all topics included in the DM presentation will be required for data administrator training.

The topics that must be covered in data administrator training are outlined in Figure 55 and explained in detail in corresponding chapters of this manual, as well as in the *Data Management Training Presentation*. The following section explains how the data manager should prepare for data administrator training.

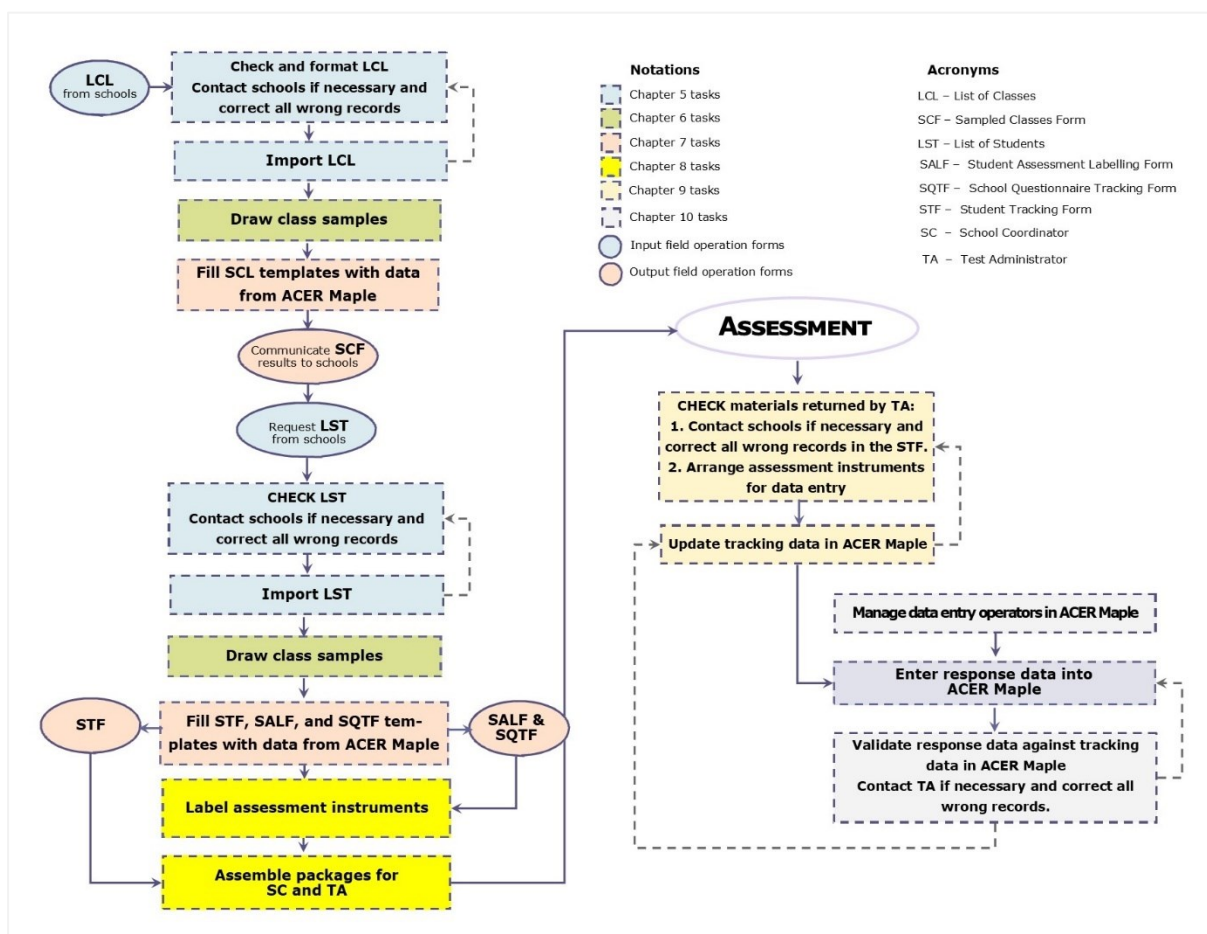


Figure 55: Data administrators' tasks for the AMPL



## 4.2 Preparation for data administrator training

Preparing the materials for data administrator training gives data managers an opportunity to better familiarise themselves with AMPL data management procedures and ACER Maple.

Table 12 lists the data manager’s tasks in relation to data administrator training and provides references to relevant sections and/or chapters of this document.

For the purposes of data administrator training, a number of fictitious ‘schools’ have been included in the LSS and can be used to test some of the ACER Maple procedures before any real data is available. These ‘schools’ are found in stratum 99 of the LSS.

**Table 12: Data manager tasks in relation to data administrator training**

Preparation task	Reference
Ensure that training setup corresponds to the real working conditions of data administrators.	Section 4.3, Introduction, Chapters 1 and 2
Prepare necessary documentation	Chapter 3
Download DMTP provided by ACER.	DMTP
Prepare training field operation forms for schools from stratum 99.	Sections 4.4-4.6 and DMTP
Adapt DMTP exercise on checking and importing LST.	Chapter 5 and DMTP
Adapt DMTP exercise on student sampling from schools in stratum 99	Chapter 6 and DMTP
Adapt DMTP exercise on populating STF templates with sampling data.	Chapter 7 and DMTP
Adapt DMTP exercise on checking and updating STF ‘after the assessment’.	Section 4.6, Chapter 9 and DMTP



### Note to ALL National Centres:

Sections 4.4-4.6 provide fictitious examples. These examples must be modified to the grade level(s) assessed by your NC.

## 4.3 Training setup

Data administrator training should be set up to correspond to the real working conditions of data administrators as much as possible. To achieve this, you should make sure that:

1. All data administrators attend the training.
2. The required computing equipment is ready:
  - ▶ ACER Maple is installed in a LAN environment as described in Chapter 2 with one of PCs for each data administrator plus one host PC.
  - ▶ each PC meets the system requirements and PC setup (sections 2.2 and 2.3); and
  - ▶ administrator logins are created for each data administrator as explained in section 2.9.3.
3. LCL, SCF, LST, STF, SALF and SQTF templates are copied over to every data administrator PC.
4. Audio-visual equipment is ready to use. Some examples of this equipment might include:
  - ▶ a projector for viewing the *Data Management Training Presentation*, ensuring that the screen is visible from every data administrator workstation; or

- ▶ a second monitor for each data administrator, so that they can watch the *Data Management Training Presentation* on one monitor and complete the training exercises using another monitor.

## 4.4 Prepare training List of Classes data

The List of Classes (LCL) template is despatched together with ACER Maple. It is designed as an Excel file with two worksheets:

- the *Information* worksheet, containing school information and instructions for School Coordinators; and
- the *List of Classes* worksheet, containing class data.

Both worksheets should be copied and populated with fictitious information by the data manager in preparation for data administrator training.

Table 13 shows an example of the *Information* worksheet prepared for training. This example can be used as a basis for creating your own *Information* worksheet of the LCL template used for training. Please note that:

- For **training** purposes, the **AMPL School No** value in row 5 **must** correspond to a 'school' in stratum 99 of the List of Sampled Schools (LSS) agreed between your NC and ACER.
- The total number of classes listed in rows 4 and 5 should correspond to the number of classes listed in the *List of Classes* worksheet ('4' for grade 4 and '3' for grade 6 in this example).
- If only one grade level is assessed, only information for one grade level (whichever is assessed by your NC) should be provided.
- The DIRECTIONS in row 6 should be:
  - ▶ As they are shown in Table 13 with the exception of grade level IF the word 'class' is used in your country for grouping of students in the same grade level, taught by the same teacher.
  - ▶ IF the word 'class' is NOT used for grouping of students in the same grade level, taught by the same teacher, make sure that the word '**class**' is explained in row 6 and the *Note to NC* below row 6 is deleted. Talk to your NPM if the changes had not been implemented.
- The **grade levels** in the DIRECTIONS in row 6 should correspond to the grade levels assessed in your country.

**Table 13: Example of LCL School information to be used training (as if 'returned from school')**

1	School information					
2	School name:	School 123	Telephone:	4584563	List prepared by:	Mr SC ABC
3	National School ID.:	ZZA123	Fax:	4584565	Date list prepared:	20/05/2023
4	Address:	Central avenue, 46	Email:	sc@schoolcentral	Total number of grade 4 classes listed:	4
5	AMPL School No.:	1			Total number of grade 6 classes listed:	3
6	DIRECTIONS FOR the <i>List of Classes</i> worksheet: Please list alphabetically by <b>Class name</b> ALL grade 4 and 6 classes in your school and the number of students in each class. After the List of Classes worksheet is filled with class data, fill out the three boxes above (i.e. 'List provided by', 'Date list prepared', 'Total number of classes 4 listed', and 'Total number of classes 6 listed')					

Table 14 shows an example of error-free class data in Excel format prepared for training. The data in this table can be used as the basis for creating your own LCL training data. You will need to create at least two lists of class data for training. One containing errors that data administrators should correct during the training and one that is error-free, like the example in Table 14.

When creating **error-free** LCL data for training, adhere to the following rules:

- **AMPL School No.** ‘returned from school’ should be empty. It will be populated with the AMPL School No value from the *Information* worksheet by the data administrator during training.
- **Line No.** ‘returned from school’ should be empty. It will be populated with sequential 5-digit string (00001, 00002,...) by the data administrator during training.
- **Lower Grade** ‘returned from school’ should be empty. It will be populated with ‘1’ for lower grade and with ‘0’ for upper grade.
- **Upper Grade** ‘returned from school’ should be empty. It will be populated with ‘0’ for lower grade and with ‘1’ for upper grade.



**Note to National Centres assessing lower primary school students only:**

- fill the **Lower Grade** column with ‘1’ for all classes; and
- fill the **Upper Grade** column with ‘0’ for all classes.



**Note to National Centres assessing upper primary school students only:**

- fill the **Lower Grade** column with ‘0’ for all classes; and
- fill the **Upper Grade** column with ‘1’ for all classes.

- **Class name** should be listed in alphabetical order and if the class name contains the grade level like in example in Table 14, it should correspond to the grade level value from the *Information* worksheet.
- **No. of Students** should be close to the expected number of students in the class in your country.
- **Grade Level** ‘returned from school’ should be entered by School Coordinator.

**Table 14: Example of LCL data in Excel format to be used training (as if ‘returned from school’)**

1	AMPL School No	Line No.	Lower Grade	Upper Grade	Class Name	No. of Students	Grade Level
2					4A	30	4
3					4B	25	4
4					4C	32	4
5					4D	20	4
6					6A	30	6
7					6B	25	6
8					6C	32	6

## 4.5 Prepare training List of Students data

After an error-free LCL for the fictitious school has been prepared and populated with ‘AMPL School No’ and ‘Line No’ (see sections 5.2), data administrators can proceed to import it into ACER Maple

(section 5.4). After the LCL has been successfully imported a class for assessment can be drawn (Chapter 6). After sampling the SCF template for the fictitious school can be populated with sampling data (Chapter 7). In real-life situation, the School Coordinator is informed about which class will be participated in the assessment and asked to send the list of students enrolled in the sampled class. For training, pretend that this had been done and the list of students is received.

The List of Students (LST) template is despatched together with ACER Maple. It is designed as an Excel file with two worksheets:

- the *Information* worksheet, containing school information and instructions for School Coordinators; and
- the *List of Students* worksheet, containing student data.

Both worksheets should be copied and populated with fictitious information by the data manager in preparation for data administrator training.

Table 15 shows an example of the *Information* worksheet prepared for training. This example can be used as a basis for creating your own *Information* worksheet of the LST template used for training. When filling the *Information* worksheet in the LST please adhere to the following rules:

- For **training** purposes, the **AMPL School No** value in row 5 **must** correspond to a ‘school’ in stratum 99 of the List of Sampled Schools (LSS) agreed between your NC and ACER.
- The DIRECTIONS in row 6 should be:
  - ▶ As they are shown in Table 15 with the exception of grade level IF the word ‘**class**’ is used in your country for grouping of students in the same grade level, taught by the same teacher.
  - ▶ IF the word ‘**class**’ is NOT used in your country for grouping of students in the same grade level, taught by the same teacher, make sure that the word ‘**class**’ is explained in row 6 and the *Note to NC* is deleted. Talk to your NPM if the changes had not been implemented.
- **Grade Level** under **Sampled class information** should be populated with the grade level assessed in your country.
- **Class Name** and **Class ID** under **Sampled class information** should be populated with the corresponding values exported after class sampling into the SCF template.
- **Only one change is required in the instructions under Special Educational Needs (SEN) Codes** in the *Information* worksheet: **survey language** must be changed to English.



#### Note to the India NC:

For schools assessed in Hindi the **survey language** must be changed to Hindi

Table 15: Example of LST School information to be used training (as if 'returned from school')

1	<b>School information</b>				
2	<b>School name:</b>	Central school	<b>Telephone:</b>	4584563	<b>List prepared by:</b> Mr SC ABC
3	<b>National School No.:</b>	XT3Q5	<b>Fax:</b>	4584565	<b>Date list prepared:</b> 20/05/2023
4	<b>Address:</b>	Central avenue, 46	<b>Email:</b>	sc@schoolcentral	<b>Total number of students listed:</b> 65
5	<b>AMPL School No.:</b>	1001			
6	<p><b>DIRECTIONS FOR the List of Students worksheet:</b> Please list ALL students in your school in sampled class (see Sampled class information below) and provide their demographic data.</p> <p>Use the list of codes in the Special Educational Needs (SEN) to fill the corresponding column in the List of Students worksheet.</p> <p>After the List of Students worksheet is filled with student data, fill out the three boxes above (i.e. 'List provided by', 'Date list prepared', and 'Total number of students listed').</p>				
7					
8	<b>Special Educational Needs (SEN) Codes:</b>		<b>Sampled [classes] information</b>		
9	<b>Code</b>	<b>Description</b>	<b>Grade Level</b>	<b>Class Name</b>	<b>Class ID</b>
10	0	No special educational needs	<>	<>	<>
11	1	Functional disability...			
	2	Cognitive, behavioural, or emotional disability...			
12	3	Limited <b>survey language</b> experience...			

Table 16 shows an example of error-free student data in Excel format prepared for training. The data in this table can be used as the basis for creating your own LST training data. You will need to create at least two lists of student data for training. One containing errors, that data administrators should correct during the training, and one that is error-free, like the example in Table 16.

When creating **error-free** LST data for training, adhere to the following rules:

- **School Name** 'returned from school' should be empty. It will be populated with the school name from the *Information* worksheet by the data administrator during training.
- **AMPL School No.** 'returned from school' should be empty. It will be populated with the AMPL School No value from the *Information* worksheet by the data administrator during training.
- **Line No.** 'returned from school' should be empty. It will be populated with sequential 5-digit string (00001, 00002,...) by the data administrator during training.
- **Lower Grade** 'returned from school' should be empty. It will be populated with '1' for lower grade and with '0' for upper grade.
- **Upper Grade** 'returned from school' should be empty. It will be populated with '0' for lower grade and with '1' for upper grade.



**Note to National Centres assessing lower primary school students only:**

- fill the **Lower Grade** column with '1' for all classes; and
- fill the **Upper Grade** column with '0' for all classes.



**Note to National Centres assessing upper primary school students only:**

- fill the **Lower Grade** column with '0' for all classes; and
- fill the **Upper Grade** column with '1' for all classes.

- **Student name** is usually listed in alphabetical order. Provide the names used in your country.
- **Gender:** if the names in your language differ by gender, make sure that:
  - ▶ 1 is assigned to **girls**; and
  - ▶ 2 is assigned to **boys**.
- **Month of Birth** should be a random 2-digit string (between 01 and 12) as in the example in Table 16.
- **Year of Birth:** an appropriate value should be selected from the range of years within which the students from the grade level being assessed in your country were born.
- **SEN:** most of the students should have '0' (no SEN), and a small number of students should have '1' (Functional disability), '2' (Cognitive, behavioural or emotional disability), or '3' (Limited language experience).
- **Grade Level:** replace grade level(s) with the grade level(s) being assessed in your country.
- **Class name** 'returned from school' should be empty. It will be populated with the class name from the *Information* worksheet by the data administrator during training.
- **Class ID** 'returned from school' should be empty. It will be populated with the class name from the *Information* worksheet by the data administrator during training.

For some 'schools' please create an LST containing *errors* and ensure that data administrators are trained to check LST data when it is received from schools. For example, include a *Month of Birth* value between '1' and '9' (i.e. without a leading zero), or/and *Gender* value of '0'. Read more about LST checks and correct formatting of LST variables in Chapter 5.

Table 16: Example of LST data in Excel format to be used in training (as if 'returned from school')

1	For NC use					<Name> <Surname>	F=1; M=2	MM	YYYY		Class		
2	School Name	AMPL School No.	Line No.	Lower Grade	Upper Grade	Student Name	Gender	Month of Birth	Year of Birth	SEN	Grade Level	Class Name	Class ID
3						Xab Yac	1	01	2010	0			
4						Xac Yad	1	11	2011	0			
5						Xaf Yag	2	09	2010	0			
6						Xad Yag	1	08	2010	0			
7						Xaj Yak	2	05	2010	1			
8						Xab Yac	1	03	2010	0			
10						Xb Yacd	2	12	2010	0			
11						Xab Yah	2	11	2010	0			
12						Xak Yalk	1	03	2010	1			
13						Xkl Yvb	2	05	2010	0			
28						Xab Ykm	2	02	2010	0			
29						Xed Ygbn	2	04	2009	0			
30						Xsd Ymrv	1	10	2010	0			
31						Xcv Ywdj	2	07	2010	0			
32						Xth Ysdf	1	04	2010	2			
33						Xwe Ywsc	1	08	2010	0			
34						Xab Yuhj	2	03	2010	0			
35						Xerb Yjkl	1	01	2010	3			

## 4.6 Prepare updated STF

---

After an error-free LST for the fictitious school has been prepared and populated with additional information by data administrators (section 5.3), data administrators can proceed to import it into ACER Maple (section 5.4). After the LST has been successfully imported the student sample can be drawn (Chapter 6). After sampling the STF template for the fictitious school can be populated with sampling data (Chapter 7).

Table 17 shows an example Student Tracking Form in Excel format containing training data ready to be updated in ACER Maple. The data in this table can be used as a basis for creating your own STF training data. Any STF training data should contain a AMPL School No value that corresponds to a 'school' in stratum 99.

For some fictitious schools please create an STF with errors and ensure that data administrators are trained to check STF data when it is returned by Test Administrators.



Table 17: Example of STF data in Excel format ready to be updated in ACER Maple during training

1	School Name	AMPL School No.		School Coordinator				Test Administrator				Session Date 1 (DD/MM)	Session date 2 (DD/MM)		
2	<i>Central school</i>	1001		<i>Mr ST ABC</i>				<i>Ms TA XYZ</i>				30/05	31/05		
3		LST			F=1; M=2	MM	YYYY		Attendance			Participation	Class		
4	Student Name	Line No.	AMPL Participant ID	Test Form	Gender	Month of Birth	Year of Birth	SEN	Test	StQ	LG	UG	Grade Level	Class Name	Comments
5	Xab Yac	00001	92100106	5	1	01	2010	0	1	1	9	1	6	6C	
6	Xac Yad	00002	92100104	6	1	11	2011	0	0	1	9	0	6	6C	
7	Xaf Yag	00003	92100105	7	2	09	2010	0	1	0	9	0	6	6C	
8	Xad Yaf	00004	92100101	8	1	08	2010	0	0	0	9	1	6	6C	
9	Xaj Yak	00005	92100103	3	2	05	2010	1	1	1	9	0	6	6C	
10	Xab Yac	00006	92100108	4	1	03	2010	0	0	1	9	1	6	6C	
11	Xb Yacd	00007	92100102	5	2	12	2010	0	1	0	9	1	6	6C	
12	Xab Yah	00008	92100109	6	2	11	2010	0	1	1	9	1	6	6C	
13	Xak Yalk	00009	92100107	7	1	03	2010	1	0	0	9	0	6	6C	
14	Xkl Yvb	00010	92100110	8	2	05	2010	0	0	0	9	0	6	6C	
15	Xab Yfg	00011	92100115	3	1	06	2010	0	0	0	9	0	6	6C	
16	Xab Ykm	00012	92100120	4	2	02	2010	0	0	0	9	0	6	6C	
16	Xed Ygbn	00013	92100111	5	2	04	2009	0	0	0	9	0	6	6C	
18	Xsd Ymrv	00014	92100116	6	1	10	2010	0	0	0	9	0	6	6C	
19	Xcv Ywdj	00015	92100112	7	2	07	2010	0	0	0	9	0	6	6C	
20	Xth Ysdf	00016	92100117	8	1	04	2010	2	0	0	9	0	6	6C	
21	Xwe Ywsc	00017	92100113	3	1	08	2010	0	0	0	9	0	6	6C	
22	Xab Yuhj	00018	92100114	4	2	03	2010	0	0	0	9	0	6	6C	

## 5 PREPARING AND IMPORTING DATA FOR SAMPLING

5.1	Class and student sampling logistics.....	75
5.2	Preparing LCL data for import .....	76
5.2.1	File naming conventions.....	77
5.2.2	List of Classes data preparation outline .....	77
5.2.3	Check grade level and class names .....	78
5.2.4	Check the number of classes.....	78
5.2.5	Check the number of students .....	78
5.2.6	Contact school if required.....	78
5.2.7	Sort LCL data .....	79
5.2.8	Add the value in the 'AMPL School No.' column.....	80
5.2.9	Add values in the 'Line No.' column .....	80
5.2.10	Add values in the 'Lower Grade' and 'Upper Grade' columns.....	80
5.2.11	Ensure the data matches the validation rules in each column.....	81
5.2.12	Save the file.....	82
5.3	Preparing LST data for import .....	82
5.3.1	File naming conventions.....	83
5.3.2	List of Students data preparation outline.....	83
5.3.3	Check class names.....	83
5.3.4	Check the gender and age distributions.....	84
5.3.5	Check the number of students .....	84
5.3.6	Contact school if required.....	84
5.3.7	Sort LST data .....	85
5.3.8	Add the school name in the first column.....	86
5.3.9	Add the value in the 'AMPL School No.' column.....	86
5.3.10	Add values in the 'Line No.' column .....	86
5.3.11	Add values in the 'Lower Grade' and 'Upper Grade' columns.....	87
5.3.12	Ensure the data matches the validation rules in each column.....	87
5.3.13	Save the file.....	87
5.4	Importing Data for Sampling .....	89
5.5	Import Field Data Validity Report .....	92
5.5.1	Errors in List of Classes data .....	92
5.5.2	Warnings in List of Classes data.....	93
5.5.3	Errors in List of Students data.....	96
5.5.4	Warnings in List of Students data .....	96
5.6	Caution against Re-Importing Field Data .....	99
5.6.1	Caution against Re-Importing List of Classes .....	99
5.6.2	Caution against Re-Importing List of Students .....	99
5.6.3	Re-Importing field data .....	100

## 5.1 Class and student sampling logistics

The logistics of sampling are illustrated in Figure 56, outlined below and explained in detail in relevant sections of this manual:

1. After data administrators have been trained, they will start checking class lists received from schools and formatting them into LCL files (sections 5.2), then importing the LCL data into ACER Maple (section 5.4).
2. After data from the LCL have been successfully imported into the ACER Maple database, class sampling is undertaken, which results in one class of each grade level being sampled (chapter 6) and SCF form populated with the sampled class data (chapter 7).
3. After that the SC must be contacted and asked for the student lists from the sampled class. After List of Students is received from schools, data administrators check and format the student lists received from schools into the LST files, then import the LST data into ACER Maple (sections 5.3 and 5.4).
4. Each time the data is imported into ACER Maple, the software will check the imported data for inconsistencies. Detected inconsistencies will be listed in the *Import Field Data Validity Report*. Some of these inconsistencies may be errors that must be corrected before student sampling can proceed, while others may be warnings of missing data that can be completed later by Test Administrators on the tracking forms (section 5.5).



Data will only be transferred into the ACER Maple database when all errors have been corrected.

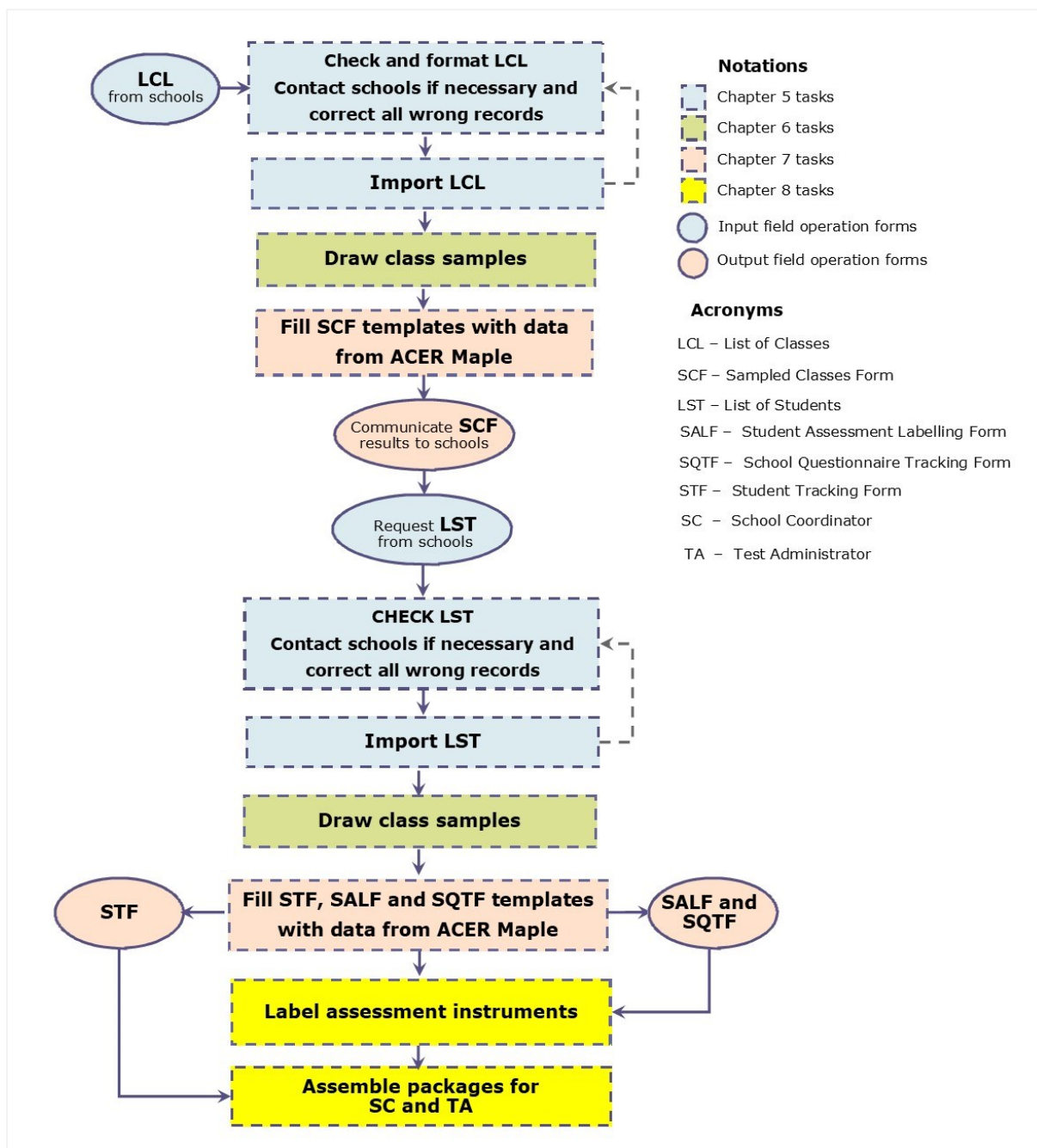


Figure 56: Sampling logistics

## 5.2 Preparing LCL data for import

The List of Classes (LCL) is crucial for sampling in the AMPL project because only students sampled from sampled classes are eligible for assessment. The data stored in these lists are used in student tracking forms, to validate sampling data and for weight adjustments after the data is collected and submitted to ACER.



To make LCL import efficient, the data in each LCL must be checked and corrected **before** being imported into ACER Maple.



It is important for the data manager to export the LCL codebook (see section 3.3) and make it available to all data administrators, before the data administrators begin preparing the LCL data for import.

It is preferable for the LCL data to be prepared and imported **one school at a time as soon as it is received**. The process for preparing a file for importing starts with establishing a file naming convention, as described in section 5.2.2. The remaining steps for preparing the file are outlined in section 5.3.2, and explained in detail in sections 5.2.3 - 5.2.12.

### 5.2.1 File naming conventions

Before any LCLs start arriving from schools, the data manager must establish a file naming convention and ensure that all data administrators adhere to it.



All data administrators within your NC must use the same file naming convention.

- Each LCL file should be saved in Excel format in a designated location.
- Each LCL file must have in the file name 'LCL', an **AMPL school number**, the school name, and the date when the LCL was prepared (e.g. LCL\_121\_Central school\_AsReceived210502).
  - ▶ If an LCL has been received electronically, it should be saved according to the established file naming convention before any further preparation of the file begins.
  - ▶ If an LCL has been received in hard copy, it must be:
    1. checked, in hard copy, as explained in sections 5.2.3 - 5.2.5;
    2. corrected (if required), in hard copy, as explained in section 5.2.6;
    3. keyed into an LCL Excel template (5.2.7-5.2.11);
    4. saved according to the established file naming convention before any further preparation continues (5.2.12).

### 5.2.2 List of Classes data preparation outline

The following 9 steps outlines how to prepare the List of Classes data:

1. Check grade level(s) and class names (section 5.2.3).
2. Check the number of classes in the *List of Classes* worksheet against the *Information* worksheet (section 5.2.4).
3. Check the number of students in the *List of Classes* worksheet (section 5.2.5).
4. Contact school if required (section 5.2.6).
5. Sort the LCL data (section 5.2.7).
6. Add the appropriate value in the 'AMPL School No.' (section 5.2.8).
7. Add appropriate values in the 'Line No.' column (section 5.2.9).
8. Add appropriate values in the 'Lower Grade' and 'Upper Grade' columns (section 5.2.10).
9. Ensure that the data adheres to the validation rules for each column (section 5.2.11).
10. Save the file (section 5.2.12).

### 5.2.3 Check grade level and class names

Check that the number in the **Grade Level** column matches the grade level assessed in your country (refer to Table 18).



**If in your NC two grade levels are assessed**, make sure that each list contains only one grade level. E.g., grade 4 classes must be listed separately from grade 6 classes.

**Table 18: Grade levels assessed by AMPL countries**

Country	Grade level assessed
India	3 and 5
Kenya	6
Lesotho	7
The Gambia	3
Zambia	4 and 7

In the **Class Name** column

- If grade level is not included in the class name, or class name is not provided<sup>9</sup>, go to section 5.3.4.
- If grade level is included in the class name (e.g. 6a), highlight any class names with grade level that does not match the number in the **Grade Level** column or the grade level assessed in your country.

### 5.2.4 Check the number of classes

The number of classes in the *List of Classes* worksheet must be the same as the number provided in the *Information* worksheet.

Make a note if this is not the case.

### 5.2.5 Check the number of students

The number of students in the *List of Classes* worksheet for each class must be a reasonable number for your country. If it is too small or too large from your point of view, make a note

### 5.2.6 Contact school if required

After completing checks described in sections 5.2.3 - 5.2.5:

- if there are no highlighted cases or additional notes that were made during checking, go to section 5.2.7.

OTHERWISE

- contact the school to verify the data for any highlighted cases or additional notes that were made during checking.

Possible queries for the school and the actions required to correct the data are listed in Table 19.

<sup>9</sup> Class names and students name are optional. They are provided for convenience of administration.

**Table 19: Possible queries regarding LCL checks, and actions required**

Possible query	Actions required
Query any class names with incorrect grade levels	<ul style="list-style-type: none"> <li>If any classes are in the correct grade level, but there was an error in the class name, correct the class name in the LCL.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>If any classes listed are in the wrong grade level, ask the School Coordinator to send a corrected list and destroy the incorrect one.</li> </ul>
Query any suspicious or missing student numbers	<ul style="list-style-type: none"> <li>If the School Coordinator provides updated data, update the records in the LCL.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>If the data is not available, enter missing values as indicated in the codebook and ask the School Coordinator to provide the data later for sampled class(es)</li> </ul>
Query any instance where the number of classes in the <i>List of Classes</i> worksheet is not the same as the number provided in the <i>Information</i> worksheet	<ul style="list-style-type: none"> <li>If the number provided in the <i>Information</i> worksheet is incorrect, correct the number in the worksheet.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>If the number of classes in the <i>List of Classes</i> worksheet is incorrect, ask the School Coordinator to send a corrected list and destroy the incorrect one.</li> </ul>

After enquiries are made:

- If all corrections have been made in the existing LCL, save a new version of the LCL with “\_Updated” added to the end of the file name. Ensure that the new file is saved in a suitable location.
- If the School Coordinator is required to send an updated List of Classes, delete the existing one. When the updated LCL has been received, it will need to be checked again.

### 5.2.7 Sort LCL data

If an “\_Updated” LCL has been saved, it will need to be checked to ensure that the listed records are ordered correctly before ACER Maple can import it. Open the updated LCL in Microsoft® Excel to check:

- If the records on the LCL are ordered alphabetically according to class name (e.g. 6a is listed first, then 6b,...).  
OTHERWISE
- Sort the LCL data alphabetically by Class Name as follows:
  - If the file has opened in Microsoft® Excel in Protected View, click the **Enable Editing** button at the top of the screen.
  - Highlight row 1 and ALL class records in the List of Classes worksheet.
  - Click **DATA**. The DATA ribbon will be displayed at the top of the Excel screen.
  - Click **Sort**. The *Sort* window will appear (Figure 59).
  - Click ‘My data has headers’ in the top right-hand corner of the *Sort* window (see Figure 59).
  - In the *Sort by* drop-down list, click ‘AMPL School No.’.
  - Click Add Level
  - In the *Then by* drop-down list, click ‘Grade Level’.

9. Click Add Level
10. In the *Then by* drop-down list, click 'Class Name'.
11. Click Add Level
12. Click **OK**. Microsoft® Excel will sort the data.

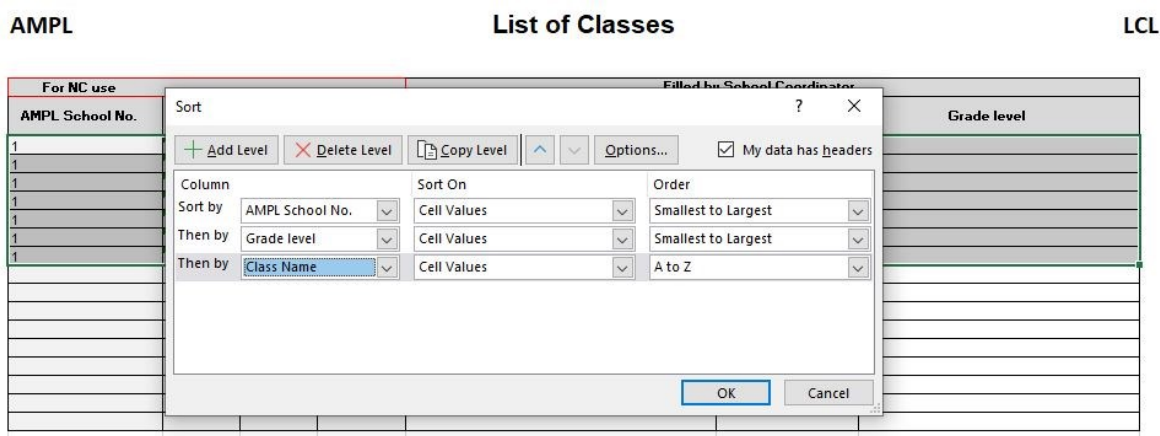


Figure 57: Sorting LCL

13. Check that the LCL has been sorted as specified:
  - ▶ If yes, save a copy of the file with extension “\_Sorted”
  - ▶ Otherwise, close the file without saving, reopen it, and repeat steps 1 to 12 to sort again.

### 5.2.8 Add the value in the 'AMPL School No.' column

In the 'AMPL School No.' column, copy over the value from the 'AMPL School No' cell in the *Information* worksheet. Make sure that the number is the same for all records in the school.

Click **Save**.

### 5.2.9 Add values in the 'Line No.' column

To add 'Line No.' values in the 'Line No.' column:

- In the first row, enter '00001'. Remember to use a single quotation mark to include leading zeroes.
- In the second row, enter '00002'.
- Select the two cells, then position the cursor at the bottom right of the selection, and then click to expand the black square down to the row of the last student in the list (Figure 60). This will populate the line numbers “00001, 00002, 00003, ...” for the school.
- Click **Save**.

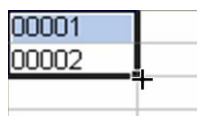


Figure 58: Populating LCL 'Line No.' column

### 5.2.10 Add values in the 'Lower Grade' and 'Upper Grade' columns

- In the '**Lower Grade**' column, type '**1**' for all lower grade classes and '**0**' for all upper grade classes.



- In the '**Upper Grade**' column, type '**1**' for all upper grade classes and '0' for all lower grade classes.
- Check that '0' and '1' are assigned correctly.
  - ▶ If '0' and '1' are assigned correctly, click **Save**.
  - ▶ Otherwise correct and then click **Save**.



**Note to National Centres assessing lower primary school students only:**

- fill the **Lower Grade** column with '1' for all classes; and
- fill the **Upper Grade** column with '0' for all classes
- See example in Table 21.



**Note to National Centres assessing upper primary school students only:**

- fill the **Lower Grade** column with '0' for all classes; and
- fill the **Upper Grade** column with '1' for all classes.
- See example in Table 22

### 5.2.11 Ensure the data matches the validation rules in each column

Compare the prepared LCL data against the exported codebook and format files for the LCL and verify that the data matches the validation rules in each column, and the structure of the data. See section 3.3 for instructions on exporting codebook and format files and how to interpret codebooks.

As an example of a validation check consider the following: The 'Month of Birth' column requires a 2-digit number (as specified in the validation rule for this column in the codebook). This means that if March is entered as '3' or 'March', it must be changed to '03' to avoid an error when importing the data into ACER Maple. To include a leading 0, key in a single quotation mark (') in front of '03'.



Note that a single quotation mark (') is necessary to include leading zeros in columns 'Line No.' and 'Month of Birth'.

To ensure correct structure

- Open LCL format
- Make sure that all columns are in the right order
- Copy the first row from the format and paste it in row 2 of the LCL data worksheet.

Table 20 shows LCL data for a fictitious NC assessing two grade levels ready to be imported into ACER Maple. Table 21 and Table 22 shows similar examples of LCL for fictitious NCs assessing on ly one grade level.

**Table 20: Example LCL data in Excel format ready to be imported into ACER Maple (lower and upper grades)**

1	AMPLSchool No.	Line No.	Lower Grade	Upper Grade	Class name	No. of Students	Grade Level
2	1	00001	1	0	4A	30	4
3	1	00002	1	0	4B	25	4
4	1	00003	1	0	4C	32	4
5	1	00004	1	0	4D	20	4
6	1	00005	0	1	6A	33	6
7	1	00006	0	1	6B	25	6
8	1	00007	0	1	6C	32	6

**Table 21: Example LCL data in Excel format ready to be imported into ACER Maple (lower grade only)**

1	AMPLSchool No.	Line No.	Lower Grade	Upper Grade	Class name	No. of Students	Grade Level
2	1	00001	1	0	4A	30	4
3	1	00002	1	0	4B	25	4
4	1	00003	1	0	4C	32	4
5	1	00004	1	0	4D	20	4

**Table 22: Example LCL data in Excel format ready to be imported into ACER Maple (upper grade only)**

1	AMPLSchool No.	Line No.	Lower Grade	Upper Grade	Class name	No. of Students	Grade Level
2	1	00005	0	1	6A	33	6
3	1	00006	0	1	6B	25	6
4	1	00007	0	1	6C	32	6

### 5.2.12 Save the file

Save a new version of the LCL with “\_ForImport” added to the end of the file name. Ensure that the new file is saved in a suitable location.

## 5.3 Preparing LST data for import

The List of Students (LST) is crucial for student sampling. The data stored in these lists are used in student tracking forms and to validate sampling data.



To make LST import efficient, the data for each LST must be checked and corrected **before** being imported into ACER Maple.



It is important for the data manager to export the LST codebook (see section 3.3) and make it available to all data administrators, before the data administrators need to begin preparing the LST data for import.

It is preferable for the LST data to be prepared and imported **one school at a time as soon as it is received**. The process for preparing a file for importing starts with establishing a file naming convention, as described in section 5.3.1. The remaining steps for preparing the file are outlined in section 5.3.2, and explained in detail in sections 5.3.3 - 5.3.13.

### 5.3.1 File naming conventions

Before any LSTs start arriving from schools, the data manager must establish a file naming convention and ensure that all data administrators adhere to it.

- Each LST file should be saved in Excel format in a designated location.
- Each LST file must have in the file name 'LST', a AMPL school number, any other information that identifies the school (e.g. the school name), and the date that list was prepared (e.g. LST\_121\_Central school\_AsReceived210502).



All data administrators within your NC must use the same file naming convention.

- If an LST has been received electronically, it should be saved according to the established file naming convention before any further preparation of the file begins (section 5.3.2).
- If an LST has been received in hard copy, it must be:
  1. checked, in hard copy, as explained in sections 5.3.3- 5.3.5;
  2. corrected (if required), in hard copy, as explained in section 5.3.6;
  3. keyed into an LST Excel template and check the results (5.3.7-5.3.12); and
  4. saved according to the established file naming convention before any further preparation continues (5.3.13).

### 5.3.2 List of Students data preparation outline

To prepare the List of Students data:

1. Check class names (section 5.3.3).
2. Check gender and age distributions (section 5.3.4 ).
3. Check the number of students in the *List of Students* worksheet against the *Information* worksheet (section 5.3.5).
4. Contact school if required (section 5.3.6).
5. Sort the LST data (section 5.3.7).
6. Add the school name in the first column (section 5.3.8).
7. Add the appropriate value in the 'AMPL School No.' (section 5.3.9).
8. Add appropriate values in the 'Line No.' column (section 5.3.10).
9. Add appropriate values in the 'Lower Grade' and 'Upper Grade' columns (section 5.3.11)
10. Ensure that the data adheres to the validation rules for each column (section 5.3.12).
11. Save the file (section 5.3.13).

### 5.3.3 Check class names

- If grade level is not included in the class name, or class name is not provided<sup>10</sup>, go to section 5.3.4.
- If grade level is included in the class name (e.g. 6a):

<sup>10</sup> Class names and student names are optional. They are provided for convenience of administration.

1. check that the grade level indicated in the class name corresponds to the grade level assessed in your country (refer to Table 18 on page 78).
2. highlight any class names with an incorrect grade level.

### **5.3.4 Check the gender and age distributions**

The gender and age distributions must match the school's demographic background (e.g. a single gender school cannot have students of both genders, or a student born in 2015 cannot be in grade 6).

Highlight any records in the List of Students that have incorrect, suspicious or missing demographics data. Some examples of such records are:

- a student who is the only female in the List of Students;
- year of birth that is outside the usual range for students from the grade level being assessed
- any student with missing gender or date of birth data.

### **5.3.5 Check the number of students**

The number of students in the *List of Students* worksheet must be the same as the number provided in the *Information* worksheet.

Make a note if this is not the case.

### **5.3.6 Contact school if required**

After completing checks described in sections 5.3.3- 5.3.5:

- if there are no highlighted cases or additional notes that were made during checking, go to section 5.3.7.

OTHERWISE

- contact the school to verify the data for any highlighted cases or additional notes that were made during checking.

Possible queries for the school and the actions required to correct the data are listed in Table 23.

**Table 23: Possible queries regarding LST checks and actions required**

Possible query	Actions required
Query any class names with incorrect grade levels	<ul style="list-style-type: none"> <li>If any students are in the correct grade level, but there was an error in the class name, correct the class name in the LST.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>If any students listed are in the wrong grade level, ask the School Coordinator to send a corrected list and destroy the incorrect one.</li> </ul>
Query any suspicious or missing demographics data <sup>11</sup>	<ul style="list-style-type: none"> <li>If the School Coordinator provides updated data, update the records in the LST.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>If the data is not available, enter missing values as indicated in the codebook and ask the School Coordinator to provide the data later in the STF for sampled students</li> </ul>
Query any instance where the number of students in the <i>List of Students</i> worksheet is not the same as the number provided in the <i>Information</i> worksheet	<ul style="list-style-type: none"> <li>If the number provided in the <i>Information</i> worksheet is incorrect, correct the number in the worksheet.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>If the number of students in the <i>List of Students</i> worksheet is incorrect, ask the School Coordinator to send a corrected list and destroy the incorrect one.</li> </ul>

After enquiries are made:

- If all corrections have been made in the existing LST, save a new version of the LST with “\_Updated” added to the end of the file name. Ensure that the new file is saved in a suitable location.
- If the School Coordinator is required to send an updated List of Students, delete the existing one. When the updated LST has been received, it will need to be checked again.

### 5.3.7 Sort LST data

If an “\_Updated” LST has been saved, it will need to be checked to ensure that the listed records are ordered correctly before ACER Maple can import it. Open the updated LST in Microsoft® Excel to check:

- If the records on the LST are ordered alphabetically according to class name (e.g. all students from 6a are listed first, then all students from 6b,...) AND student name within each class, go to section 5.3.9.
- OTHERWISE
- Sort the LST data alphabetically by Class Name and Student name (within Class name) as follows:
    - If the file has opened in Microsoft® Excel in Protected View, click the **Enable Editing** button at the top of the screen.
    - Highlight row 2 and ALL student records in the List of Students worksheet.
    - Click **DATA**. The DATA ribbon will be displayed at the top of the Excel screen.
    - Click **Sort**. The *Sort* window will appear (Figure 59).

<sup>11</sup> Date of birth and gender **must** be entered into the Excel spreadsheet. In rare cases when actual date of birth or gender are not available at the time of sampling, missing values must be entered. See Appendix 3 if ‘blind’ sampling is required.

5. Click 'My data has headers' in the top right-hand corner of the *Sort* window (see Figure 59).
6. In the *Sort by* drop-down list, click Class Name.
7. Click **Add Level**. A new 'Then by' drop-down list will appear.
8. In the 'Then by' drop-down list, click Student Name.
9. Click **OK**. Microsoft® Excel will sort the data.

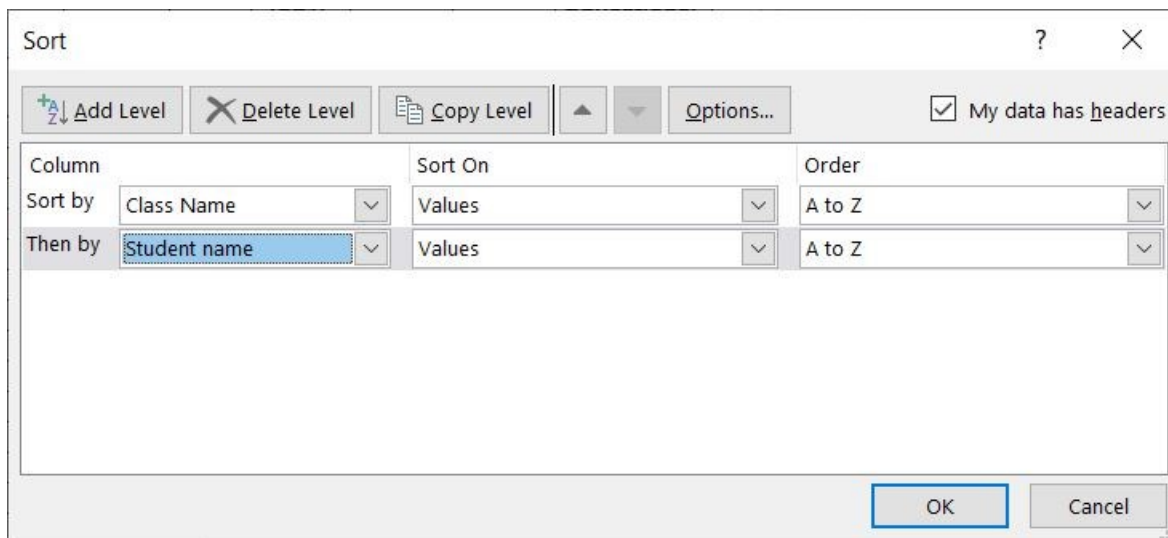


Figure 59: Sorting LST

10. Check that the LST has been sorted as specified:
  - ▶ If yes, save a copy of the file with extension “\_Sorted”
  - ▶ Otherwise, close the file without saving, reopen it, and repeat steps 1 to 10 to sort again.

### 5.3.8 Add the school name in the first column

In the 'School Name' column, copy over the 'School Name' cell from the *Information* worksheet. Make sure that the name is the same for all records in the school.

### 5.3.9 Add the value in the 'AMPL School No.' column

In the 'AMPL School No.' column, copy over the value from the 'AMPL School No' cell in the *Information* worksheet. Make sure that the number is the same for all records in the school.

### 5.3.10 Add values in the 'Line No.' column

To add 'Line No.' values in the 'Line No.' column:

- In the first row, enter '00001. Remember to use a single quotation mark to include leading zeroes.
- In the second row, enter '00002.
- Select the two cells, then position the cursor at the bottom right of the selection, and then click to expand the black square down to the row of the last student in the list (Figure 60). This will populate the line numbers “00001, 00002, 00003, ...” for the school.

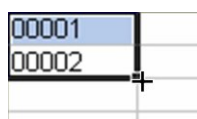


Figure 60: Populating LST 'Line No.' column

### 5.3.11 Add values in the 'Lower Grade' and 'Upper Grade' columns

- In the 'Lower Grade' column, type '1' for all lower grade students and '0' for all upper grade classes.
- In the 'Upper Grade' column, type '1' for all upper grade students and '0' for all lower grade classes.
- Check that '0' and '1' are assigned correctly.
  - ▶ If '0' and '1' are assigned correctly, click **Save**.
  - ▶ Otherwise correct and then click **Save**.



#### Note to National Centres assessing lower primary school students only:

- fill the **Lower Grade** column with '1' for all classes; and
- fill the **Upper Grade** column with '0' for all classes.



#### Note to National Centres assessing upper primary school students only:

- fill the **Lower Grade** column with '0' for all classes; and
- fill the **Upper Grade** column with '1' for all classes.

### 5.3.12 Ensure the data matches the validation rules in each column

Compare the prepared LST data against the exported codebook and format files for the LST and verify that the data matches the validation rules in each column, and the structure of the data. See section 3.3 for instructions on exporting codebook and format files and how to interpret codebooks.

As an example of a validation check consider the following: The 'Month of Birth' column requires a 2-digit number (as specified in the validation rule for this column in the codebook). This means that if March is entered as '3' or 'March', it must be changed to '03' to avoid an error when importing the data into ACER Maple. To include a leading 0, key in a single quotation mark (') in front of '03'.



Note that a single quotation mark (') is necessary to include leading zeros in columns 'Line No.' and 'Month of Birth'.

To ensure correct structure

- Open LST format.
- Make sure that all columns are in the right order.
- Copy the first row from the format and paste it in row 2 of the LST data worksheet.

Table 24 shows LST data ready to be imported into ACER Maple.

### 5.3.13 Save the file

Save a new version of the LST with "\_For\_Import" added to the end of the file name. Ensure that the new file is saved in a suitable location.

Table 24: Example LST data in Excel format ready to be imported into ACER Maple (two grade levels)

For NC use						<Name> <Surname>	F=1; M=2	MM	YYYY		Class		
1	School Name	AMPL School No.	Line No.	Lower Grade	Upper Grade	Student Name	Gender	Month of Birth	Year of Birth	SEN	Grade Level	Class Name	Class ID
2	School 123	1	00001	1	0	Xab Yac	1	01	2010	0	4	4B	3
3	School 123	1	00002	1	0	Xac Yad	1	11	2011	0	4	4B	3
4	School 123	1	00003	1	0	Xaf Yag	2	09	2010	0	4	4B	3
5	School 123	1	00004	1	0	Xad Yag	1	08	2010	0	4	4B	3
6	School 123	1	00005	1	0	Xaj Yak	2	05	2010	1	4	4B	3
7	School 123	1	00006	1	0	Xab Yac	1	03	2010	0	4	4B	3
8	School 123	1	00007	1	0	Xb Yacd	2	12	2010	0	4	4B	3
10	School 123	1	00008	1	0	Xab Yah	2	11	2010	0	4	4B	3
11	School 123	1	00009	1	0	Xak Yalk	1	03	2010	1	4	4B	3
12	School 123	1	00010	1	0	Xkl Yvb	2	05	2010	0	4	4B	3
28	School 123	1	00026	0	1	Xab Ykm	2	02	2010	0	6	6C	3
29	School 123	1	00027	0	1	Xed Ygbn	2	04	2009	0	6	6C	3
30	School 123	1	00028	0	1	Xsd Ymrv	1	10	2010	0	6	6C	3
31	School 123	1	00029	0	1	Xcv Ywdj	2	07	2010	0	6	6C	3
32	School 123	1	00030	0	1	Xth Ysdf	1	04	2010	2	6	6C	3
33	School 123	1	00031	0	1	Xwe Ywsc	1	08	2010	0	6	6C	3
34	School 123	1	00032	0	1	Xab Yuhj	2	03	2010	0	6	6C	3
35	School 123	1	00033	0	1	Xerb Yjkl	1	01	2010	3	6	6C	3



## 5.4 Importing Data for Sampling



A data administrator login must be used for the following function.

To import LCL or LST data into ACER Maple:

1. On the Main screen select **Import > Field data** and then click **Activate**. The *Import field data* screen will appear (Figure 61).
2. In the **Available Templates** drop-down list on the left-hand side of the screen select:
  - ▶ LCL if you are importing List of Classes;
  - ▶ LST if you are importing List of Students.
3. In the **Selected Template Preview** use the horizontal scrollbar at the bottom of the previewed list to view all the columns in the template.
4. In the **Options** list ensure that 'Append to existing data' is selected.

Figure 61: *Import field data* screen

5. Click **Browse...** and manually enter or navigate to the location of the Excel file containing the LST data to be imported.



The Excel file selected for import **must** match the template selected in the **Available Templates** drop-down list.

The Excel file will be uploaded into ACER Maple and its file name will appear in a tab beside the **Browse...** button.

In the **Uploaded File Preview** a preview of the uploaded file will appear (Figure 62). Only the first 15 rows of data will be displayed. The total number of rows and columns in the uploaded file will be displayed beneath the preview.

### Import field data

Survey: Assessment of Minimum Proficiency Level (AMPL)  
Entity: ZedlandA (ZZA)  
Admin level: 01

---

**Available Templates:**

List of Classes (AMPL\_LCL) ▾

**Browse (.xlsx)**

Browse... AMPL\_ZZA\_LCL\_5\_

**Upload complete**

**Options:**

Append to existing data

Replace specific records

\* Button 'Import' can be re-enabled by clicking 'Browse...'

### Selected Template Preview

	AMPL School No.	Line No.	Lower Grade	Upper Grade	Class Name	No. of Students	Grade Level
1	Institution tracking	Input line number	Pop 1 eligibility	Pop 2 eligibility	Group name	Group size	Year level

Template Acronym: "AMPL\_LCL", Template Full Name: "List of Classes", Template ID: "1" (033\_00000\_1)  
Worksheet Number: 2, Heading Row Number: 2

---

### Uploaded File Preview

(Only display first 15 rows of data)

	AMPL School No.	Line No.	Lower Grade	Upper Grade	Class Name	No. of Students	Grade Level
1	5	00001	1	0	4A	30	4
2	5	00002	1	0	4B	25	4
3	5	00003	1	0	4C	32	4
4	5	00004	1	0	4D	20	4
5	5	00005	0	1	6A	33	6
6	5	00006	0	1	6B	25	6
7	5	00007	0	1	6C	32	6

Total Rows: 7, Total Columns: 7

**Figure 62: Uploaded File Preview for a List of Classes (LST)**

- Click **Import**. ACER Maple then performs a number of validity checks on the data in the selected Excel file.

The possible outcomes and required actions are described in Table 25 for the LCL and Table 26 for the LST.

**Table 25: Possible outcomes when importing List of Classes data**

Outcome	Next steps
<p>LCL data has been validated, with no discrepancies, and is ready to be imported into the ACER Maple database.</p> <p>Pop-up message appears saying the data has been validated with no errors or warnings.</p>	<ol style="list-style-type: none"> <li>1. Click <b>Continue</b>.</li> <li>2. Another pop-up message will appear listing the number of records updated. Click <b>Dismiss</b>.</li> <li>3. Import LCL data from another Excel file (if required); OR click <b>Back</b> to continue with other tasks; OR click <b>Quit</b> to close the session and create a back-up (see sections 2.7.4 / 2.7.5)</li> </ol>
<p>LCL data contains some discrepancies that should be checked before importing (warnings).</p> <p>Pop-up message appears warning that there are discrepancies, but the data can be imported, and prompts you to save or download the report.</p> <p><i>Import Field Data Validity Report</i> is available for download.</p>	<ol style="list-style-type: none"> <li>1. Click <b>Download Validity Report</b>, save the file in an appropriate location and open it.</li> <li>2. Refer to section 5.5 to check the records that appear in the report.</li> <li>3. If any corrections are required, click <b>Cancel</b> to dismiss the pop-up message, make the required corrections in the Excel file and attempt to import the LCL data again.</li> <li>4. If corrections are not required, click <b>Continue</b> to import the data. Another pop-up message will appear listing the number of records that have been imported. Click <b>Dismiss</b>.</li> <li>5. Explanations must be entered in ACER Maple before data can be submitted.</li> </ol>
<p>LCL data contains some discrepancies that prevent the data from being imported (errors).</p> <p>Pop-up message appears warning that there are discrepancies, the data cannot be imported, and prompts you to save or download the report.</p> <p><i>Import Field Data Validity Report</i> is available for download.</p>	<ol style="list-style-type: none"> <li>1. Click <b>Download Validity Report</b>, save the file in an appropriate location. Click <b>Cancel</b> to close the pop-up message.</li> <li>2. Manually enter or navigate to the location of the saved report and open it.</li> <li>3. Refer to section 5.5 to check the records that appear in the report.</li> <li>4. Make the required corrections in the Excel file and attempt to import the LCL data again.</li> </ol>

**Table 26: Possible outcomes when importing List of Student data**

Outcome	Next steps
LST data has been validated, with no discrepancies, and is ready to be imported into the ACER Maple database. Pop-up message appears saying the data has been validated with no errors or warnings.	<ol style="list-style-type: none"> <li>1. Click <b>Continue</b>.</li> <li>2. Another pop-up message will appear listing the number of records updated. Click <b>Dismiss</b>.</li> <li>3. Import LST data from another Excel file. OR Proceed to sample students for the imported/updated schools (Chapter 6).</li> </ol>
LST data contains some discrepancies that should be checked before importing (warnings). Pop-up message appears warning that there are discrepancies but the data can be imported, and prompts you to save or download the report. <i>Import Field Data Validity Report</i> is available for download.	<ol style="list-style-type: none"> <li>1. Click <b>Download Validity Report</b>, save the file in an appropriate location and open it.</li> <li>2. Refer to section 5.5 to check the records that appear in the report.</li> <li>3. If any corrections are required, click <b>Cancel</b> to dismiss the pop-up message, make the required corrections in the Excel file and attempt to import the LST data again.</li> <li>4. If corrections are not required, click <b>Continue</b> to import the data. Another pop-up message will appear listing the number of records that have been imported. Click <b>Dismiss</b>.</li> <li>5. Explanations must be entered in ACER Maple before data can be submitted.</li> </ol>
LST data contains some discrepancies that prevent the data from being imported (errors). Pop-up message appears warning that there are discrepancies, the data cannot be imported, and prompts you to save or download the report. <i>Import Field Data Validity Report</i> is available for download.	<ol style="list-style-type: none"> <li>1. Click <b>Download Validity Report</b>, save the file in an appropriate location. Click <b>Cancel</b> to close the pop-up message.</li> <li>2. Manually enter or navigate to the location of the saved report and open it.</li> <li>3. Refer to section 5.5 to check the records that appear in the report.</li> <li>4. Make the required corrections in the Excel file and attempt to import the LST data again.</li> </ol>

## 5.5 Import Field Data Validity Report

If you attempt to import List of Student data that contains errors and/or missing data, ACER Maple will produce an *Import Field Data Validity Report* (in Excel format) that contains information about these issues. Before you try to resolve them, make sure you have your *List of Sampled Schools* (LSS) handy.



The *Import Field Data Validity Report* can contain multiple worksheets. Make sure you have checked the records in **all** worksheets in the report.

### 5.5.1 Errors in List of Classes data

Table 27 (page 94) lists errors that may appear in particular Error worksheets of the *Import Field Data Validity Report* when an LCL is imported. Table 27 also explains how these errors can be resolved. Most of the actions require updating the List of Classes Excel file.

A file import error may also occur if the file you are attempting to import is not an Excel spreadsheet, or if no file was selected to import. In either case, locate the correct file and then attempt to import the LCL data again.

After all corrections have been made in the LCL Excel file, attempt to import the List of Classes data again. As long as errors exist within the LCL file for a particular school, you will not be able to import the LCL data. Class sampling for this school cannot proceed until the LCL has been imported successfully.

If the situation arises where a school is not responding to queries, and you need to proceed with sampling before all errors have been corrected, you can replace any incorrect data with the appropriate missing code(s) (refer to the LCL codebook to find the correct missing codes for each variable). You can then proceed with sampling, and the missing codes will appear in the populated SCF Excel files as blank cells. You must then ensure that the SC updates the blank cells with the correct information before you proceed with student sampling. The updated data should be entered into ACER Maple using **Update tracking data > Field Operation Forms** (see Chapter 9) after the assessment.

### **5.5.2 Warnings in List of Classes data**

Table 28 (page 95) lists discrepancies that may appear in Warning worksheets of the *Import Field Data Validity Report* when an LCL is imported and explains how they can be resolved.

All discrepancies in Warning worksheets are related to missing codes in the data. It is always preferable to have non-missing data for number of students in each class before LCL data is imported. However, as described above, a situation may arise where a school is not responding to queries, therefore the missing codes are allowed. Sampling can then proceed, and the missing codes will appear in the populated SCF Excel files as blank cells. The SC must update the blank cells with the correct information before you proceed with student sampling.

Table 27: Import Field Data Validity Report for class lists: Errors worksheets – Possible warnings and their resolutions

Description	Error message in report	How to resolve	Action required
<b>Incorrect columns worksheet</b>			
Excel file corresponds to a different template. OR Excel file is missing one or more columns. OR Excel file has one or more extra columns. OR Excel file has one or more columns with incorrect names.	<i>Incorrect columns: Missing – &lt;Column Name&gt;, Extra – &lt;Column Name&gt;</i>	<ul style="list-style-type: none"> <li>Check that you are selecting the correct List of Students Excel file to import and the correct template in ACER Maple.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct LCL Excel file to import or select the correct template in ACER Maple.</li> </ul> OR <ul style="list-style-type: none"> <li>Add all missing columns</li> </ul> OR <ul style="list-style-type: none"> <li>Delete all extra columns</li> </ul> OR <ul style="list-style-type: none"> <li>Correct column names.</li> </ul>
<b>Import duplication worksheet</b>			
Data has already been imported for the same AMPL School No.	<i>Data for [AMPL School No.] 'X' already imported</i>	<ul style="list-style-type: none"> <li>Check the AMPL School Numbers in the LCL Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct AMPL School No. in the LCL Excel file.</li> </ul> OR <ul style="list-style-type: none"> <li>If the current AMPL School No. is correct, contact Clare Ozolins at <a href="mailto:Clare.Ozolins@acer.org">Clare.Ozolins@acer.org</a> to discuss your options.</li> </ul>
One or more rows contain a AMPL School No. and Line No. combination that has already been imported.	<i>Data for [AMPL School No.] and [Line No.] already exists</i>	<ul style="list-style-type: none"> <li>Check both AMPL School No. and Line No. in the LCL Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct AMPL School No. and/or Line No. in the LCL Excel file.</li> </ul>
<b>Record duplication worksheet</b>			
One or more rows contain a AMPL School No. and Line No. combination that has already been imported.	<i>Confidential data for [AMPL School No.] and [Line No.] already exists</i>	<ul style="list-style-type: none"> <li>Check both AMPL School No. and Line No. in the LCL Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct AMPL School No. and/or Line No. in the LCL Excel file.</li> </ul>

Description	Error message in report	How to resolve	Action required
<b>Key violations worksheet</b>			
There are one or more illegitimate AMPL School Numbers.	<i>[AMPL School No.] is illegitimate</i>	<ul style="list-style-type: none"> <li>Check the LSS– only the AMPL School Numbers provided there are legitimate.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all AMPL School No. in the LCL Excel file.</li> </ul>
There are one or more missing values or empty cells for AMPL School Numbers.	<i>[AMPL School No.] is missing</i>	<ul style="list-style-type: none"> <li>Check AMPL School No. for the specified rows in the LCL Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Add correct AMPL School No. from the LSS to the LCL Excel file.</li> </ul>
Input line numbers are not sequential within a school. OR There are duplicate input line numbers within a school.	<i>[Line No.] is not sequential</i>	<ul style="list-style-type: none"> <li>Check Line No. for the specified rows in the LCL Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all Line No. in the LCL Excel file.</li> </ul>
Input line numbers do not begin at 00001 for a school.	<i>[Line No.] does not begin at 00001</i>	<ul style="list-style-type: none"> <li>Check Line No. for the specified rows in the LCL Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all Line No. in the LCL Excel file.</li> </ul>
<b>Validation rules worksheet</b>			
One or more records contain one or more values that violate variable validation rules.	Description of validation rule violation(s)	<ul style="list-style-type: none"> <li>Check the specified values against the List of Classes codebook for the specified rows in the LCL Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all invalid values in the LCL Excel file.</li> </ul>

Table 28: Import Field Data Validity Report for class lists: Warning worksheets – Possible warnings and their resolutions

Description	Warning message in report	How to resolve	Action required
<b>LCL missing value(s) worksheet</b>			
There are one or more missing values in a specific column.	<i>Missing value(s) in &lt;Column Name&gt;</i>	<ul style="list-style-type: none"> <li>Check the values in that column in the LCL Excel file.</li> <li>Contact the school to get the information.</li> </ul>	<ul style="list-style-type: none"> <li>Update the LCL Excel file if it has not been imported yet.</li> </ul> <p>OTHERWISE</p> <ul style="list-style-type: none"> <li>Make updates in the SCF form after sampling.</li> </ul>

### 5.5.3 Errors in List of Students data

Table 29 (page 97) lists errors that may appear in particular Error worksheets of the *Import Field Data Validity Report* when an LST is imported. Table 29 also explains how these errors can be resolved. Most of the actions require updating the List of Students Excel file.

A file import error may also occur if the file you are attempting to import is not an Excel spreadsheet, or if no file was selected to import. In either case, locate the correct file and then attempt to import the LST data again.

After all corrections have been made in the LST Excel file, attempt to import the List of Students data again. As long as errors exist within the LST for a particular school, you will not be able to import the LST data. Student sampling for this school cannot proceed until the LST has been imported successfully.

If the situation arises where a school is not responding to queries, and you need to proceed with sampling before all errors have been corrected, you can replace any incorrect data with the appropriate missing code(s) (refer to the LST codebook to find the correct missing codes for each variable). You can then proceed with sampling, and the missing codes will appear in the populated STF Excel files as blank cells. You must then ensure that the SC/TA updates the blank cells with the correct information on or before the day of assessment. The updated data should be entered into ACER Maple using **Update tracking data > Field Operation Forms** (see Chapter 9) after the assessment.

### 5.5.4 Warnings in List of Students data

Table 30 (page 98) lists discrepancies that may appear in Warning worksheets of the *Import Field Data Validity Report* when an LST is imported and explains how they can be resolved.

All discrepancies in Warning worksheets are related to missing codes in the data. It is always preferable to have non-missing data for gender or date of birth before LST data is imported. However, as described above, a situation may arise where a school is not responding to queries, therefore the missing codes are allowed. Sampling can then proceed, and the missing codes will appear in the populated STF Excel files as blank cells. The SC/TA must update the blank cells with the correct information on or before the day of assessment.



Table 29: Import Field Data Validity Report for List of Students: Error worksheets – Possible errors and their resolutions (all sampling options)

Description	Error message in report	How to resolve	Action required
<b>Incorrect columns worksheet</b>			
Excel file corresponds to a different template. OR Excel file is missing one or more columns. OR Excel file has one or more extra columns. OR Excel file has one or more columns with incorrect names.	<i>Incorrect columns: Missing – &lt;Column Name&gt;, Extra – &lt;Column Name&gt;</i>	<ul style="list-style-type: none"> <li>Check that you are selecting the correct List of Students Excel file to import and the correct template in ACER Maple.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct LST Excel file to import or select the correct template in ACER Maple.</li> </ul> OR <ul style="list-style-type: none"> <li>Add all missing columns</li> <li>Delete all extra columns</li> <li>Correct column names.</li> </ul>
<b>Import duplication worksheet</b>			
Data has already been imported for the same AMPL School No.	<i>Data for [AMPL School No.] 'X' already imported</i>	<ul style="list-style-type: none"> <li>Check the AMPL School Numbers in the LST Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct AMPL School No. in the LST Excel file.</li> </ul> OR <ul style="list-style-type: none"> <li>If the current AMPL School No. is correct, contact Clare Ozolins at <a href="mailto:Clare.Ozolins@acer.org">Clare.Ozolins@acer.org</a> to discuss your options.</li> </ul>
One or more rows contain a AMPL School No. and Line No. combination that has already been imported.	<i>Data for [AMPL School No.] and [Line No.] already exists</i>	<ul style="list-style-type: none"> <li>Check both AMPL School No. and Line No. in the LST Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct AMPL School No. and/or Line No. in the LST Excel file.</li> </ul>
<b>Record duplication worksheet</b>			
One or more rows contain a AMPL School No. and Line No. combination that has already been imported.	<i>Confidential data for [AMPL School No.] and [Line No.] already exists</i>	<ul style="list-style-type: none"> <li>Check both AMPL School No. and Line No. in the LST Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct AMPL School No. and/or Line No. in the LST Excel file.</li> </ul>

Description	Error message in report	How to resolve	Action required
<b>Key violations worksheet</b>			
There are one or more illegitimate AMPL School Numbers.	<i>[AMPL School No.] is illegitimate</i>	<ul style="list-style-type: none"> <li>Check the LSS— only the AMPL School Numbers provided there are legitimate.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all AMPL School No. in the LST Excel file.</li> </ul>
There are one or more missing values or empty cells for AMPL School Numbers.	<i>[AMPL School No.] is missing</i>	<ul style="list-style-type: none"> <li>Check AMPL School No. for the specified rows in the LST Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Add correct AMPL School No. from the LSS to the LST Excel file.</li> </ul>
Input line numbers are not sequential within a school. OR There are duplicate input line numbers within a school.	<i>[Line No.] is not sequential</i>	<ul style="list-style-type: none"> <li>Check Line No. for the specified rows in the LST Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all Line No. in the LST Excel file.</li> </ul>
Input line numbers do not begin at 00001 for a school.	<i>[Line No.] does not begin at 00001</i>	<ul style="list-style-type: none"> <li>Check Line No. for the specified rows in the LST Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all Line No. in the LST Excel file.</li> </ul>
<b>Validation rules worksheet</b>			
One or more records contain one or more values that violate variable validation rules.	Description of validation rule violation(s)	<ul style="list-style-type: none"> <li>Check the specified values against the List of Students codebook for the specified rows in the LST Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all invalid values in the LST Excel file.</li> </ul>

Table 30: Import Field Data Validity Report for student lists: Warning worksheets – Possible warnings and their resolutions

Description	Warning message in report	How to resolve	Action required
<b>&lt;LST&gt; missing value(s) worksheet</b>			
There are one or more missing values in a specific column.	<i>Missing value(s) in &lt;Column Name&gt;</i>	<ul style="list-style-type: none"> <li>Check the values in that column in the LST Excel file.</li> <li>Contact the school to get the information.</li> </ul>	<ul style="list-style-type: none"> <li>Update the LST Excel file if it has not been imported yet.</li> </ul> <p>OTHERWISE</p> <ul style="list-style-type: none"> <li>Make updates in the tracking form after sampling.</li> </ul>

## 5.6 Caution against Re-Importing Field Data

### 5.6.1 Caution against Re-Importing List of Classes

If classes have not yet been sampled in a school, you can re-import the LCL data using **Import > Field data** (as described in this section). However, do it only if the initial list was **incorrect**. For example, data for one school was uploaded for another school by accident or School Coordinator informed you that initial list was incorrect and sent an updated list.



**Do not** re-import LCL data for a school in which classes have already been sampled **unless**:

- students had not been sampled yet; and
- you have agreed with ACER that you are permitted to do this; and
- there is time to:
  1. re-sample classes; **and**
  2. inform School Coordinator that he/she needs to prepare lists of Students from different classes.

If the above conditions are met, ensure that you **delete** Sampled Classes Form (SCF) produced from the incorrect List of Classes **before** re-importing the list. You must also make sure that the School Coordinator has deleted the previous SCF.

If you found that classes have been sampled from an incorrect List of Classes **but** do not have time to re-sample and to send correct SCF to the school, contact Clare Ozolins at [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org). Explain what was wrong with the initial List of Classes and include the correct List of Classes with your e-mail.

### 5.6.2 Caution against Re-Importing List of Students

If students have not yet been sampled in a school, you can re-import the LST data using **Import > Field data** (as described in this section).

If students have already been sampled in a school and you need to update demographic data for any students, you **should not** re-import the LST data into ACER Maple using **Import > Field data**. Updates to demographic data for students that have already been sampled should be made using **Update tracking data > Field Operation Forms** (see Chapter 9) after the assessment.

If students have already been sampled in a school, the LST data should **only** be re-imported if the initial list was **seriously compromised**. For example, data for one school was uploaded for another school by accident. Or students from non-sampled classes were included in the LST by School Coordinator.



**Do not** re-import LST data for a school which has already sampled students **unless** there is time to:

3. re-sample students; **and**
4. send the updated tracking forms to the school; **and**
5. you have agreed with ACER that you are permitted to do this.

If the above three conditions are met, ensure that you **delete** all tracking forms produced from the incorrect List of Students **before** re-importing the list. You must also make sure that the School Coordinator has deleted the previously received tracking forms.

If you found that students have been sampled from a seriously compromised List of Student **but** do not have time to re-sample and to send correct tracking forms to the school, contact Clare Ozolins at [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org). Explain what was wrong with the initial List of Student and include the correct List of Students with your e-mail.

### 5.6.3 Re-Importing field data

To re-import any LST data for a school which has already been imported into ACER Maple:

1. On the Main screen select **Import** and then click **Activate**. The *Import field data* screen will appear (Figure 63).

Figure 63: *Import field data* screen

2. In the **Available Templates** drop-down list select the relevant template.
3. Click **Browse...** and manually enter or navigate to the location of the Excel file containing the LST data to be imported.



The Excel file selected for re-importing **must** match the template selected in the **Available Templates** drop-down list.

4. In the **Options** list select 'Replace specific records'.
5. Click **Import**. ACER Maple will attempt to import the LST data from the selected Excel file, replacing the previously imported LST data for this school.
6. ACER Maple then performs a number of validity checks on the data in the selected Excel file. The possible outcomes and required actions are described in Table 31 on the following page.

Some warnings may not require any corrections in the data. It is also possible that after corrections have been made, some errors still remain. In this case, when you try to re-import the List of Student data, the validity report will be produced again.

**Table 31: Scenarios when re-importing List of Student data for a school**

Scenario	Message	Next steps
Students have not been sampled for this school, no errors or warnings.	<i>Data have been validated. No errors. No warnings. Please click <b>Continue</b>.</i>	<ul style="list-style-type: none"> <li>Click <b>Continue</b>.</li> </ul>
Students have not been sampled for this school, errors or warnings.	<i>Data contains errors and cannot be imported into the ACER Maple database. Please download the validity report.</i>	<ol style="list-style-type: none"> <li>Click <b>Download Validity Report</b>.</li> <li>Follow the instructions in the relevant sub-sections of section 5.5 to address the errors and/or warnings in the <i>Import Field Data Validity Report</i>.</li> </ol>
Students <b>have been sampled</b> for this school.	<p><b>AMPL School No. 'X' has been already sampled.</b></p> <p><i>Have you discussed the issue with sampling contractor?</i></p> <p>If <b>Yes</b>:</p> <p><i>All data for <b>AMPL School No. 'X'</b> will be replaced.</i></p> <p><i>Have you backed up your data?</i></p>	<ul style="list-style-type: none"> <li><b>Only</b> click <b>OK</b> if: <ul style="list-style-type: none"> <li>you are sure there is <b>enough time</b> to re-sample students and send the updated tracking forms to the school;</li> <li>the old tracking forms are <b>deleted</b> by you and by the School Coordinator before you produce new tracking forms; and</li> <li>you have permission from ACER to do so.</li> </ul> </li> </ul> <p>To obtain permission from ACER contact Clare Ozolins at <a href="mailto:Clare.Ozolins@acer.org">Clare.Ozolins@acer.org</a>, explaining what was wrong with the initial LST and attaching the correct LST to the message.</p> <p>OTHERWISE</p> <ul style="list-style-type: none"> <li>If you do not have time to re-sample and to send the correct tracking forms to the school, or do not have permission from ACER, click <b>Cancel</b>.</li> </ul>

## 6 SAMPLING



A data administrator login must be used for the following function.

After an LST has been successfully imported into ACER Maple, the students for that school can be sampled.

To sample the students for a school, and allocate each student the appropriate instruments:

1. On the Main screen select **Sample and allocate instruments > Sample and allocate** and then click **Activate**. The *Sample and allocate instruments* screen will appear (Figure 64).

Figure 64: *Sample and allocate instruments* screen

2. In the **Select Population Type** box select: **1: classes** OR **2: students** depending on whether you are sampling classes or students.
3. In the **Select Combined Option** box select the available option. The option will be:
  - 2** - if you are sampling **classes**; OR
  - XXX** - if you are sampling **students**; XXX is assigned on your LSS in the *Student combined option* column and is usually, but not always is a standard ISO 3-letter code for your country (see Table 2 or your LSS).

**You have to select the option even if there is only one.**
4. In the **Select School Type** list keep 'Main' selected (unless you need to sample a replacement school).



Do not select 'Already sampled' unless this has been agreed with ACER sampling team.

5. Click **List Available Institutions to Sample**. In the **Available for Sampling** box the AMPL School Number of all schools which are available for sampling will be listed (Figure 65).

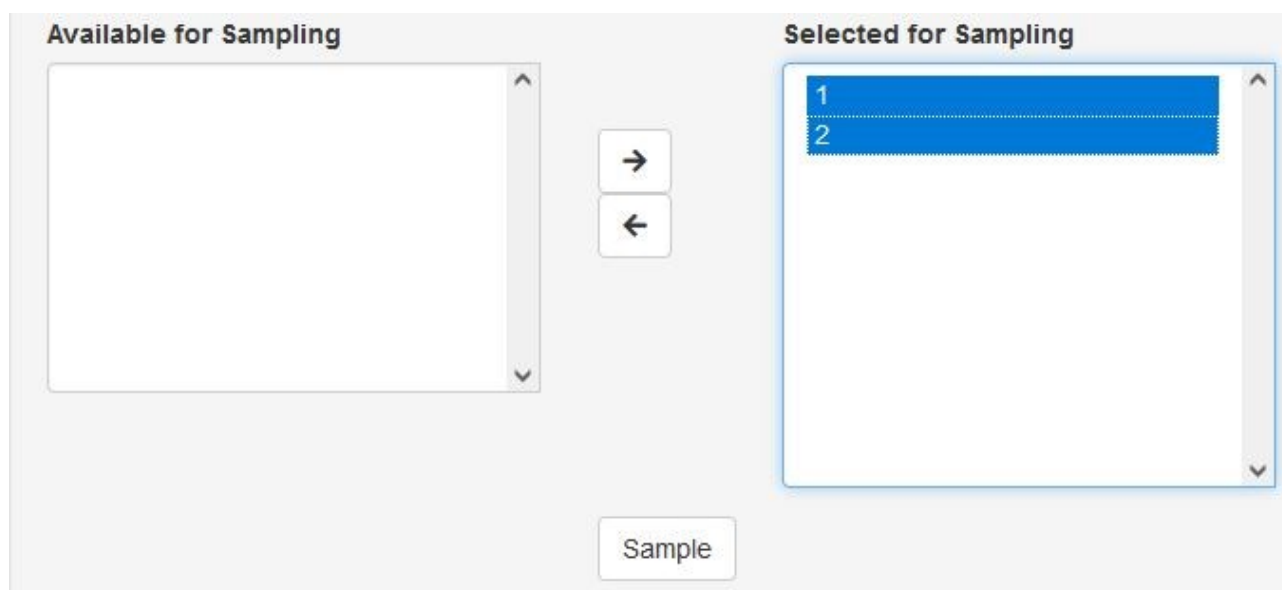
Figure 65: Schools available for sampling listed in the Available for Sampling box

6. In the **Available for Sampling** box select the AMPL School Numbers of all schools to be sampled. Use Shift and/or Ctrl to select multiple schools as required (Figure 66).

Figure 66: Selecting multiple schools in the Available for Sampling box

7. Click  to move these schools into the **Selected for Sampling** box (Figure 67)<sup>12</sup>, the **Sample** button will appear.

<sup>12</sup> To remove schools from the **Selected for Sampling** field select the MILO School Numbers in this field and then click .



**Figure 67: Multiple schools moved to the Selected for Sampling box**

8. Click **Sample**. ACER Maple will draw the sample. You will receive a pop-up confirmation that “School is sampled”.
9. Click **OK**.
  - ▶ If you are sampling classes you will have an Instrument allocation warning that no allocation had been done. Click **OK**.
  - ▶ If you are sampling students, ACER Maple allocate instruments to the sampled students for the selected combined option in the selected schools and tells you that. Click **OK**.

During the sampling and instrument allocation process ACER Maple will perform some validity checks of the data. The possible outcomes and required actions are described in Table 32.

**Table 32: Scenarios when using the *Sample and allocate* function**

Outcome	Next steps
<ul style="list-style-type: none"> <li>• Sampling and allocation successful, no discrepancies found.</li> <li>• Messages: <i>‘The selected Institutions have been sampled’</i> AND <i>‘Instruments have been allocated to the selected population in all selected institutions’</i></li> </ul>	<ol style="list-style-type: none"> <li>1. Click <b>OK</b> for each message.</li> <li>2. Proceed to populate tracking forms with data for these schools (Chapter 7).</li> </ol> OR Complete sampling and allocation of instruments for another set of schools.
<ul style="list-style-type: none"> <li>• Sampling successful but the data contains some discrepancies that should be checked (warnings).</li> <li>• Message: <i>‘No allocation in background/initial data for this case’</i></li> </ul> The <i>Sampling Validity Report</i> is available for download.	<ol style="list-style-type: none"> <li>1. Download the <i>Sampling Validity Report</i>.</li> <li>2. Contact ACER Helpdesk at <a href="mailto:maplehelpdesk@acer.org">maplehelpdesk@acer.org</a>; include your 3-letter NC code, a short description of the problem in the subject line. Attach report.</li> </ol>



## 7 POPULATING SCF AND STF TEMPLATES WITH SAMPLING DATA

- 7.1 Populating SCF and STF templates with data from ACER Maple.....105
- 7.2 Export Field Data Checks .....111

### 7.1 Populating SCF and STF templates with data from ACER Maple



A data administrator login must be used for the following function.

After sampling the STF Excel templates need to be populated with sampled students' data.

To populate the STF templates with data:

1. On the Main screen select **Export > Field data** and then click **Activate**. The *Export field data* screen will appear (Figure 68).

Figure 68: Export field data screen

2. In the **Select Population Type** box select:

**1: classes**, if populating SCF; or

**2: students**, if populating STF

**In the next two steps select the available option even if there is only one.**

3. In the **Select Combined Option** select:
  - 2, if populating SCF; OR
  - XXX - if you are sampling **students**; XXX is assigned on your LSS in the *Student combined option* column and is usually, but not always is a standard ISO 3-letter code for your country (see Table 2 or your LSS).
4. In the **Select Sampling Level** box select **Main Sample**.
5. Click **List Available Institutions to Export**.
6. In the **Available for Export** box the AMPL School Numbers of all schools whose STF is available to populate with data will be listed (Figure 69).

The screenshot shows a user interface with three main sections: 'Available for Export', 'Selected for Export', and 'Select Template(s)'. The 'Available for Export' section is a list box containing the numbers '1' and '2'. The 'Selected for Export' section is an empty list box. The 'Select Template(s)' section is a list box containing the text 'AMPL\_SCF'. Between the 'Available for Export' and 'Selected for Export' sections, there are two buttons: a right-pointing arrow (→) and a left-pointing arrow (←).

**Figure 69: Schools available to populate tracking forms with data are listed in the Available for Export box-**

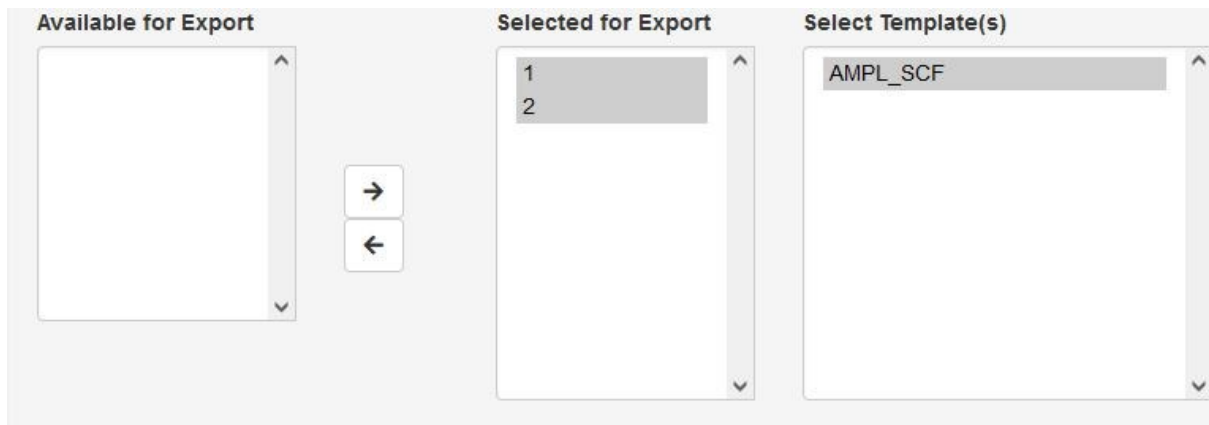
7. In the **Available for Export** box select the AMPL School Numbers of all schools for which you are going to generate SCF or STF. Use Shift and/or Ctrl to select multiple schools as required (Figure 70).

This screenshot is similar to Figure 69, but in the 'Available for Export' list box, the items '1' and '2' are highlighted with a grey background, indicating they have been selected. The other elements of the interface remain the same.

**Figure 70: Selecting multiple schools in the Available for Export box**

8. Click  to move these schools into the **Selected for Export** box (Figure 71). To remove schools from the **Selected for Export** box select their AMPL School Numbers and then click .

Once schools have been added to the **Selected for Export** box the **Select excel template(s)** button will appear.



**Figure 71: Multiple schools moved to the Selected for Export box**

9. In the **Select Template(s)** box select the template displayed on your screen.



A template must be selected in the **Select Template(s)** box although only one template is listed in this box for the AMPL NCs.

10. Click **Select excel template(s)**. A pop-up window will appear asking you to select the corresponding Excel file template (Figure 72).



**Figure 72: Pop-up to select the Excel file template**

11. Click **Browse** and manually enter or navigate to the location of the Excel template which matches the template selected in the **Select Template(s)** box.

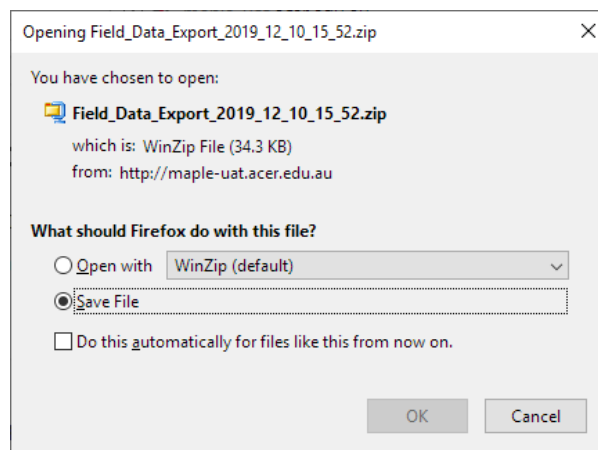


The Excel template selected in the folder **must** match the template selected in the **Select Template(s)** box. If this is not the case, it will cause an error and the export will be terminated. See section 7.2 for details

The Excel template will be uploaded into ACER Maple and its file name will appear in a tab beside the **Browse** button

Click **Submit selection**. The **Export** button will appear at the bottom of the screen.

12. Click **Export**. ACER Maple will generate templates populated with data for the selected sampled population, combined option, sampling level, schools, and template. These populated forms will be combined into one zip file which will be available for download (Figure 73).



**Figure 73: Downloaded zip file containing populated tracking forms**

13. Select 'Save File' (Figure 73).
14. Click **OK** and save the zip file in an appropriate location.
15. After the file has downloaded, unzip it.



Each of the tracking forms will have the following file name: <Template acronym>\_<AMPL School No.>\_<School name>\_<Date>. For example, the STF for school 1 produced on the 30 May 2023 will have the file name STF\_1\_2023\_05\_30. **Keep these naming convention** for all tracking forms.

- If you have generated **Sampled Classes Form** (see example in Table 33), you need to communicate class names to School Coordinators and to **send to the SC**:
  - ▶ an LST Excel template with *Information* worksheet filled as required (see section 4.5) with
  - ▶ instructions on how LST for sampled classes should be filled.
- When preparing **Student Tracking Form** for Test Administrators:
  - ▶ if your NC assess two grade levels divide the file in two: one for **lower grade** and one for **upper grade**;
  - ▶ use your records to complete the School Coordinator and Test Administrator names;
  - ▶ provide dates for Day 1 and Day 2 of the assessment if they have already been agreed with the school.

An example of an STF form ready for assessment administration is provided in Table 34, page 110.

  - ▶ Save two forms using the following file name:  
STF\_<AMPL School No.>\_G<Lower grade>\_<Date>\_<SchoolName>\_TARReady and  
STF\_<AMPL School No.>\_G<Upper grade>\_<Date>\_<SchoolName>\_TARReady.

For example, the form provided in Table 34 can be saved as STF\_1\_G6\_2023\_05\_30\_School123\_TARReady.

16. Send this form electronically to School Coordinator to check, or print it and send it by post.



It is recommended that all tracking forms are sent in electronic format to the School Coordinator. If possible the Test Administrator can then use the electronic version during the assessment, as well as for updating data on the tracking forms. The forms, once they have been updated after the assessment, can then be returned in electronic format and no additional manual data entry will be required.

17. You are ready now to produce labels and package the field operation materials for the School Coordinator and Test Administrator (see Chapter 8).

**Table 33: Example SCF (two grade levels assessed).**

School Name	Nat. School ID	AMPL School No.		School Co-ordinator
School 123	ZZA123	1		<i>Mr. SCABC</i>
Class Name	Class ID	Grade Level	No. of Students	Comments
4A	00001	4	30	
6A	00005	6	33	

Table 34: Example STF ready to be sent to Test Administrator and School coordinator for administration of grade 6 assessment.

1	School Name	AMPL School No.		School Coordinator				Test Administrator		Session Date 1 (DD/MM)		Session date 2 (DD/MM)			
2	School 123	1001		<i>Mr ST ABC</i>				<i>Ms TA XYZ</i>		30/05		31/05			
3	LST			F=1; M=2	MM	YYYY		Attendance		Participation		Class			
4	Student Name	Line No.	AMPL Participant ID	Test Form	Gender	Month of Birth	Year of Birth	SEN	Test	StQ	LG	UG	Grade Level	Class Name	Comments
5	Xab Yac	00001	92100106	5	1	01	2010	0	1	1	9	1	6	6C	
6	Xac Yad	00002	92100104	6	1	11	2011	0	0	1	9	0	6	6C	
7	Xaf Yag	00004	92100105	7	2	09	2010	0	1	0	9	0	6	6C	
8	Xad Yaf	00005	92100101	8	1	08	2010	0	0	0	9	1	6	6C	
9	Xaj Yak	00006	92100103	3	2	05	2010	1	1	1	9	0	6	6C	
10	Xab Yac	00008	92100108	4	1	03	2010	0	0	1	9	1	6	6C	
11	Xb Yacd	00009	92100102	5	2	12	2010	0	1	0	9	1	6	6C	
12	Xab Yah	00010	92100109	6	2	11	2010	0	1	1	9	1	6	6C	
13	Xak Yalk	00011	92100107	7	1	03	2010	1	0	0	9	0	6	6C	
14	Xkl Yvb	00012	92100110	8	2	05	2010	0	0	0	9	0	6	6C	
15	Xab Yfg	00014	92100115	3	1	06	2010	0	0	0	9	0	6	6C	
16	Xab Ykm	00015	92100120	4	2	02	2010	0	0	0	9	0	6	6C	
16	Xed Ygbn	00016	92100111	5	2	04	2009	0	0	0	9	0	6	6C	
18	Xsd Ymrv	00017	92100116	6	1	10	2010	0	0	0	9	0	6	6C	
19	Xcv Ywdj	00018	92100112	7	2	07	2010	0	0	0	9	0	6	6C	
20	Xth Ysdf	00020	92100117	8	1	04	2010	2	0	0	9	0	6	6C	
21	Xwe Ywsc	00021	92100113	3	1	08	2010	0	0	0	9	0	6	6C	
22	Xab Yuhj	00022	92100114	4	2	03	2010	0	0	0	9	0	6	6C	

## 7.2 Export Field Data Checks

---

When the **Export > Field data** function is used, ACER Maple checks that the tracking form template selected in ACER Maple matches the selected tracking form Excel template. Table 35 on the following page gives detailed information about the types of inconsistencies that may appear.

*<Template selected on screen>* in Table 35 refers to the template selected on the *Export field data* screen. Error messages appear in pop-up windows with the title: *'Problem with excel template for exporting <Template selected on screen>'*. For example, if the STF\_ENG template was selected the title will be: *'Problem with excel template for exporting STF\_ENG'*.

*'Row X'* in Table 35 refers to the row in the original unmodified template containing the heading titles (before any national adaptations were made). For example, in the STF\_ENG template this is row 4. Therefore, the message will display: *'Make sure that the column headers are in row number 4'*.

After all corrections have been made, attempt to generate the populated STF again.

Table 35: Messages when generating tracking forms populated with data

Description	Pop-up error message	How to resolve	Action required
<p>Excel file is missing one or more columns. OR Excel file has one or more extra columns. OR Excel file has one or more columns with incorrect names. OR Excel file corresponds to a different template.</p>	<p><i>Column headings in Excel file must correspond to the column names in &lt;Template selected on screen&gt;</i> <i>Make sure that the column headers are in the row number X</i></p>	<ul style="list-style-type: none"> <li>Check that you are selecting the correct Excel file to export and the correct template in ACER Maple.</li> </ul> <p>OTHERWISE</p> <ul style="list-style-type: none"> <li>Carefully check all adaptations you made in the template of the Excel file and in ACER Maple when you modified the corresponding ACER Maple template.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct Excel file to import or select the correct template in ACER Maple.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Add the missing columns or modify the template in ACER Maple as required.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Delete any extra columns or modify the template in ACER Maple as required.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Correct the column names or modify the template in ACER Maple as required.</li> <li>Make sure that the column headings are in the correct row.</li> </ul>
<p>Excel file does not have any column headings in the row where the column headings are expected by ACER Maple.</p>	<p><i>Column headings in the selected file are expected to be in row X</i> <i>This row in the selected excel file does not hold any data (empty cells)</i></p>	<ul style="list-style-type: none"> <li>Check that you are selecting the correct Excel file to export and the correct template in ACER Maple.</li> </ul> <p>OTHERWISE</p> <ul style="list-style-type: none"> <li>Correct the template.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct Excel file to import or select the correct template in ACER Maple.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Make sure that the column headings are in the correct row.</li> </ul>
<p>Some other file (not an Excel file) was selected by mistake to be populated with data.</p>	<p><i>Please select an excel file (.xls, .xlsx) to upload</i></p>	<ul style="list-style-type: none"> <li>Select the correct file.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct file.</li> </ul>



## 8 LABELING AND PACKAGING ASSESSMENT MATERIALS

8.1	Using Mail Merge Function in Microsoft Word .....	113
8.2	Exporting labelling forms.....	113
8.3	Creating Labels .....	115
8.3.1	<i>Specifying label type</i> .....	116
8.3.2	<i>Populating the STLB_type document with data and printing labels</i> .....	117
8.4	Labelling and Packaging Materials for Test Administrators .....	118

### 8.1 Using Mail Merge Function in Microsoft Word

The Mail Merge function in Microsoft® Word allows users to create documents or labels by populating them with data from a Microsoft® Excel worksheet.

The Mail Merge procedure for the AMPL is designed to produce the labels that will be attached to the cover of each of the assessment instruments.

- Two labels must be printed for each student:
  - ▶ One label for each test form assigned to students on the STF; and
  - ▶ One label for the Student Questionnaire.
- One label should be printed for each School Questionnaire. It is convenient to create a separate folder for labels. This folder is called *Labels* in this chapter.

To create labels, you will need to use the following functions:

1. The **Export List of Candidates** function in ACER Maple exports excel worksheets containing student and principal data required for labels. This function exports the list of all candidates that were sampled in the relevant administrative domain, i.e. in all schools associated with a given Admin ID account (section 8.2).
2. The **Mail Merge** function to create labels in a Microsoft® Word document (section 8.3).

The Word document can then be printed on the adhesive labels which will be attached to the printed assessment instruments.

### 8.2 Exporting labelling forms

After student tracking forms have been populated with sampled students' data, lists of student candidates can be exported and used to produce the required labels for each survey instrument.



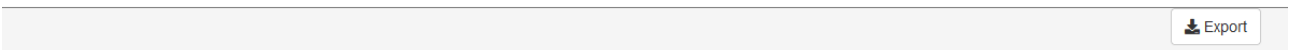
A data manager or data administrator login must be used for the following function. Data manager can export data for all sampled candidates in the entity and data administrator can export data for all sampled candidates in their administrative domain

To export the required excel files from ACER Maple:

1. On the Main screen select **Export > List of Candidates** and then click **Activate**. The *Export list of candidates* screen will appear (Figure 74).

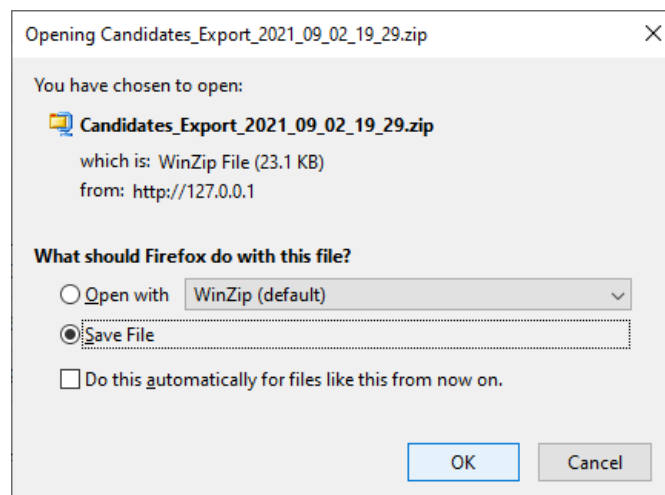
**Figure 74: Export list of candidates screen**

2. Click the **Select Templates** field at the top of the screen. A drop-down list will appear.
3. Select the following templates:
  - AMPL Student Labelling Form (AMPL\_SALF)
  - AMPL School Questionnaire Tracking Form (AMPL\_SQTF)
4. Once template(s) have been selected, the **Export** button will appear at the right bottom corner of the *Export list of candidates* screen (Figure 75).



**Figure 75: The Export button at the bottom of the screen**

5. Click **Export** (Figure 75). All selected files will be combined into one zip file which will be available for download (Figure 76).



**Figure 76: Save list of candidates**

6. Select 'Save File' and click **OK** to save the zip file. Manually enter or navigate to an appropriate location to save the file.
7. After the zip file has been downloaded, unzip the Excel files into your *Labels* folder.

8. Open the exported AMPL\_SALF data file saved in your *Labels* folder (see example in Table 36). Columns A-G contain information that will be mail-merged into labels.



**Column H specifies to which test form the label must be assigned.**

For example:

- the label with the student ID=286100103 should be assigned to Test Booklet 5 (highlighted in red in Table 36); while
- the label with the student ID=286100108 should be assigned to Test Booklet 6 (highlighted in green in Table 36),

**Table 36: Example of SALF data in Excel format to be used for labelling Student Test Forms and Questionnaires**

	A	B	C	D	E	F	G
2	School Name	AMPL School No.	Grade Level	Class Name	Student Name	AMPL Participant ID	Test Form
3	School 123	1	6	6C	Xab Yac	28000103	5
4	School 123	1	6	6C	Xac Yad	28000108	6
5	School 123	1	6	6C	Xaf Yag	28000101	7
6	School 123	1	6	6C	Xad Yag	28000102	8
7	School 123	1	6	6C	Xaj Yak	28000112	3
8	School 123	1	6	6C	Xab Yac	28000104	4
9	School 123	1	6	6C	Xerb Yjkl	28000118	5

9. Open the exported AMPL\_SQTF data file saved in your *Labels* folder (see example in Table 37).
- ▶ Column A exported empty and must be filled from the LSS file before it can be merged into labels.
  - ▶ Columns B-C are ready to be mail-merged into labels.
  - ▶ Columns D and E remain empty at this stage. They must be filled after School Questionnaires are returned to the NC (see section 9.3 for details).

**Table 37: Example of SQTF data in Excel format to be used for labelling School Questionnaires**

	A	B	C	D	E
1	School Name	AMPL School No.	AMPL Participant ID	Participation Code	Comment
2	School 123	1	38000101		
3	School 124	2	38800201		
4	School 125	3	38000301		

## 8.3 Creating Labels

When the Student Data Labels (i.e. SDL) Excel file(s) is ready, you need to prepare your adhesive labels for printing. You will need to know the supplier and product number of your labels. Once you have this information you will be able to:

1. Specify your label types and field titles in Word documents as explained in section 8.3.1.
2. Populate this Word document with data and print your labels as explained in section 8.3.2

### 8.3.1 Specifying label type

To specify label types:

1. Open a new Word document.
2. In the menu bar, click **Mailings > Start Mail Merge > Labels**. The “Label Options” dialog box will appear (Figure 77)

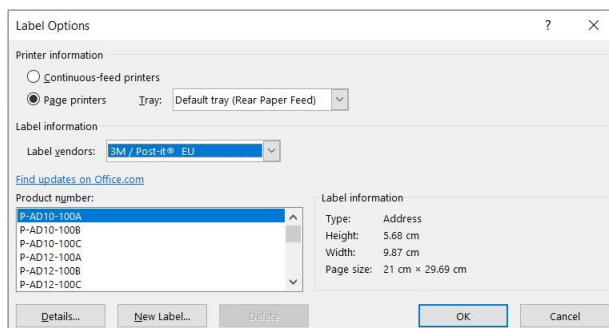


Figure 77: Mail Merge *Label Options* dialog box

3. Select your label supplier from the ‘**Label vendors**’ drop-down list.
4. Select the product number from the “**Product number**” list<sup>13</sup>.
5. The document should now display a table with an outline of the labels. If you don’t see the outline of the labels, go to **Table Tools > Layout > View Gridlines**.
6. In the first label provide the following field titles:
  - School Name**
  - AMPL School No.**
  - Grade Level**
  - Class Name**
  - Student Name**
  - AMPL Participant ID**
  - Booklet No.**
7. Save your document in the *Labels* folder with the file name TestLB\_type.
8. Repeat steps 1-5 to create labels for Student Questionnaires.
9. In the first label provide the following field titles:
  - School Name**
  - AMPL School No.**
  - Grade Level**
  - Class Name**
  - Student Name**
  - AMPL Participant ID**
10. Save your document in the *Labels* folder with the file name STQLB\_type.

<sup>13</sup> If none of the options match your label package, choose “New Label”, enter your label’s information, and give it a name. Choose “OK” to add the new label to the “Product number” list.

11. Repeat steps 1-5 to create labels for School Questionnaires.
12. In the first label for School Questionnaires provide the following field titles:

**School Name**

**AMPL School No.**

**AMPL Principal ID**

13. Save your document in the *Labels* folder with the file name SCQLB\_type.

### 8.3.2 Populating the *STLB\_type* document with data and printing labels

To populate the TestLB\_type document with data and to print labels for Test forms:

1. Open the TestLB\_type document you created in section 8.3.1.
2. Save a copy of the TestLB\_type document with the date in the file name.
3. In the menu bar, click **Mailings > Select recipients > Use an existing list**.
4. Locate and open the Excel file containing the data for the school(s) for which you are creating labels (created in section 8.2).
5. In the first label in the TestLB\_<Date> document, insert the following fields:
  - ▶ Click **Mailings > Insert Merge Field > School\_Name** next to the *School Name* title
  - ▶ Click **Mailings > Insert Merge Field > AMPL\_School\_No.** next to the *AMPL School No.* title
  - ▶ Click **Mailings > Insert Merge Field > Grade\_Level** next to the *Grade Level* title
  - ▶ Click **Mailings > Insert Merge Field > Class\_Name o.** next to the *Class Name* title
  - ▶ Click **Mailings > Insert Merge Field > Student\_Name.** next to the *Student Name* title
  - ▶ Click **Mailings > Insert Merge Field > AMPL\_Participant\_ID** next to the *AMPL Participant ID* title
  - ▶ Click **Mailings > Insert Merge Field > Booklet\_No.** next to the *Booklet No.* title
6. Click **Mailings > Update Labels**. The result should be similar to what is shown in Figure 78 (depending on your label size)

School Name «School_Name»	«Next Record»School Name «School_Name»
AMPL School No. «AMPL_School_No»	AMPL School No. «AMPL_School_No»
Grade Level «Grade_Level»	Grade Level «Grade_Level»
Class Name «Class_Name»	Class Name «Class_Name»
Student Name «Student_Name»	Student Name «Student_Name»
AMPL Participant ID «AMPL_Participant_ID»	AMPL Participant ID «AMPL_Participant_ID»
Booklet No. «Test_Form»	Booklet No. «Test_Form»

**Figure 78: Mail Merge document with fields inserted**

7. Click **Mailings > Finish & Merge > Print Documents** to populate document with data and print labels. An example of labels to be printed is shown in Figure 79.

School Name School 124 AMPL School No. 2 Grade Level 4 Class Name 4D Student Name Xac Yad AMPL Participant ID 28000201 Booklet No. 7		School Name School 124 AMPL School No. 2 Grade Level 4 Class Name 4D Student Name Xac Yad AMPL Participant ID 28000202 Booklet No. 8
--	--	--

**Figure 79: Labels ready to be printed**

8. To prepare labels for Student Questionnaires Repeat steps 2 to 7 using the STL<sub>B</sub>\_type document you created in section 8.3.1 with the pre-populated SALF.
9. To prepare labels for School Questionnaires Repeat steps 2 to 7 using the SQL<sub>B</sub>\_type document you created in section 8.3.1 with the pre-populated SQTF that was despatched with ACER Maple.

## 8.4 Labelling and Packaging Materials for Test Administrators

To label and package materials:

1. For each student in an SALF label file (created in section 8.3), print a copy of their ID label for test and a copy of their ID label for the questionnaire.
2. Print STF for each school.
3. Sort test forms in the order they are assigned in the STF. For example, if the first student in the STF is assigned form 5, the test forms should be sorted as follows: 5,6,7,8,3,4,5,....
4. Prepare as many copies of the Student Questionnaires as there are students listed in the STF.
5. Prepare a copy of the school Questionnaire.
6. Locate ALL labels printed for this school (for Test, Student Questionnaires and School questionnaire). For ALL labels located:
  - ▶ Make sure that **AMPL School No.** in the STF and on labels is the same.
  - ▶ Make sure that the school name in the STF and on labels is the same.
7. Assign labels to the test booklets for the school. Assign labels to the Student Questionnaires in the order as students listed in the STF.
8. Assign a label for the same school to the School Questionnaire
9. Add the required number of the unlabelled instruments (at least one of each test form type and a Student Questionnaire) in case if replacement is required.
10. Bundel instruments with the STF, and other documentation as required by Field Ops Manual\_AMPLab\_v0.1<sup>14</sup>, section 6.5.

<sup>14</sup>

[https://acerlimited.sharepoint.com/:b:/r/sites/AMPLab/Shared%20Documents/General/Manuals\\_Guides\\_Resources/Field%20Ops%20Manual\\_AMPLab\\_v0.1.pdf?csf=1&web=1&e=s29whj](https://acerlimited.sharepoint.com/:b:/r/sites/AMPLab/Shared%20Documents/General/Manuals_Guides_Resources/Field%20Ops%20Manual_AMPLab_v0.1.pdf?csf=1&web=1&e=s29whj)

## 9 RECEIPT OF MATERIALS AFTER THE ASSESSMENT

9.1	Preparing Student Assessment Instruments for Data Entry .....	119
9.1.1	Sorting student assessment instruments that have correct corresponding STF Attendance codes.....	120
9.1.2	Preparing student assessment instruments that have incorrect corresponding STF Attendance codes for enquiries .....	120
9.2	Conducting Internal STF Data Checks .....	121
9.2.1	Checking student demographic data .....	121
9.2.2	Checking SEN codes.....	121
9.2.3	Checking Participation codes against Attendance codes.....	122
9.2.4	Enquiring about discrepancies.....	122
9.3	Receiving AMPL School Questionnaires.....	123
9.4	Updating Data from Tracking Forms in ACER Maple.....	123
9.5	Update Field Data Validity Report .....	127
9.5.1	Discrepancies that can be detected in the STF data .....	127
9.5.2	Errors in updated School Questionnaire Tracking Form data.....	131
9.6	Updating School Participation .....	134
9.6.1	Preparing data in the School Participation Form.....	134
9.6.2	Updating school participation in ACER Maple.....	135
9.7	Update Institution Participation Validity Report .....	137

Test Administrators must return ALL assessment materials and resources to the NC, using a secure service. These materials must be carefully checked and sorted in preparation for data entry as outlined below and explained in detail in the corresponding sections of this chapter.

To prepare materials for data entry, all data administrators will need to:

1. Check student assessment instruments against the STF and prepare them for data entry (section 9.1).
2. Conduct internal STF data checks (section 9.2).
3. Check the school questionnaire and record its receipt in the SQTF (section 9.3)
4. Update STF and SQTF data in ACER Maple (sections 9.4-9.5).
5. After all materials from all schools have been returned, update school participation in ACER Maple (sections 9.6-9.7).

### 9.1 Preparing Student Assessment Instruments for Data Entry

When materials have been received from the Test Administrators after the assessment, data administrators must check test forms and questionnaires against STF *Attendance* codes (i.e. the attendance code recorded by the TA on the STF), and then prepare them for data entry in ACER Maple.

Most of the returned student assessment instruments will have responses, but some of them will remain empty. These are either spares or instruments that were intended for students that did not get completed. Each data administrator will therefore need five boxes to sort the instruments from the schools that belong in their domain:

- one box for empty student assessment instruments; and
- a number of boxes for completed (or partially completed) student assessment instruments:

- ▶ one box for each of the AMPL Test Forms; and
- ▶ one box for the AMPL Student Questionnaires.

Instruments in each of these boxes should be sorted by **AMPL school ID** and by **AMPL student ID** within each school.



All instruments must be kept secure and in order.

### 9.1.1 *Sorting student assessment instruments that have correct corresponding STF Attendance codes*

Table 38 shows correct STF Attendance codes for empty instruments, and for instruments with at least one response. It also shows how to sort the instruments in the corresponding boxes depending on whether they are empty or not.

<X> in Table 38 is the booklet number (e.g. 1,2,...). The box labels are provided as an example for the purpose of explaining the sorting procedure. You can label them in another way if you prefer

**Table 38: STF Attendance codes for empty instruments and for instruments with at least one response**

STF Attendance code	Student assessment instruments	Box labelled
Test=1	AMPL Test Form <X> with at least one response.	DE<X>
Test=0	Empty AMPL Test Form X.	EMPTY
StQ=1	AMPL Student Questionnaire with at least one response.	DEQ
StQ=0	Empty AMPL Student Questionnaire.	EMPTY

### 9.1.2 *Preparing student assessment instruments that have incorrect corresponding STF Attendance codes for enquiries*

If there is a discrepancy between the STF Attendance code and the content of an instrument, then the instrument will need to be put aside, and the record in the STF should be flagged as requiring investigation.



#### Examples

1. If the Test=1 and the AMPL Test Form with the same student ID is empty, then the record in the STF must be flagged for investigation and the Test Form placed in the EMPTY box.
2. If Test=0 and the AMPL Test Form with the same student ID has at least one response, then the record in the STF must be flagged for investigation and the booklet will need to be placed aside in case it requires a different label.

After all booklets are checked, the data administrator needs to check the STF for internal discrepancies (see section 9.2). Once the STF has been checked, the data administrator or the data manager must contact the Test Administrator and/or School Coordinator to resolve discrepancies, correct the STF if required, and sort any instruments with discrepancies (see 9.2.4).



## 9.2 Conducting Internal STF Data Checks



If STFs have been sent in electronic format to the School Coordinator and the Test Administrator, and the Test Administrator used the electronic version of the STF during the assessment to update data, then the STFs can also be returned in electronic format once they have been updated after the assessment. This will mean that no additional manual data entry will be required in the STF Excel files.



If the STF has been returned in paper format, you will need to manually update the corresponding electronic Excel versions of the tracking forms that were initially populated with sampled students' data (see chapter 7) before they can be updated in ACER Maple.

The first thing you need to do when you receive a completed STF back from a school, is check the data that has been updated by the School Coordinator and Test Administrator.

The data you need to check includes:

- student demographic data (grade, gender, date of birth);
- SEN codes against participation codes; and
- participation codes against attendance codes.

These checks are all explained in the following subsections.

### 9.2.1 Checking student demographic data

The following checks are required for student demographic data:

- If the **class name includes grade level**, check that it is the correct grade for your country;
- check that each students' **date of birth** is within a reasonable range for the year level assessed in your country;
- check that each students' **gender** corresponds to the student names (wherever possible).

Highlight any suspicious records in the STF.

### 9.2.2 Checking SEN codes

The box below lists all valid SEN codes for Student Tracking Forms in the AMPL.



#### **SEN codes for student tracking forms for the AMPL:**

- 0 – No SEN condition
- 1 – Functional disability
- 2 – Cognitive, behavioural, or emotional disability
- 3 – Limited assessment language experience

Check that

- ALL SEN codes are valid (i.e. ALL SEN codes are less than or equal to 3); and
- Participation code '3' (excluded on SEN basis) is only assigned to students with SEN > '0'.

Highlight any discrepant records in the STF.

### 9.2.3 Checking Participation codes against Attendance codes

**Valid STF Participation codes (columns LG and UG):**

- 1 – Participant
- 2 – Parent refusal
- 3 – Excluded on SEN basis
- 4 – Now enrolled at another school
- 5 – Not enrolled in this school, enrolment unknown
- 9 – Population ineligibility
- 0 – Non-participant for any other reason

**Valid STF Attendance codes (columns Test and StQ):**

- 1 – Attended Test/StQ
- 0 – Did not attend Test/StQ



At this stage, a student is considered to be a 'participant' (code '1') if he or she attended a session for at least one of the instruments (i.e. provided at least one response in one of the instruments which has been marked with Attendance code '1').

For each record in the STF check the following:

- if the STF Participation code is '1', then at least one of the Attendance codes is '1'; and
- if all three Attendance codes are '0', the STF Participation code is NOT '1'.

Highlight any discrepant records in the STF.

### 9.2.4 Enquiring about discrepancies

If any records have been highlighted in the STF, contact the Test Administrator and/or School Coordinator to find which data is correct and to update the STF as required.

In cases where a student completed the wrong instrument (i.e. Student A completed student B's instrument(s)), you will need to replace the label on student B's instrument with the label for student A.

Also make enquiries about missing data.



Make every attempt to recover any missing data. It is extremely important for data analysis that demographic data for every student is available.

After all discrepancies have been resolved sort the instruments into appropriate boxes as indicated in Table 38 (page 120)

### 9.3 Receiving AMPL School Questionnaires

The School Questionnaire Tracking Forms (SQTF) had been exported for each domain when materials were prepared for schools (see section 8.2). SQTF had been pre-populated by ACER Maple with the list of IDs for all principals in each domain

On receipt of materials from the Test Administrators, the data administrator must check the AMPL School Questionnaire and record the following in their SQTF:

- Any AMPL School Questionnaires that have at least one response must be recorded as '1' - 'Returned' in the SQTF, sorted by AMPL School Number, and securely stored for data entry.
- Any empty AMPL School Questionnaires should be separated, sorted by AMPL School Number, and securely stored in the EMPTY box. The code that should be entered in the SQTF depends on the reason the questionnaire was empty (see Table 39).

**Table 39: School Questionnaire participation codes to be entered into SQTF**

Code	Code meaning
1	Questionnaire returned and filled
2	Questionnaire returned empty
0	Questionnaire sent but has not been recovered
9	Questionnaire had NOT been sent (school did not participate)

Once **all** school questionnaires that have been received back from schools have been recorded in the SQTF, update the SQTF for any remaining schools as indicated in Table 39.



A school questionnaire code is required for each school.



The length of a comment is restricted to 500 characters. If more space is required please include the AMPL School Number and your comment in the Sampling Data Submission Checklist.

Save a copy of the completed SQTF Excel file with “\_For\_Import” added to the end of the file name.

Ensure that the new file is saved in a suitable location, so that it can be uploaded into ACER Maple (instructions are provided in section 9.4).

### 9.4 Updating Data from Tracking Forms in ACER Maple

Once the updated data in a tracking form has been checked and corrected, the data needs to be updated in ACER Maple.



A data administrator login must be used for the following function.

To update data from tracking forms after the assessment:

1. On the Main screen select **Update tracking data > Field operation forms** and then click **Activate**. The *Update field operation forms* screen will appear (Figure 80).

### Update field operation forms

Survey: Assessment of Minimum Proficiency Level (AMPL)

Entity: ZedlandA (ZZA)

Admin level: 01

### Selected Template Preview

	Student Name	Line No.	AMPL Participant ID	Test Form	Gender	Month of Birth	Year of Birth	S
1	Record name in TCD	Input line number	Username 0	Instrument ID 1	Gender	Date of birth-month	Date of birth-year	SEN
2	Updatable	Non-updatable	Non-updatable	Non-updatable	Updatable	Updatable	Updatable	Upd

Template Acronym: "AMPL\_STF", Template Full Name: "Student Tracking Form", Template ID: "4" (033\_000000\_4)  
Worksheet Number: 2, Heading Row Number: 4  
("Institution tracking" is added by default)

File content preview area

**Available Templates:**

Student Tracking Form  
(AMPL\_STF)

**Browse (.xlsx)**

Browse... AMPL\_STF\_5\_upc

Upload complete

Note: "\*" indicates the template is for institutional level population type

**Figure 80: Update field operation forms screen**

2. In the **Available Templates** drop-down list select the relevant tracking form template:
  - ▶ AMPL\_STF, if you are updating Students Tracking Form
  - ▶ AMPL\_SQTF, if you are updating receipt of School Questionnaires



The SQTF data can only be updated when the status of School Questionnaires in ALL schools in your domain is known.

3. In the **Selected Template Preview** a preview of the selected template will appear. Make sure this is the required template.
4. Click **Browse...** and manually enter or navigate to the location of the completed STF or SQTF Excel file to be imported. The Excel file will be uploaded into ACER Maple and its file name will appear in a tab beside the **Browse...** button.

5. In the **Uploaded File Preview** a preview of the uploaded file will appear (Figure 81). Only the first 15 rows of data will be displayed. The total number of rows and columns in the uploaded file will be displayed beneath the preview.

**Update field operation forms**

Survey: Assessment of Minimum Proficiency Level (AMPL)

Entity: ZedlandA (ZZA)

Admin level: 01

**Selected Template Preview**

	Student Name	Line No.	AMPL Participant ID	Test Form	Gender	Month of Birth	Year of Birth	S
1	Record name in TCD	Input line number	Username 0	Instrument ID 1	Gender	Date of birth-month	Date of birth-year	SEN
2	Updatable	Non-updatable	Non-updatable	Non-updatable	Updatable	Updatable	Updatable	Update

Template Acronym: "AMPL\_STF", Template Full Name: "Student Tracking Form", Template ID: "4" (033\_000000\_4)  
Worksheet Number: 2, Heading Row Number: 4  
(\*Institution tracking is added by default)

**Available Templates:**

Student Tracking Form (AMPL\_STF)

**Browse (.xlsx)**

Browse... AMPL\_STF\_5\_upd.  
Upload complete

Note: \*\*\* indicates the template is for institutional level population type

**Uploaded File Preview**  
(Only display first 15 rows of data)

	Student Name	Line No.	AMPL Participant ID	Test Form	Gender	Month of Birth	Year of Birth	SEN	Test	StQ	LG	UG
1	Xac Yad	00002	28000501	3	1	11	2011	0	1	1	1	9
2	Xab Yac	00001	28000502	4	1	01	2012	0	0	1	1	9
3	Xerb Yjkl	00018	28000503	3	1	01	2012	3	0	0	3	9
4	Xab Yac	00006	28000504	4	1	03	2012	0	1	1	1	9
5	Xak Yalk	00009	28000505	3	1	03	2012	1	0	0	3	9
6	Xak Yalk	00027	28000506	4	1	03	2012	1	1	1	1	9
7	Xth Ysdf	00015	28000507	3	1	04	2012	2	0	0	3	9
8	Xwe Ywsc	00016	28000508	4	1	08	2012	0	1	0	1	9
9	Xad Yag	00022	28000509	3	1	08	2012	0	1	1	1	9
10	Xed Ygbn	00012	28000510	4	2	04	2009	0	1	1	1	9
11	Xed Ygbn	00030	28000511	3	2	04	2009	0	1	1	1	9
12	Xab Ykm	00029	28000512	4	2	02	2012	0	1	1	1	9
13	Xab Yuhj	00017	28000513	3	2	03	2012	0	1	1	1	9
14	Xkl Yvb	00010	28000514	4	2	05	2012	0	1	1	1	9
15	Xaj Yak	00023	28000515	3	2	05	2012	1	0	0	3	9

Total Rows: 40, Total Columns: 16  
(\*Institution tracking is added by default, values are extracted from "AMPL Participant ID", start position: "3" end position: "6")

Import

**Figure 81: Uploaded File Preview for a student tracking form**

6. Click **Import** if the preview looks as expected. ACER Maple then performs a number of validity checks on the data in the selected Excel file.

The possible outcomes and required actions are described in Table 40.

Table 40: Scenarios when updating field data

Outcome	Next steps
<ul style="list-style-type: none"> <li>Tracking data has been validated and is ready to be updated in the ACER Maple database.</li> <li>Message: <i>'Data have been validated. No errors. No warnings. Please click <b>Continue</b>.'</i></li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Continue</b>.</li> <li>Another pop-up message will appear which shows the number of records updated. Click <b>Dismiss</b>.</li> <li>Update data in ACER Maple from another tracking form. OR Click <b>Back</b> to return to the Main screen.</li> </ol>
<ul style="list-style-type: none"> <li>Tracking data contains some discrepancies that prevent the data from being imported (errors).</li> <li>Pop-up message appears warning that there are discrepancies, the data cannot be imported, and prompts you to save or download the report</li> <li>The <i>Update Field Data Validity Report</i> is available for download.</li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Download Validity Report</b>, save the file in an appropriate location. Click <b>Cancel</b> to dismiss the pop-up message.</li> <li>Manually enter or navigate to the location of the saved report and open it.</li> <li>Refer to section 9.5 to check the records that appear in the report.</li> <li>Make the required corrections in the Excel file and attempt to update the tracking form data again.</li> </ol>
<ul style="list-style-type: none"> <li>Tracking data contains some discrepancies that should be checked before importing it.</li> <li>Pop-up message appears warning that there are discrepancies but the data can be imported, and prompts you to download the report.</li> <li>The <i>Update Field Data Validity Report</i> is available for download.</li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Download Validity Report</b>, save the file in an appropriate location and open it.</li> <li>Refer to section 9.5 to check the records that appear in the report.</li> <li>If any corrections are required, make them in the tracking form and attempt to update the tracking form data again.</li> <li>If corrections are not required, click <b>Continue</b> to import the data. Another pop-up message will appear listing the number of records that have been imported. Click <b>Dismiss</b>.</li> <li>Remaining warnings must be explained in the validity report Excel file and included in the data submission package, as described in chapter <b>Error! Reference source not found.</b> .</li> </ol>

## 9.5 Update Field Data Validity Report

If you attempt to update tracking data that contains discrepancies, ACER Maple will produce an *Update Field Data Validity Report* (in Excel format) that contains information about these issues.



The *Update Field Data Validity Report* can contain multiple worksheets. Make sure you have checked the records in **all** worksheets in the report.

### 9.5.1 Discrepancies that can be detected in the STF data

Table 41 (page 128) and Table 42 (page 130) give detailed information about the types of discrepancies that may be listed in the *Update Field Data Validity Report* for STF data, as well as steps to resolve them:

- error worksheets list incorrect records that need to be corrected before the data can be successfully updated in ACER Maple;
- warning worksheets list suspicious records that need to be verified and either corrected or explained.

After all corrections have been made, save the file and attempt to update STF data in ACER Maple again.



There may be multiple versions of the *Update Field Data Validity Report*.

It is possible that after corrections have been made, some errors or warnings still remain. In this case, when you try to update the student tracking form data in ACER Maple, the validity report will be produced again.

**Table 41: Update Field Data Validity Report for student tracking forms: Error worksheets – possible errors and their resolutions**

Description	Error message in report	How to resolve	Action required in student tracking form Excel file
<b>AMPL_STF key violations worksheet</b>			
Duplicate Student ID(s).	<i>[Student ID] is found in rows &lt;Row1&gt;, &lt;Row 2&gt;</i>	<ul style="list-style-type: none"> <li>Check against tracking form populated by ACER Maple before the assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Correct the incorrect Student ID.</li> </ul>
Empty Student ID(s).	<i>[Student ID] cannot be empty</i>		<ul style="list-style-type: none"> <li>Fill empty cell</li> </ul>
First digit in Student ID is incorrect.	<i>First digit in [Student ID] is incorrect</i>		<ul style="list-style-type: none"> <li>Change first digit to '2'.</li> </ul>
Digit 2 in Student ID are incorrect.	<i>[Student ID] contains wrong entity identification</i>		<ul style="list-style-type: none"> <li>Change digit 2 to your country AMPL code<sup>15</sup>.</li> </ul>
Non-existent Student ID.	<i>Data for [Student ID] does not exist in the software</i>	<ul style="list-style-type: none"> <li>Check against tracking form populated from ACER Maple before the assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Correct Student ID.</li> </ul>
Digits 3-6 in Student ID are incorrect.	<i>Data for AMPL school number does not exist</i>		
Combination of Student ID and Line No. does not exist in the data in ACER Maple.	<i>Data for combination of [Student ID] and Line No. has not been imported</i>		<ul style="list-style-type: none"> <li>Correct Student ID and/or Line No. as required</li> </ul>
Record with combination of Student ID and Line No. has not been sampled by ACER Maple.	<i>Data for combination of [Student ID] and Line No. has not been sampled</i>		
<b>AMPL_STF missing records worksheet</b>			
The record of a sampled student is missing from the AMPL_STF.	<i>Record with [Student ID] and Line No. has been sampled but are not in the AMPL_STF</i>	<ul style="list-style-type: none"> <li>Check against tracking form populated from ACER Maple before the assessment.</li> </ul>	<ol style="list-style-type: none"> <li>Add missing record and clarify student's participation status with Test Administrator.</li> </ol>

<sup>15</sup> The country codes in the student ID are: '4'-KEN; '5'-LSO; '6'-ZMB; '7'-GMB.



Description	Error message in report	How to resolve	Action required in student tracking form Excel file
<b>Incorrect columns worksheet</b>			
<p>Excel file is missing one or more columns. OR Excel file has one or more extra columns. OR Excel file has one or more columns with incorrect names. OR Excel file corresponds to a different template.</p>	<p><i>Incorrect columns: Missing – &lt;Column Name&gt;, Extra – &lt;Column Name&gt;</i></p>	<ul style="list-style-type: none"> <li>Check that you are selecting the correct Excel file to import and the correct template in ACER Maple.</li> </ul> <p>OTHERWISE</p> <ul style="list-style-type: none"> <li>Carefully check all adaptations you made in the template of the Excel file and in ACER Maple when you modified the corresponding ACER Maple template.</li> </ul>	<ul style="list-style-type: none"> <li>Add missing columns or modify template in ACER Maple as required.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Delete extra columns or modify template in ACER Maple as required.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Correct column names or modify template in ACER Maple as required.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Select correct Excel file to import or select correct template in ACER Maple.</li> </ul>
<b>Validation rules worksheet</b>			
<p>One or more records contain one or more values that violate variable validation rules.</p>	<p>Description of validation rule violation(s)</p>	<ul style="list-style-type: none"> <li>Check specified values against tracking form codebook for specified rows in Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>Correct invalid values.</li> </ul>
<b>SEN vs "Participation"</b>			
<p>Participation code is '3' indicating that student was excluded on SEN basis, but SEN code is '0' (no special education needs)</p>	<p><i>[SEN] must be greater than 0 if [Participation] is 3</i></p>	<ul style="list-style-type: none"> <li>Contact School Coordinator and/or Test Administrators to enquire about student SEN and participation status</li> </ul>	<ul style="list-style-type: none"> <li>Correct either the SEN code or the Participation code whichever is incorrect</li> </ul>

Description	Error message in report	How to resolve	Action required in student tracking form Excel file
<b>Participation discrepancies</b>			
Participation code is '1' indicating that the student participated in assessment, but all attendance codes are '0' indicating that the student has not attended any of the instruments	<i>Candidate must attend at least one instrument to be marked as participating (Sampling level:0).</i>	<ul style="list-style-type: none"> <li>Contact Test Administrators to enquire about student attendance and participation status.</li> <li>Check paper instruments for attendance code</li> </ul>	<ul style="list-style-type: none"> <li>Correct either the participation or attendance code whichever is incorrect</li> </ul>
Participation code is not '1' indicating that the student did not participate in assessment, but one or more of the attendance codes are '1' indicating that the student has attended one or more of the instruments	<i>Candidate must be participating to attend the [Test] or [STQ] (Sampling level:0).</i>	<ul style="list-style-type: none"> <li>Contact Test Administrators to enquire about student attendance and participation status.</li> <li>Check paper instruments for attendance code</li> </ul>	<ul style="list-style-type: none"> <li>Correct either the participation or attendance code whichever is incorrect</li> </ul>

Table 42: Update Field Data Validity Report for student tracking forms: Warning worksheets – possible warnings and their resolutions

Description	Warning message in report	How to resolve	Action required in student tracking form Excel file
<b>AMPL_STF missing value(s) worksheet</b>			
There are one or more missing values or empty cells for a <a href="#">specific column</a> .	<i>Missing value(s) in &lt;Column Name&gt;</i>	<ol style="list-style-type: none"> <li>Check the values in that column in the Excel file.</li> <li>Contact the school to get the information.</li> </ol>	<ul style="list-style-type: none"> <li>Update the <b>AMPL_STF</b>.</li> </ul>
SEN > 4.	<i>Is this SEN agreed?</i>	<ol style="list-style-type: none"> <li>Check the values in that column in the Excel file.</li> <li>If it is greater than 4, Contact School Coordinator to enquire about SEN of the student</li> </ol>	<ul style="list-style-type: none"> <li>Correct the SEN value if the value is not agreed with ACER.</li> </ul>
The students is indicated to attend the test, but not the STQ or vice versa	<i>Candidate is marked as participating but is not attending all instruments (Sampling level:0).</i>	<ol style="list-style-type: none"> <li>Contact Test Administrators to enquire about student attendance status.</li> <li>Check paper instruments for attendance code</li> </ol>	<ul style="list-style-type: none"> <li>Correct attendance if required, otherwise provide TA explanation and save the report</li> </ul>

### **9.5.2 Errors in updated School Questionnaire Tracking Form data**

Table 43 (page 132) gives detailed information about the types of discrepancies that may be listed in the *Update Field Data Validity Report* for SQTF data, as well as steps to resolve them.

After all corrections have been made, save the file and attempt to update SQTF data in ACER Maple again.

Table 43: Update Field Data Validity Report for School Questionnaire Tracking Form: Error worksheets – possible errors and their resolutions

Description	Error message in report	How to resolve	Action required in School Questionnaire Tracking Form Excel file
<b>SQTF key violations worksheet</b>			
Duplicate School Principal ID(s).	<i>[School Principal ID] is found in rows &lt;Row1&gt;, &lt;Row 2&gt;</i>	<ul style="list-style-type: none"> <li>Check against pre-populated tracking form (SQTF) exported from ACER Maple</li> </ul>	<ul style="list-style-type: none"> <li>Correct the incorrect School Principal ID.</li> </ul>
Empty School Principal ID(s).	<i>[School Principal ID] cannot be empty</i>		<ul style="list-style-type: none"> <li>Fill empty cell.</li> </ul>
First digit in School Principal ID is incorrect.	<i>First digit in [School Principal ID] is incorrect</i>	N/A	<ul style="list-style-type: none"> <li>Change first digit to '3'.</li> </ul>
Digits 2 in School Principal ID are incorrect.	<i>[School Principal ID] contains wrong entity identification</i>		<ul style="list-style-type: none"> <li>Change digit 2 to your country AMPL code<sup>16</sup>.</li> </ul>
Non-existent School Principal ID.	<i>Data for [School Principal ID] does not exist in the software</i>	<ul style="list-style-type: none"> <li>Check against pre-populated SQTF exported from ACER Maple</li> </ul>	<ul style="list-style-type: none"> <li>Correct School Principal ID.</li> </ul>
Digits 3-6 in School Principal ID are incorrect.	<i>Data for AMPL school number does not exist</i>		
Combination of School Principal ID and Line No. does not exist in the data in ACER Maple.	<i>Data for combination of [School Principal ID] and Line No. has not been imported</i>		<ul style="list-style-type: none"> <li>Correct School Principal ID and or Line No. as required.</li> </ul>
Record with combination of School Principal ID and Line No has not been sampled by ACER Maple.	<i>Data for combination of [School Principal ID] and Line No. has not been sampled</i>		
Digits 7-9 in School Principal ID are incorrect.	<i>[School Principal ID] has incorrect part for the record</i>		<ul style="list-style-type: none"> <li>Correct School Principal ID.</li> </ul>
<b>SQTF missing records worksheet</b>			
The record of principal is missing from the SQTF.	<i>Record with [School Principal ID] and Line No. has been sampled but are not in the SQTF</i>	<ul style="list-style-type: none"> <li>Check against pre-populated SQTF exported from ACER Maple</li> </ul>	<ol style="list-style-type: none"> <li>Add missing record and clarify principal's participation status with the Test Administrator.</li> </ol>

Description	Error message in report	How to resolve	Action required in School Questionnaire Tracking Form Excel file
<b>Incorrect columns worksheet</b>			
<p>Excel file is missing one or more columns.</p> <p>OR</p> <p>Excel file has one or more extra columns.</p> <p>OR</p> <p>Excel file has one or more columns with incorrect names.</p> <p>OR</p> <p>Excel file corresponds to a different template.</p>	<p><i>Incorrect columns: Missing – &lt;Column Name&gt;, Extra – &lt;Column Name&gt;</i></p>	<ul style="list-style-type: none"> <li>• Check that you are selecting the correct Excel file to import and the correct template in ACER Maple.</li> </ul>	<ul style="list-style-type: none"> <li>• Add missing columns.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Delete extra columns.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Correct column names.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Select the correct Excel file to import or select the correct template in ACER Maple.</li> </ul>
<b>Validation rules worksheet</b>			
<p>One or more records contain one or more values that violate variable validation rules.</p>	<p>Description of validation rule violation(s)</p>	<ul style="list-style-type: none"> <li>• Check the specified values against the tracking form codebook for the specified rows in the TTF Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>• Correct any invalid values.</li> </ul>

<sup>16</sup> The country codes in the student ID are: '4'-KEN; '5'-LSO; '6'-ZMB; '7'-GMB.

## 9.6 Updating School Participation

### 9.6.1 Preparing data in the School Participation Form

School participation status should have been tracked by your NC using either the School Participation Form exported from ACER Maple (section 3.2) or in another school file, where all other information about selected schools is saved.

Once the participation status of **all** sampled and replacement schools has been confirmed, the sampling process completed, students assessed, and all tracking forms have been updated after the assessment, you will need to check the file where school participation status has been tracked to ensure that:

- all schools from the LSS are listed; and
- each school has the appropriate code according to its participation status (Table 44).

If participation codes have been entered into another file, you will need to export the School Participation Form from ACER Maple (section 3.4), then transfer the codes and comments into the School Participation Form.

The complete School Participation Form data must then be updated in ACER Maple (instructions in section 9.6.2).

**Table 44: School Participation Codes for the AMPL**

Code	Code meaning
1	Participant
2	Refusal
3	Non-participation for other reasons (please specify, e.g. school fire or flood, teacher strike, conflict zone)
4	No eligible students
5	School closed (permanently)
7	Replacement school not contacted
9	School exclusion (specify type and number of eligible students)
11	School ineligible for other reasons (please specify)



A school participation code is required for each school.



Add an explanation in the 'Comment' column if required. You must provide an explanation in the 'Comment' column for codes '3', '9' and '11'. All other codes do not require comments unless you feel that it is necessary.



The length of a comment is restricted to 500 characters. If more space is required please include your comment in the Sampling Data Submission Checklist together with the AMPL School Number.

## 9.6.2 Updating school participation in ACER Maple



Do not import the School Participation Form data until the participation status for **all** schools has been updated.



The data manager login must be used for the following function.

To update school participation in ACER Maple:

1. On the Main screen select **Update tracking data > Institution participation form** and then click **Activate**. The *Update institution participation form* screen will appear (Figure 82).

**Figure 82: Update institution participation form screen**

2. Click **Browse...** and manually enter or navigate to the location of the completed School Participation Form Excel file to be imported. The Excel file will be uploaded into ACER Maple and its file name will appear in a tab beside the **Browse...** button (Figure 83).

**Figure 83: Updated SPF Excel file uploaded into ACER Maple**

3. In the **Uploaded File Preview** a preview of the uploaded file will appear (Figure 84). Only the first 15 rows of data will be displayed. The total number of rows and columns in the uploaded file will be displayed beneath the preview

### Update institution participation form

Survey: Assessment of Minimum Proficiency Level (AMPL)

Entity: ZedlandA (ZZA)

Admin level: 00

#### Selected Template Preview

	School Name	AMPL School No.	Participation Code	Comments
1	Institution Name	Institution tracking	Institution participation	Inst participation comment

Template Acronym: "AMPL\_SPF", Template Full Name: "School Participation Form", Template ID: "7" (033\_000000\_7)  
Worksheet Number: 1, Heading Row Number: 1

#### Available Templates:

School Participation Form (AMPL\_SPF)

**Browse (.xlsx)**

Upload complete

#### Uploaded File Preview

(Only display first 15 rows of data)

	School Name	AMPL School No.	Participation Code	Comments
1	School 123	1	2	
2	School 124	2	3	Teacher strike
3	School 125	3	4	
4	School 126	4	5	
5	School 127	5	1	
6	School 128	6	7	
7	School 129	7	9	Special type 5 students
8	School 130	8	11	Remote area not included in the frame
9	School 131	9	2	
10	School 132	10	2	

Total Rows: 10, Total Columns: 4

Import

**Figure 84: Uploaded File Preview for a school participation form**

4. Click **Import** if the preview looks as expected. An alert will appear asking if you have updated ALL your data:
- ▶ if the data has been updated, click **Yes**;
  - OTHERWISE
  - ▶ click **No** and updated STF and SQTF data that had not been updated (section 9.5).
5. ACER Maple then performs a number of validity checks on the data in the *School Participation Form* Excel file. The possible outcomes and required actions are described in Table 45.



Table 45: Scenarios when updating school participation data

Outcome	Next steps
<ul style="list-style-type: none"> <li>School participation data has been validated and is ready to be updated in the ACER Maple database.</li> <li>Message: <i>'Data have been validated. No errors. No warnings. Please click <b>Continue</b>'</i></li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Continue</b>.</li> <li>Another pop-up message will appear listing the number of records updated. Click <b>Dismiss</b>.</li> <li>Proceed to Chapter <b>Error! Reference source not found</b>.</li> </ol>
<ul style="list-style-type: none"> <li>School participation data contains some discrepancies that prevent the data from being imported (errors).</li> <li>Message: <i>'Data contains errors and cannot be imported into the ACER Maple database.'</i></li> <li>Pop-up message prompts you to download the report.</li> <li>The <i>Update Institution Participation Validity Report</i> is available for download.</li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Download Validity Report</b>, save the file in an appropriate location. Click <b>Cancel</b> to dismiss the pop-up message.</li> <li>Manually enter or navigate to the location of the saved report and open it.</li> <li>Refer to section 9.7 to check the records that appear in the report.</li> <li>Make the required corrections in the Excel file and attempt to update school participation form again.</li> </ol>
<ul style="list-style-type: none"> <li>School participation data contains some discrepancies that should be checked before importing (warnings).</li> <li>Message: <i>'Data contains discrepancies but can be imported if corrections are not required.'</i></li> <li>The <i>Update Institution Participation Validity Report</i> is available for download.</li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Download Validity Report</b>, save the file in an appropriate location and open it.</li> <li>Refer to section 9.7 to check the records that appear in the report.</li> <li>If any corrections are required, make them in the <i>School Participation Form</i> and attempt to update the school participation data again.</li> <li>If corrections are not required, click <b>Continue</b> to import the data. Another pop-up message will appear listing the number of records that have been imported. Click <b>Dismiss</b>.</li> <li>Remaining warnings must be explained in the validity report Excel file and included in the data submission package, as described in chapter <b>Error! Reference source not found</b>.</li> </ol>

## 9.7 Update Institution Participation Validity Report

The validity report produced by ACER Maple will be named *Update\_Institution\_Participation\_VValidity\_Report (<Date and Time>).xlsx*, where <Date and Time> has <yyyy\_mm\_dd\_hour\_min> format. Save the file in an appropriate location and open it to review the error/warning messages. Each row in the report represents a discrepancy. Some of the discrepancies can be connected to other discrepancies listed in the excel file.

Table 46 (page 139) and Table 47 (page 141) give detailed information about the types of discrepancies that may be listed in the *Update Institution Participation Validity Report*, as well as steps to resolve them.

- Error worksheets list incorrect records that need to be corrected before the data can be successfully updated in ACER Maple.
- Warning worksheets list suspicious records that need to be verified and either corrected or explained.



There may be multiple versions of the *Update Institution Participation Validity Report*. It is possible that after corrections have been made, some errors or warnings still remain. In this case, when you try to update the School Participation Form data in ACER Maple, the validity report will be produced again.

Corrections may need to be made in participants' tracking information, in the assessment data entered in ACER Maple, or in the School Participation Form (SPF). After all corrections have been made, attempt to import School Participation Form again.

Please note that as long as errors exist in the *Update Institution Participation Validity Report*, you will not be able to update school participation. Successful completion of this task is one of the requirements for enabling the **Submit data** function, which is needed for the final task of submitting the database to ACER.

If all errors have been resolved and the *Update Institution Participation Validity Report* contains only warnings (i.e. records that do not need to be corrected), school participation can be successfully updated (see Table 45). The validity report Excel file must be saved and all warnings listed in the file must be explained in the report as described in Table 45. This file will be required as part of the data submission to ACER (see section 11.2.3).



It is possible that the *Update Institution Participation Validity Report* will not be produced by ACER Maple. This would happen if there were no discrepancies found in the data when updating the School Participation Form. In this case, there will be no warnings requiring explanation, and the report will not be required for data submission.

Table 46: Update Institution Participation Validity Report: Error worksheets – possible errors and their resolutions

Description	Error message in report	How to resolve	Action required
<b>Incorrect columns worksheet</b>			
Excel file is missing one or more columns. OR Excel file has one or more extra columns. OR Excel file has one or more columns with incorrect names. OR Excel file corresponds to a different template.	<i>Incorrect columns: Missing – &lt;Column Name&gt;, Extra – &lt;Column Name&gt;</i>	<ul style="list-style-type: none"> <li>Check that you are selecting the correct SPF Excel file to import and the correct template in ACER Maple.</li> </ul> <p>OTHERWISE</p> <ul style="list-style-type: none"> <li>Carefully check all adaptations you made in the template of the SPF Excel file and in ACER Maple when you modified the corresponding ACER Maple template.</li> </ul>	<ul style="list-style-type: none"> <li>Select the correct SPF Excel file to import or select the correct template in ACER Maple.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Add all missing columns or modify the template in ACER Maple as required.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Delete all extra columns or modify the template in ACER Maple as required.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Correct all column names or modify the template in ACER Maple as required.</li> </ul>
<b>Key violations worksheet</b>			
There are one or more illegitimate AMPL School Numbers.	<i>[AMPL School No.] is illegitimate</i>	<ul style="list-style-type: none"> <li>Check the LSS – only AMPL School Numbers provided in the LSS are legitimate.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all AMPL School Numbers in the SPF Excel file.</li> </ul>
There are one or more empty cells for AMPL School Number.	<i>[AMPL School No.] is missing</i>	<ol style="list-style-type: none"> <li>Check the AMPL School Number(s) in the SPF Excel file.</li> <li>Check the LSS.</li> </ol>	<ul style="list-style-type: none"> <li>Add all correct AMPL School Numbers to the SPF Excel file.</li> </ul>
There are one or more duplicate AMPL School Numbers.	<i>[AMPL School No.] &lt;#&gt;is found in rows &lt;row1, row2,..&gt;</i>		<ul style="list-style-type: none"> <li>Correct all AMPL School Numbers in the SPF Excel file.</li> </ul>
<b>Incomplete records worksheet</b>			
Some AMPL School Numbers from the LSS are missing.	<i>All schools should be updated together</i>	<ol style="list-style-type: none"> <li>Check the AMPL School Number(s) in the SPF Excel file.</li> <li>Check the LSS.</li> </ol>	<ul style="list-style-type: none"> <li>Add all correct AMPL School Numbers to the SPF Excel file.</li> </ul>

Description	Error message in report	How to resolve	Action required
<b>Validation rules worksheet</b>			
One or more records contain one or more values that violate variable validation rules.	Description of validation rule violation(s)	<ul style="list-style-type: none"> <li>Check the specified values in the SPF Excel file against the School Participation Form codebook.</li> </ul>	<ul style="list-style-type: none"> <li>Correct all invalid values in the SPF Excel file.</li> </ul>
<b>SPF worksheet</b>			
School participation code was entered incorrectly. OR List of Students were not imported for all schools.	<i>AMPL School No participating but no records were imported for sampling</i>	<ol style="list-style-type: none"> <li>Check the school participation code in the SPF Excel file.</li> <li>Find out why the List of Students has not been imported.</li> </ol>	<ul style="list-style-type: none"> <li>Correct the school participation code in the SPF Excel file.</li> </ul> OR <ul style="list-style-type: none"> <li>Proceed with sampling and assessment in the school.</li> </ul>
School participation code is entered incorrectly. OR Students were not sampled in all schools.	<i>AMPL School No participating but no records were sampled</i>	<ol style="list-style-type: none"> <li>Check the school participation code in the SPF Excel file.</li> <li>Find out why the students were not sampled.</li> </ol>	
School participation code is entered incorrectly. OR Tracking forms were not updated for all schools.	<i>AMPL School No participating but no records were identified as participating on the field operation form</i>	<ol style="list-style-type: none"> <li>Check the school participation code in the SPF Excel file.</li> <li>Check whether the tracking form was updated in ACER Maple.</li> </ol>	<ul style="list-style-type: none"> <li>Correct the school participation code in the SPF Excel file.</li> </ul> OR <ul style="list-style-type: none"> <li>Update the tracking form for the school in ACER Maple.</li> </ul>
School participation code is '3', '9' or '11', but the reason for the code has not been specified in the 'Comments' column.	<i>Codes 3, 9, and 11 require specifications in Comment column.</i>	Check the school participation code in the SPF Excel file.	<ul style="list-style-type: none"> <li>Correct the school participation code in the SPF Excel file.</li> </ul> OR <ul style="list-style-type: none"> <li>Specify the reason for the code.</li> </ul>

**Table 47: Update Institution Participation Validity Report: Warning worksheets – possible warnings and their resolutions**

Description	Warning message in report	How to resolve	Action required in School Participation Form Excel file
<b>SPF vs field operation forms worksheet</b>			
School participation code is entered incorrectly. OR Tracking form has incorrect test participation codes. OR There is a reason for this discrepancy.	<i>AMPL School No is not participating but some records were identified as participating on the field operation form</i>	<ol style="list-style-type: none"> <li>1. Check the school participation code in the SPF Excel file.</li> <li>2. Check the tracking form Excel file for the school.</li> </ol>	<ul style="list-style-type: none"> <li>• Correct the school participation code in the SPF Excel file.</li> </ul> OR <ul style="list-style-type: none"> <li>• Correct the tracking form Excel file for the school and update it again in ACER Maple.</li> </ul>
<b>SPF replacement worksheet</b>			
School participation code is entered incorrectly. OR There is a reason for this discrepancy.	<i>Main and first replacement school both participating</i>	<ul style="list-style-type: none"> <li>• Check the school participation code in the SPF Excel file.</li> </ul>	<ul style="list-style-type: none"> <li>• Correct the school participation code in the SPF Excel file.</li> </ul> OR <ul style="list-style-type: none"> <li>• Specify the reason for having main and corresponding replacement school participating at the same time in the assessment for each line in the report Excel file.</li> </ul> THEN <ul style="list-style-type: none"> <li>• Contact Clare Ozolins at <a href="mailto:Clare.Ozolins@acer.org">Clare.Ozolins@acer.org</a>, explaining what happened.</li> </ul>
	<i>Main and second replacement school both participating</i>		
	<i>First replacement and second replacement school both participating</i>		

## 10 DATA ENTRY

10.1 Data Entry Organisation .....	142
10.1.1 Available test designs .....	142
10.1.2 Data entry planning.....	143
10.1.3 Manage Data Entry Operators in ACER Maple .....	145
Accessing the Manage Data Entry Operators screen.....	145
Add new record .....	146
Search.....	149
Edit .....	151
Delete .....	152
Reset first time login code (FTLC) .....	153
10.1.4 Data entry documentation.....	153
10.1.5 Training .....	154
Training Setup.....	156
Prepare paper-based instruments for training .....	156
10.2 Entering Responses into ACER Maple.....	157
10.2.1 Data entry rules.....	157
Cover pages in the AMPL instruments .....	158
Units and items in AMPL questionnaires.....	158
Units and items in Test Forms.....	161
Data entry screens.....	163
Variables in ACER Maple .....	163
10.2.2 Accessing the 'Key in responses' screen .....	164
10.2.3 Add a new record.....	165
10.2.4 Search.....	167
10.2.5 Edit.....	169
10.2.6 Reset.....	170
10.2.7 Delete .....	171
10.3 Validating Respondent List .....	171
10.4 Respondent List Validity Report .....	173
10.4.1 Errors in Respondent List Validity Report.....	174
10.4.2 Warnings in Respondent List Validity Report.....	174

### 10.1 Data Entry Organisation

Before responses from the paper-based survey instruments can be entered into ACER Maple, the process of data entry needs to be carefully planned and organised. NCs need to devise a data entry plan for each domain (i.e. each Admin ID) within their national context, to ensure they will have sufficient staff and equipment for their data entry requirements. NC planning depends on the test designs that had been implemented by it and availability to employ staff and provide equipment for data entry operators.

#### 10.1.1 Available test designs

The AMPL survey allows NCs to select from basic test designs AMPLa, AMPLab, AMPLb or a combination of them. Each test design comprises several booklet types (or test forms) that are rotated between students on the STF produced by ACER Maple. The Test Administrator then allocates each student with the booklet type according to the STF.

There is only one type of Student Questionnaire, and each student should be provided one questionnaire by the Test Administrator. There is only one type of School Questionnaire, and each school should be provided one questionnaire. The data from Student and School Questionnaires also need to be entered in ACER Maple database. Table 48 shows which instruments are used in each design.

**Table 48: Instruments used in various designs**

Design	Booklet IDs rotated between students	Other instruments	
AMPLa	7,8	Student Questionnaire	School Questionnaire
AMPLab	3,4,5,6,7,8	Student Questionnaire	School Questionnaire
AMPLb	1,2	Student Questionnaire	School Questionnaire

Currently either design AMPLab or a combination of designs AMPLa and AMPLab, or designs AMPLa are selected by participating NCs (Table 49).

**Table 49: Grades assessed, and test designs selected by participating NCs**

Country	Lower Grade	Test design	Upper Grade	Test design
Kenya	N/A	N/A	6	AMPLab
Lesotho	N/A	N/A	6	AMPLab
Zambia	4	AMPLa	7	AMPLab
The Gambia	3	AMPLa	N/A	N/A
India	To be advised			

NCs that selected a combination of two designs will need to employ more DEOs than NCs that selected only one design, since the sample size is twice as large.

Once the appropriate number of data entry operators (DEOs) for each administrative unit has been decided upon, and employed appropriately, they need to undergo training before they can begin entering the data received from schools.

### 10.1.2 Data entry planning

Of all the survey instruments, the Student Questionnaire involves the most data being entered, because every student is expected to complete it. The School Questionnaire involves the least data being entered, as there will only be one completed per school. See Table 50 for the maximum expected number of records and responses that could be entered for each survey instrument.

Table 50: Expected records and responses in survey instruments

Instrument	Max. number of records per instrument	Number of responses per person	Data entry days per instrument per grade level
AMPLb Test Forms (1-2)	2500 each	67	6-8
AMPLa Test Forms (7-8)	2500 each	86	8-9
AMPLab Test Forms (3-8)	840 each	86	3-4
Student Questionnaire	5000	54	11-12
School Questionnaire	150-300 (varies by sample design)	75	Less than 1 day

Once DEOs are well-practiced in data entry for their allocated instrument(s), a DEO with a good keystroke will take about one second per response. Allowing for an initial slower period at the beginning of data entry, and accounting for page turning and various other interruptions, responses from AMPL Test Forms 1 and 2 will take 6-8 working days for one person to enter. The time required for other instruments is estimated in the same way.

The data manager will need to figure out how many personnel will be required to enter the data from all assessment instruments, and what equipment is available for this purpose. To aid these decisions, and to better manage the data entry process overall, a **data entry plan** should be devised. Two examples of how this can be done are provided below.

As stated in section 1.3:

- One data manager is responsible for all data management operations in the NC.
- As many data administrators assist the data manager with school-by-school operations as there are domains (i.e. Admin ID values in the LSS). Each DA is responsible for a different domain.

Therefore,

- If **only one** design is selected by the NC, data manager can consider two DEOs working under the instruction of each data administrator. One of them entering responses from the test booklets and then the School Questionnaires, and another entering responses from the Student Questionnaires. The number of days required for data entry will depend on the number of domains defined in the LSS. With two domains (Admin ID=01 and 02) data entry can be completed in 6 days, with four domains (Admin ID=01, 02, 03, 04), data entry can be completed in three days.
- If **two** designs are selected by the NC, the amount of data to be entered is increased twofold. In this case, it is prudent to consider at least three DEOs working under the instruction of each data administrator. One of them entering responses from the test booklets 3 and 4 (for two grade levels), another entering data from booklets 5-8 and then the School Questionnaires, and the third DEO entering responses from the Student Questionnaires. This plan is illustrated in Table 51.



**Table 51: Example of the data entry plan for AMPLa and AMPLab with three data entry operators per domain**

Instrument	Admin ID		
	01	02	.....
AMPL Test Form 3 &4	DEO1a	DEO2a	.....
AMPL Test Form 5-8 + School Questionnaire	DEO1b	DEO2b	.....
Student Questionnaire	DEO1c	DEO2d	.....

The way to reduce time required for data entry is to have more domains (i.e. more data administrators). Data administrators at the time of data entry can work as DEOs if necessary.

The data manager and data administrators will also need to ensure that sufficient equipment is available for data entry. Each DEO will need a PC to enter data into ACER Maple, but the same PC can be used for more than one DEO if they are working in shifts.



The data manager and the data administrator can perform data entry tasks if necessary, but they will need separate DEO logins in ACER Maple to do so.

### 10.1.3 Manage Data Entry Operators in ACER Maple

After the data entry plan has been finalised, the data entry equipment has been prepared, and data entry operators (DEOs) have been employed, ACER Maple logins need to be created for each DEO. The **Manage Data Entry Operators** function allows data administrators to add, search, edit or delete DEO logins, or to reset a DEO's first time login code (FTLC). All of these functions can be accessed from the *Manage Data Entry Operators* screen.

#### *Accessing the Manage Data Entry Operators screen*



A data administrator login must be used for the following function.

To access the *Manage Data Entry Operators* screen:

1. On the Main screen select **User settings > Manage data entry operators** and then click **Activate**. The *Manage data entry operators* screen will appear (Figure 85).

From this screen you can **Add a new record**, or **Search, Edit, Reset FTLC** or **Delete** existing records. The instructions for these actions are provided in the corresponding sections on pages 146 to 157.

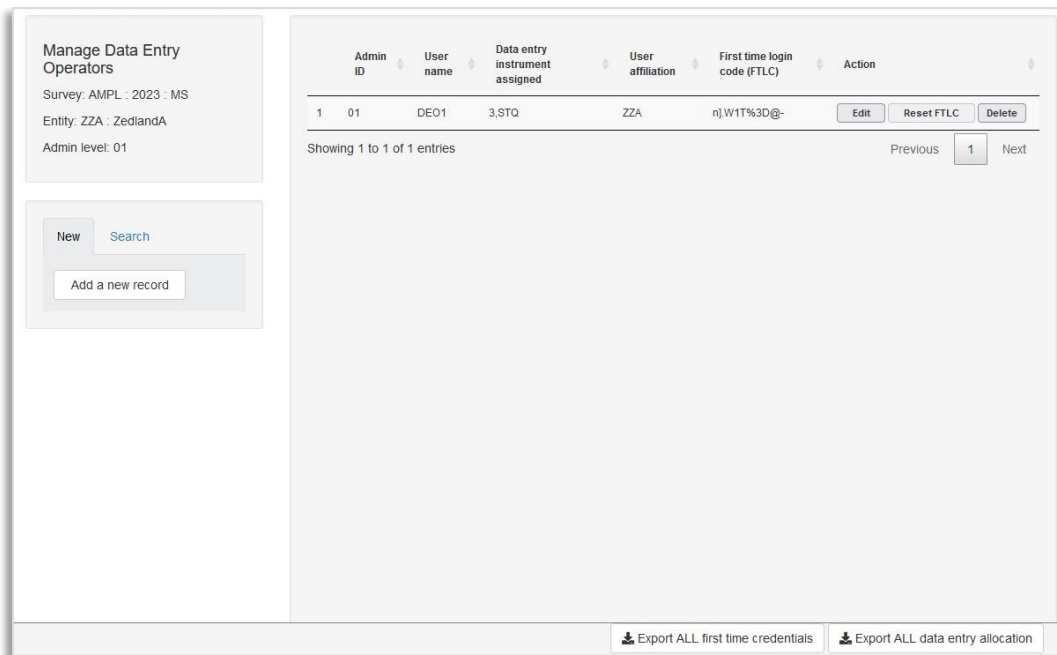


Figure 85: *Manage data entry operators* screen

### *Add new record*



A data administrator login must be used for the following function.

To create ACER Maple logins for each data entry operator:

1. Follow the instructions on page 145 to access the *Manage Data Entry Operators* screen.
2. Ensure that the *New* tab is highlighted on the left-hand side of the screen.
3. Click **Add a new record**. A pop-up window will appear (Figure 86).

**Figure 86: Add new data entry operator details**

4. Enter the *User name* and *User affiliation* for the DEO (see example in Figure 87).

**Figure 87: New DEO login details**



Each data entry operator login must be assigned a **unique** 'User name'.

5. In the Instruments assigned box, allocate at least one instrument to the DEO login being added, by selecting the appropriate tick box(es) (Figure 88). If an instrument is already listed as "[used]" it cannot be allocated again to a different DEO in the same domain.

The screenshot displays the 'Instruments assigned:' section of the ACER Maple interface. At the top, there are three input fields: 'Admin ID:' with a dropdown menu showing '01', 'User name:' with a text box containing 'DEO1', and 'User affiliation:' with a text box containing 'ZZA'. Below these fields is a tree view of instruments. The tree is expanded to show the following structure:

- All
  - (2) Students
    - (2.1) AMPL Test
      - (2.1.1) 1
      - (2.1.2) 2
      - (2.1.3) 3
      - (2.1.4) 4
      - (2.1.5) 5
      - (2.1.6) 6
      - (2.1.7) 7
      - (2.1.8) 8
    - (2.2) Student Questionnaire
      - (2.2.1) STQ [used]
  - (3) School principals
    - (3.3) School Questionnaire
      - (3.3.1) SCQ

Each instrument in the tree has a green checkmark icon next to it, indicating it is assigned. The 'AMPL Test' sub-tree is highlighted in blue.

**Figure 88: Allocate instruments to DEO**

6. Click **Save & Next**. ACER Maple then performs a number of validity checks on the information that has been entered.

The possible outcomes and required actions are described in Table 52.

Table 52: Possible outcomes when adding a new DEO credentials and data entry allocation

Outcome	Next steps
<ul style="list-style-type: none"> <li>All fields are entered and ACER Maple found no discrepancies</li> <li>A pop-up window appears listing the number of records created. It will automatically disappear after a few seconds.</li> <li>No further DEO logins are required</li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Close</b>. The <i>Manage Data Entry Operators</i> screen will return. The new DEO credentials entered in steps 4 to 6 will be listed in the middle of the screen, along with their <i>First time login code</i> (FTLC).</li> <li>Click <b>Back</b> to return to the Main screen.</li> </ol>
<ul style="list-style-type: none"> <li>All fields are entered and ACER Maple found no discrepancies</li> <li>A pop-up window appears listing the number of records created. It will automatically disappear after a few seconds.</li> <li>Another DEO login is required</li> </ul>	<ol style="list-style-type: none"> <li>Repeat steps 4 to 6 to add another DEO login.</li> <li>After the information is entered, click <b>Save &amp; Next</b> and follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>
<ul style="list-style-type: none"> <li>There is an error in the data entered for the DEO.</li> <li>A pop-up window appears describing the error that is preventing the data from being saved. It will automatically disappear after 10 seconds. It can also be closed manually by clicking 'X' in the top right corner.</li> </ul>	<ol style="list-style-type: none"> <li>Make the required corrections to the data.</li> <li>After the data is corrected, click <b>Save &amp; Next</b> and follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>



To save in Excel data entry allocation and the first time credentials for DEOs:

- Click **Export ALL first-time credentials**; and
- Save exported file in the designated location. Then
- Click **Export ALL data entry allocation**; and
- Save exported file in the designated location.

## Search

ACER Maple also includes a search function with the **Manage Data Entry Operators** function.



A data administrator login must be used for the following function.

To search the list of DEOs by user name, affiliation, or instrument assignment:

- Follow the instructions on page 145 to access the *Manage Data Entry Operators* screen.
- Ensure that the *Search* tab is highlighted on the left-hand side of the screen.
- Enter the information you wish to use to search the list of DEOs (Figure 89). If all search terms are blank, all DEO logins will be listed.
  - Enter a user name to locate a specific DEO;
  - Enter a user affiliation to see all DEOs with the same affiliation; and/or

- Select one or more instruments within the instruments assigned box to see which DEOs have been assigned those instruments.

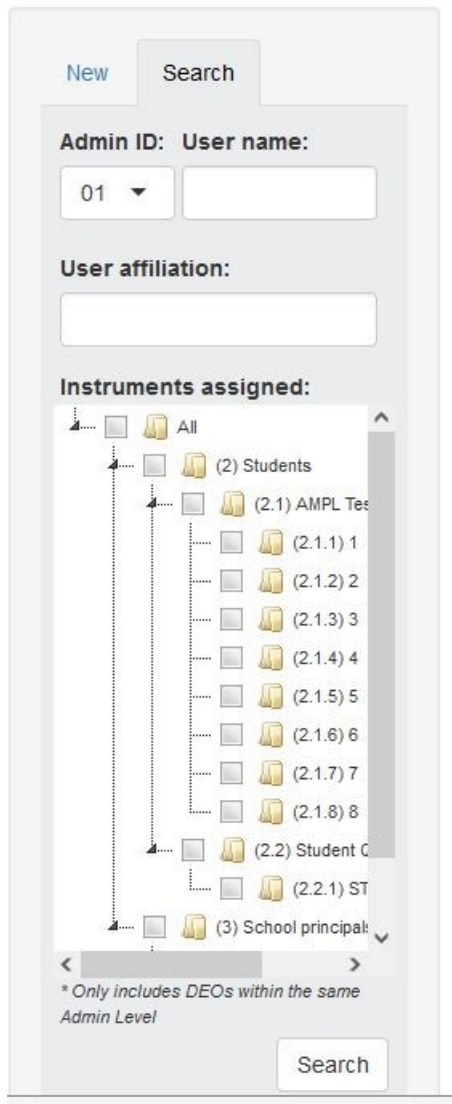


Figure 89: Search data entry operators

4. Click the **Search** button at the bottom of the screen. All records matching the search terms that have been entered will be listed in the middle of the *Manage Data Entry Operators* screen (Figure 90).

Admin ID	User name	Data entry instrument assigned	User affiliation	First time login code (FTLC)	Action
1 01	DE01	1,2,3,4,5,6,7,8	ZZA	:3}AORMmE e	<input type="button" value="Edit"/> <input type="button" value="Reset FTLC"/> <input type="button" value="Delete"/>

Showing 1 to 1 of 1 entries

Previous  Next

Figure 90: DEO search results

If no records match the entered search terms, the message “No data available in table” will display in the centre of the screen.

## Edit

This option allows data administrators to make changes to the user name, user affiliation, and/or instruments assigned to any DEO in ACER Maple.



A data administrator login must be used for the following function.

To edit user name, affiliation, or instrument assignment:

1. Follow the instructions on page 145 to access the *Manage Data Entry Operators* screen.
2. Locate the entry of the DEO login with data that needs to be changed in the list in the middle of the screen. Use the **Search** function if necessary.
3. Underneath the Action column heading, click **Edit**. A pop-up window will appear (Figure 91).

Figure 91: Edit DEO details

4. Make the required corrections to the data:
  - User name and affiliation can be updated by directly editing the text in those fields;
  - Instrument assigned can be updated by deselecting any instrument currently assigned and selecting another. More than one instrument can be selected, as long as it is not listed as “[used]”.
5. Click **Save**. You will be returned to the *Manage Data Entry Operators* screen and ACER Maple will perform some validity checks of the entered data. The possible outcomes and required actions are described in Table 53.

Table 53: Possible outcomes when editing a DEO login

Outcome	Next steps
<ul style="list-style-type: none"> <li>• All fields are updated and ACER Maple found no discrepancies.</li> <li>• A pop-up window appears listing the number of records updated. It will automatically disappear after a few seconds.</li> <li>• No other DEO logins need to be edited.</li> </ul>	<ol style="list-style-type: none"> <li>1. Click <b>Back</b> to return to the Main screen.</li> </ol>
<ul style="list-style-type: none"> <li>• All fields are updated and ACER Maple found no discrepancies.</li> <li>• A pop-up window appears listing the number of records updated. It will automatically disappear after a few seconds.</li> <li>• Another DEO login needs to be edited.</li> </ul>	<ol style="list-style-type: none"> <li>1. Repeat steps 2 to 5 to edit another DEO login.</li> <li>2. After the information is updated, click <b>Save</b> and follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>
<ul style="list-style-type: none"> <li>• There is an error in the data entered for the DEO.</li> <li>• A pop-up window appears describing the error that is preventing the data from being saved. It will automatically disappear after 10 seconds. It can also be closed manually by clicking ‘X’ in the top right corner.</li> </ul>	<ol style="list-style-type: none"> <li>1. Make the required corrections to the data.</li> <li>2. After the data is corrected, click <b>Save</b> and follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>

## Delete



A data administrator login must be used for the following function.

To delete a DEO credentials from ACER Maple:

1. Follow the instructions on page 145 to access the *Manage Data Entry Operators* screen.
2. Locate the entry of the DEO login with data that needs to be deleted in the list in the middle of the screen. Use the **Search** function if necessary.
3. Underneath the Action column heading, click **Delete**. A pop-up window will appear listing the login that will be deleted, and a message asking if you want to continue.
4. Click **OK**. Another pop-up window will appear listing the record that has been deleted. It will automatically disappear after a few seconds. The *Manage Data Entry Operators* screen will return.
5. Repeat steps 2 to 4 for any other DEO logins that need to be deleted.



### *Reset first time login code (FTLC)*

The reset FTLC option is used when a DEO has forgotten their password and needs to have it reset by their data administrator.



A data administrator login must be used for the following functions.

To reset a DEO's first time login code:

1. Follow the instructions in the previous subsection (page 145) to access the *Manage Data Entry Operators* screen.
2. Locate the entry of the DEO login with data that needs to be deleted in the list in the middle of the screen. Use the **Search** function if necessary.
3. Underneath the Action column heading, click **Reset FTLC**. A pop-up window will appear warning that the FTLC for the selected record will be reset, that the previously set user password will become invalid, and a message asking if you want to continue.
4. Click **OK**. Another pop-up window will appear listing the record that has been updated. It will automatically disappear after a few seconds. The *Manage Data Entry Operators* screen will return, with a new FTLC listed in the *First time login code (FTLC)* column of the DEO's record in the middle of the screen.
5. The new FTLC will need to be provided to the DEO. The DEO will need to follow the instructions in section 2.9.1 to complete the first-time login process again, using the new FTLC as the login code.

#### **10.1.4 Data entry documentation**

For training, you will need the codebooks for all instruments that were used by your National Centre for assessment.

To export codebooks from ACER Maple:

1. On the *Main screen* select **Response data > Export data entry documentation** and then click **Activate**. The *Export data entry documentation* screen will appear (Figure 50).

**Export data entry documentation**

Survey: Assessment of Minimum Proficiency Level (AMPL)  
Entity: ZedlandA (ZZA)  
Admin level: 00

**Export options:**

Template Codebook  
 Template Format

**Headings for questions:**

Screen label  
 Item code  
 Screen label & Item code

**File type:**

.xlsx

**Select data entry templates:**

School Questionnaire (SCQ) Student Questionnaire (STQ) Test Booklet 7 Audio, Mathematics and Reading (7)  
Test Booklet 8 Audio, Reading and Mathematics (8)

Click the bar to access the menu.  
Type to search.

Export

**Figure 92: Export data entry documentation screen**

2. Under **Export options** on the left-hand side of the screen de-select *Template Format*.
3. Under **Headings for questions** on the left-hand side of the screen select *Screen label & item code*.
4. From the drop-down list on the top of the screen, under **Select data entry templates**, select all instruments that were used by your National Centre for assessment.
5. Click **Export**. All initial data files will be combined into one zip file which will be available for download.
6. Select 'Save File' and save the zip file in an appropriate location and then unzip it.



Keep the codebooks handy. Your data management team will need to be familiar with validation rules throughout the data entry operations.

### 10.1.5 Training

The data manager will need to train all data entry operators (DEOs) before data entry in how to use ACER Maple. For the purposes of training DEOs, data managers are advised to adapt the *Data Management Training Presentation Part 2* and other training materials provided by ACER<sup>17</sup>. However, not all topics included in this presentation will be required for DEO training.

The topics that must be covered in the DEO training are:

---

<sup>17</sup> MS Teams>AMPL Partner Collaboration > Data Management Resources.

- ACER Maple login and navigation (chapter 2)
- ACER Maple response formats and data entry rules (section 10.2.1)
- Entering data into ACER Maple from paper-based instruments (section 10.2)

Table 54 lists the data manager’s tasks in relation to DEO training and provides references to relevant sections and/or chapters of this document.

**Table 54: Data manager tasks in relation to data entry operator training**

Preparation task	Reference
Ensure that training setup corresponds to the real working conditions of data entry operators as close as possible.	Section 4.3, Introduction, Chapters 1 and 2
Prepare ACER Maple with updated STF data for students in schools in stratum 99, as described in the data administrator training	Chapters 4 and 9
Export all instruments that were used by your National Centre for assessment and make sure that DEOs have the codebooks for the instruments they are assigned to enter	Section 10.1.4
Download and adapt for your needs <i>Data Management Training Presentation</i> provided by ACER.	MS Teams>AMPL Partner Collaboration>Data Management Resources>Workshops <sup>18</sup>
Prepare paper-based instruments for training with fake data for students in schools in stratum 99	<i>Prepare paper-based instruments for training</i> section (page 156)

For the purposes of DEO training, a number of fictitious ‘schools’ have been included in the LSS and can be used to test the ACER Maple data entry procedures before any real data is available. These ‘schools’ are found in stratum 99 of the LSS. As outlined in the data administrator training chapter (chapter 4):

- Training List of Students (LST) data should be prepared for some schools from stratum 99.
- The training LST data should be imported.
- Students from schools in stratum 99 should be sampled, and instruments allocated.
- STF templates should be populated with sampling data from schools in stratum 99.
- Populated STF templates should be “completed” with error-free participation data then used to update STF in ACER Maple.

In addition to these data administrator training tasks, the data manager or data administrator will need to do the following in preparation for DEO training:

- Prepare paper-based instruments for training with ‘fake’ responses for students/schools in stratum 99, according to the instrument allocated to them in the STF, and the participation data that was used to update the corresponding STFs in ACER Maple.
- DEO logins are added by the data administrator in ACER Maple.

<sup>18</sup>

[https://acerlimited.sharepoint.com/:p:/r/sites/AMPLab/Shared%20Documents/Data%20Management%20Resources/Workshops/AMPL\\_DM\\_Training.pptx?d=w70c9ec3dfe9a4418873407409c3c3d31&csf=1&web=1&e=3hhuH9](https://acerlimited.sharepoint.com/:p:/r/sites/AMPLab/Shared%20Documents/Data%20Management%20Resources/Workshops/AMPL_DM_Training.pptx?d=w70c9ec3dfe9a4418873407409c3c3d31&csf=1&web=1&e=3hhuH9)

- Data administrators need to ensure that the appropriate instrument(s) are allocated to each DEO for data entry training (according to the data entry plan).
- Data from the training paper-based instruments should be entered by DEOs.

### *Training Setup*

DEO training should be set up to correspond to the real working conditions of DEOs as much as possible. To achieve this you should make sure that:

1. All DEOs attend the training.
2. The required computing equipment is ready:
  - ▶ ACER Maple is installed in a LAN environment as described in Chapter 2 with one of PCs for each DEO plus one host PC;
  - ▶ each PC meets the system requirements and PC setup (sections 2.2 and 2.3); and
  - ▶ DEO logins are created for each DEO as explained in section 10.1.3.
3. Paper-based instruments for training (containing ‘fake’ responses for students/schools in stratum 99) are provided to DEOs.
4. Audio-visual equipment is ready to use. Some examples of this equipment might include:
  - ▶ a projector for viewing the *Data Management Training Presentation*, ensuring that the screen is visible from every DEO workstation; or
  - ▶ a second monitor for each DEO, so that they can watch the *Data Management Training Presentation* on one monitor and complete the training exercises using another monitor.

### *Prepare paper-based instruments for training*

The data manager will need to provide enough copies of the following instruments to each DEO participating in the training:

- AMPL test forms according to the design selected by the NC;
- AMPL Student Questionnaire;
- AMPL School Questionnaire

Each DEO should receive at least two copies of the instrument(s) for which they will be entering real data when it is received from schools, according to the data entry plan (section 10.1.2).

On the front cover of the test forms the same information should be provided as on booklets sent to the TAs, however not all of these data should be entered into ACER Maple, as shown in Table 55.

**Table 55: Data to be entered from the test cover page**

Information provided for TA on the paper test form	Data to be entered in ACER Maple
School Name	
AMPL School No.	AMPL School No.
Grade Level	Grade Level
Class Name	
Student Name	
AMPL Participant ID	AMPL Participant ID
Booklet No.	Booklet No.

On the front cover of the Student Questionnaire the same information should be provided as on the Student Questionnaires sent to the TAs, however not all of these data should be entered into ACER Maple, as shown in Table 56.

**Table 56: Data to be entered from the Student Questionnaire cover page**

Information provided for TA on the Student Questionnaire cover page	Data to be entered in ACER Maple
School Name	
AMPL School No.	AMPL School No.
Grade Level	Grade Level
Class Name	
Student Name	
AMPL Participant ID	AMPL Participant ID

The data manager should refer to the STFs prepared for training to ensure that the information listed on the cover page of each test form is consistent with the information listed in the STF:

- Student IDs used for AMPL test form should be consistent with what was allocated in the STF;
- Students should be marked as attending the appropriate instrument session on the STF.

On the front cover of the School Questionnaire the same information should be provided as on the School Questionnaires sent to schools, however school name should NOT be entered into ACER Maple, as shown in Table 57.

**Table 57: Data to be entered from the School Questionnaire cover page**

Information provided for TA on the School Questionnaire cover page	Data to be entered in ACER Maple
School Name	
AMPL School No.	AMPL School No.
AMPL Participant ID	AMPL Participant ID



The data manager/administrator should ensure that the participation status of each school in stratum 99 being used for training purposes has been updated accordingly in the Institution Participation Form (section 9.6.2).

Once the paper-based instruments have been prepared for training, DEO logins should be created and the appropriate instruments allocated to them for data entry training (section 10.1.3).

## 10.2 Entering Responses into ACER Maple

Once ACER Maple logins have been created for each DEO, instruments allocated to each DEO, and DEOs are trained, the data entry can commence.

### 10.2.1 Data entry rules

Each DEO must be provided with a set of instruments according to the data entry plan (see section 10.1.2 for details).

Each instrument provided to the DEO must contain at least one response from the participant to whom this instrument had been assigned (see section 9.1 for details on instrument preparation for data entry).

Before commencing data entry from the next instrument, the DEO must check whether the instrument has at least one response:

- If the instrument has at least one response:
  - ▶ the DEO starts entering data from the cover page of this instrument according to the rules explained in the next sub-section of this section (page 158); and
  - ▶ then continue entering data in the response fields according to the rules explained in the following sub-sections depending on the type of the instrument (see page 158 for questionnaires and page 161 test forms)
- If there are no responses, the DEO must put the instrument aside for his data administrator or the data manager to place this instrument in the box with other empty instruments of the same type.

### *Cover pages in the AMPL instruments*



Cover page data from the instruments that do not have students' or principal's responses must not be entered.

Table 58 shows which data from the cover pages need to be entered in the corresponding records in ACER Maple.

**Table 58: Data to be entered from the cover pages of various instruments**

Instrument type	Test instruments	Student Questionnaire	School Questionnaire
<b>Data to be entered from the cover page</b>	AMPL School No.	AMPL School No.	AMPL School No.
	Grade Level	Grade Level	
	AMPL Participant ID	AMPL Participant ID	AMPL Participant ID
	Booklet No.		

### *Units and items in AMPL questionnaires*

Each question in the paper-based questionnaire instruments correspond to a **unit** of one or more **item(s)**. Items are questions or statements to which participants have to respond. Several items can be combined into one unit, or a unit may only contain one item. Within the AMPL questionnaires, units are numbered sequentially, and items within units are marked by letters. An example, unit 3, is provided in Figure 93.

## 5 How many of the following people usually live at home with you?

*This is the home where you mainly live but could include living in more than one home.*

Please tick **one** circle for each line.

	None	One	Two	Three or more	
a) Parent(s) (including step-parents or foster parents)....	<input type="radio"/> <sub>0</sub>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	ST05A
b) Other adults (e.g., grandparents, aunt, uncle, cousin, friend) .....	<input type="radio"/> <sub>0</sub>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	ST05B
c) Older brothers and sisters (or the same age as you)....	<input type="radio"/> <sub>0</sub>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	ST05C
d) Younger brothers and sisters .....	<input type="radio"/> <sub>0</sub>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	ST05D
e) Young cousins or friends .....	<input type="radio"/> <sub>0</sub>	<input type="radio"/> <sub>1</sub>	<input type="radio"/> <sub>2</sub>	<input type="radio"/> <sub>3</sub>	ST05E

**Figure 93: Question 5 from the AMPL Student Questionnaire**

Unit ST05 consists of five items. The corresponding ACER Maple variable names (ST05A, ST05B, ST05C, ST05D, and ST05E) are listed in light grey text on the side of the page. The items in Figure 93 are multiple choice (MC): they have several response options from which the participant selects one. Each response option has a corresponding response code next to it (i.e. 0, 1, 2, or 3 in Figure 93).

**For each MC item with single-digit code:** DEO enters the code for the choice selected by the participant. Only one choice can be entered. If student selected more than one choice, code 8 (*Invalid*) must be entered if none of the choices are selected code 9 (*Missing*) must be entered.

**For each MC item with double-digit code:** DEO enters the code for the choice selected by the participant. Only one choice can be entered. If student selected more than one choice, code 98 (*Invalid*) must be entered if none of the choices selected code 99 (*Missing*) must be entered. Figure 94 shows an example of a double-digit MC item.

2

**When were you born?**Please tick **one** circle next to the **month** and **year** you were born

<b>a) Month</b>	ST02A	<b>b) Year</b>	ST02B
January .....	<input type="radio"/> <sub>01</sub>	2007 .....	<input type="radio"/> <sub>01</sub>
February .....	<input type="radio"/> <sub>02</sub>	2008 .....	<input type="radio"/> <sub>02</sub>
March .....	<input type="radio"/> <sub>03</sub>	2009 .....	<input type="radio"/> <sub>03</sub>
April .....	<input type="radio"/> <sub>04</sub>	2010 .....	<input type="radio"/> <sub>04</sub>
May .....	<input type="radio"/> <sub>05</sub>	2011 .....	<input type="radio"/> <sub>05</sub>
June .....	<input type="radio"/> <sub>06</sub>	2012 .....	<input type="radio"/> <sub>06</sub>
July .....	<input type="radio"/> <sub>07</sub>	2013 .....	<input type="radio"/> <sub>07</sub>
August .....	<input type="radio"/> <sub>08</sub>	2014 .....	<input type="radio"/> <sub>08</sub>
September .....	<input type="radio"/> <sub>09</sub>	2015 .....	<input type="radio"/> <sub>09</sub>
October .....	<input type="radio"/> <sub>10</sub>	2016 .....	<input type="radio"/> <sub>10</sub>
November .....	<input type="radio"/> <sub>11</sub>	2017 .....	<input type="radio"/> <sub>11</sub>
December .....	<input type="radio"/> <sub>12</sub>		

**Figure 94: Question 2 from the AMPL Student Questionnaire**

Please note different layouts for two examples above:

- in ST05 (Figure 93) response categories are positioned horizontally on the page (*horizontal layout*); and
- in ST02 (Figure 94) response categories are positioned vertically on the page (*vertical layout*).



Both single-digit and double-digit MC items can have horizontal and vertical layout. DEOs must be alerted to this difference during training:

- If an item has *horizontal layout* relevant *Invalid* code is entered if there are two or more responses in a row and *Missing* code is entered if there are no responses in a row
- If an item has vertical layout relevant *Invalid* code is entered if there are two or more responses in a column and *Missing* code is entered if there are no responses in a column.

In addition to the MC questions, the School Questionnaire has open-ended items (OE), where principals are asked to provide a number as a response (Figure 95).



## 14 How many teachers taught in your school on [1 March 2023]?

Please write the **numbers** in the boxes for **each** category. Write zero (0) in each box if none. Please include yourself if you teach.

- |    |                         |  |       |
|----|-------------------------|--|-------|
| a) | Full-time teachers..... |  | SC14A |
| b) | Part-time teachers..... |  | SC14B |

Figure 95: Question 14 from the AMPL School Questionnaire

In the case of OE items the number entered by the respondent into the box, is entered by the DEO in the corresponding field of the data entry screen. If there is no respond in a box, the *Missing* code is entered (999 or 9999 depending on the validation rule of the item). The *Invalid* code is entered only if the number entered in the box is outside the validation rule for the item. Validation rules are provided in the codebooks. Instructions on how to export codebooks are provided in section 10.1.4.

### Units and items in Test Forms

In the AMPL Test Forms, items are not numbered sequentially throughout the booklets, but the numbering corresponds to the numbering of the data entry fields on the ACER Maple data entry screens. The corresponding ACER Maple variable names appear in grey text above the item numbers number (i.e. E1.1 and E2.1 in Figure 96).

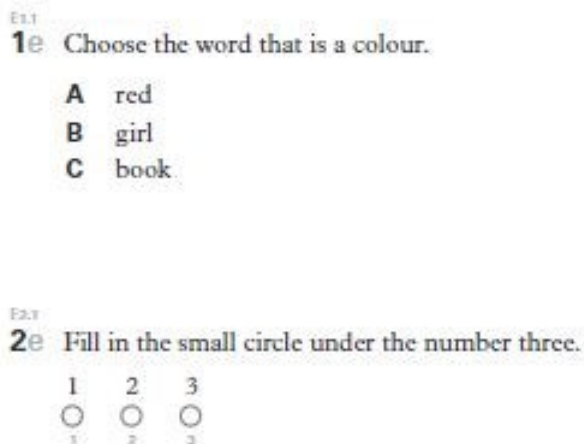


Figure 96: Example MC test items

Most of the items in the Test Forms are multiple choice (MC) with either letter assign to the response categories (item 1e, Figure 96) or the small circles with greyed-out codes beneath them: (item 2e, Figure 96):

- Each letter in the **MC items similar to 1e** corresponds to a numeric code which is entered into ACER Maple if the letter is circled:
  - ▶ A=1
  - ▶ B=2
  - ▶ C=3
  - ▶ .....

- **For each MC item with single-digit codes or letter codes:** DEO enters the code for the choice selected by the student. Only one choice can be entered. If student selected more than one choice, code 8 (*Invalid*) must be entered if none of the choices are selected code 9 (*Missing*) must be entered.
- **For each MC item with double-digit codes:** DEO enters the code for the choiceselected by the student. Only one choice can be entered. If student selected more than one choice, code 98 (*Invalid*) must be entered if none of the choices selected code 99 (*Missing*) must be entered.

Some items in the Test Forms are complex multiple choice (CMC) similar to the item shown in Figure 97. In these cases several participant choices are treated together as one response.

Which of the students in the table have green as their favourite colour?

Select 'Yes' or 'No' for each student.

Student		
Abena	<input type="radio"/> Yes	<input type="radio"/> No
Kojo	<input type="radio"/> Yes	<input type="radio"/> No
Udo	<input type="radio"/> Yes	<input type="radio"/> No
Femi	<input type="radio"/> Yes	<input type="radio"/> No

**Figure 97: Example CMC item**

In the example in Figure 97, four responses are treated together as one response:

- ▶ Each 'Yes' must be coded as '1';
- ▶ Each 'No' must be coded as '2';
- ▶ Four numbers are entered into ACER Maple for the participant's response e.g. 1212, or 1221, etc.

Response options are usually coded in the order they appear on the page, when reading left to right, top to bottom. The first option is coded as 1, the second as 2 etc. For example, in another CMC item:

- ▶ Each 'Left' must be coded as '1';
- ▶ Each 'Right' must be coded as '2';
- ▶ Four numbers are entered into ACER Maple for the participant's response e.g. 121.

## Data entry screens

An ACER Maple data entry screen is shown in Figure 98.

Figure 98: ACER Maple data entry screen for a test form

The large yellow field at the top of the screen displays information about the field currently selected for data entry, with the variable name, variable type and validation rules (in brackets) listed on the left above the box. This information cannot be edited directly.

The next fields, listed under “Cover Page” and before “Responses”, are for entering required information from the cover page.

The remaining fields, listed under “Responses” are for entering participant responses. Item numbers appear above each field.

## Variables in ACER Maple

Each item in a paper-based instrument corresponds to a variable in ACER Maple.

There are five main types of variables in ACER Maple that are used to enter responses from the AMPL survey instruments. Every response field in ACER Maple must contain either a response code (if a valid response has been provided), or an auxiliary code (if a valid response has not been provided).

There are three auxiliary codes which can be used when a valid response has not been provided:

- **Not administered (N/A):** This code is used when the respondent was unable to provide a response to a question due to problems with the survey instruments, such as printing errors or omissions, faulty cutting, folding or stapling, or missing booklet pages, etc. Note that if there were problems with the survey instruments, they should be reported in the Item Information for Cleaning document (section 0) when you submit your data.
- **Invalid:** This code is used when the respondent has provided an invalid response, such as circling or ticking two answers when they should only choose one, or including extraneous text that invalidates their response.
- **Missing:** This code is used when the respondent has not provided a response at all.

Table 59 lists the main ACER Maple variable types and their auxiliary codes.

Table 59: ACER Maple variable types used for the AMPL

Variable type	Auxiliary codes		
	N/A	Invalid	Missing
Open-ended numeric items, depending on validation rule will have:	9997	9998	9999
	997	998	999
Multiple Choice (with ≤6 choices)	7	8	9
Multiple Choice (with >6 choices)	97	98	99
Complex multiple choice (3 choices treated as one response)	997	998	999
Complex multiple choice (4 choices treated as one response)	9997	9998	9999

### 10.2.2 Accessing the 'Key in responses' screen



A data entry operator login must be used for the following function.

To enter a new response data record, or to search for and edit an existing record, data entry operators need to access the *Key in responses* screen as follows:

1. On the Main screen select **Response data > Key in responses** and then click **Activate**. The *Key in responses* screen will appear (Figure 99).

From this screen you can:

- ▶ **Add a new record**, under the *New* tab; or
- ▶ **Search, Edit, Reset** or **Delete** existing records under the *Existing* tab.

The instructions for these actions are provided in the corresponding sections 10.2.3-10.2.7.

Figure 99: Key in responses screen

### 10.2.3 Add a new record



A data entry operator login must be used for the following function.

To key in response data for a new record:

1. Follow the instructions in section 10.2.2 to access the *Key in responses* screen.
2. Ensure that the *New* tab is highlighted on the left-hand side of the screen.
3. The following fields must be filled for each new record being added:
  - Under **Pop Type** DEO selects:
    - ▶ **Students** if entering data for AMPL test forms or Student Questionnaire; or
    - ▶ **School principals** if entering data for the School Questionnaire.
  - Under **Instrument**: DEO selects from the drop-down list the instrument for which data will be entered (e.g. 3 for booklet 3 in the example in Figure 99).
  - Under **Data Entry Template**: the data entry template name that corresponds to the selected survey instrument will appear automatically.
4. Click **Add a new record**. The data entry screen for the selected instrument will appear in a pop-up window (Figure 100).
- On the left above the large yellow field at the top of the screen information about the field currently selected for data entry is displayed as follows:

- ▶ the item number in the paper version of the instrument which corresponds to the field number,
- ▶ then in brackets: variable type followed by validation rule.
- On the right above the large yellow field, the data entry operator can choose whether pressing the arrow keys, 'Tab' or 'Enter' keys on a keyboard will be used to move between response data fields. Arrow keys option is selected by default.
- **Cover page** variables are listed under the large yellow field at the top of the screen.



Do NOT choose the option of copy over the cover page variables. It saves very little time and create multiple data entry errors which will take much longer to resolve.

3 (Integer. Between 1 and 3. Or: 7, 8, 9) Press Tab / Enter /  Arrow for the next input

Character Count: 1

**Cover page** Keep values for next Show less

AMPL School No. Grade Level AMPL Participant ID Booklet No.

2 4 280002033 3

**Responses**

	1	2	3	4	5	6	7
1	1	1	1				
8							
15							
22							
29							
36							
43							
50							
57							

Students, 3, Test Booklet 3 Audio, Mathematics and Reading (3)  
[START TIME: 2023-03-30 14:07:03]

Save & Next Close

Figure 100:A data entry screen for a new record

- Under **Responses**, key in the required data into each field.



Any fields containing data that violate validation rules will be highlighted in red. The record cannot be saved if any fields are red.

- When all data has been entered and there are no red fields, click **Save & Next**.
- A pop-up window will appear saying the data will be saved and asking if you want to continue. Click **OK**. ACER Maple then performs a number of validity checks on the data entered in the template.

The possible outcomes and required actions are described in Table 60.

Table 60: Possible outcomes when adding a new response data record in ACER Maple

Outcome	Next steps
<ul style="list-style-type: none"> <li>All fields are entered and ACER Maple found no discrepancies.</li> <li>A pop-up window appears saying the record has been saved. It will automatically disappear after a few seconds.</li> <li>All data fields are cleared for the next record to be keyed in.</li> <li>The DEO does not intend to add any more records at this time.</li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Cancel</b>. A pop-up message will appear warning that the data will not be saved.</li> <li>Click <b>OK</b>. The <i>Key in responses</i> screen will return.</li> <li>Click <b>Back</b> to return to the Main screen.</li> </ol>
<ul style="list-style-type: none"> <li>All fields are entered and ACER Maple found no discrepancies.</li> <li>A pop-up window appears saying the record has been saved. It will automatically disappear after a few seconds.</li> <li>All data fields are cleared for the next record to be keyed in.</li> <li>The DEO needs to add another record.</li> </ul>	<ol style="list-style-type: none"> <li>Repeat steps 5 to 7 to add another record.</li> <li>Follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>
<ul style="list-style-type: none"> <li>There is an error in the data entered.</li> <li>A pop-up window appears describing the error that is preventing the data from being saved. It will automatically disappear after 10 seconds. It can also be closed manually by clicking 'X' in the top right corner.</li> </ul>	<ol style="list-style-type: none"> <li>Make any required corrections before clicking <b>Save &amp; Next</b> again.</li> <li>Follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>

### 10.2.4 Search

ACER Maple also includes a search function with the **Key in responses** function.



A data entry operator login must be used for the following function.

To search the list of keyed in response data records by *instrument*, *identifier* (from cover page), the date the record was added to ACER Maple (*Added date*) or by DEO who added the record (*Added by*):

- Follow the instructions in section 10.2.2 to access the *Key in responses* screen.
- Ensure that the *Existing* tab is highlighted on the left-hand side of the screen.
- Enter the information you wish to use to search the list of keyed in response data records (Figure 101). If all search terms are left blank, all keyed in records will be listed.
  - Select from the drop-down *Instrument* list to see all records entered for that instrument. The total number of records entered for each instrument appears in brackets next to the instrument name.

- Enter a value for one of the identifier variables from the instrument cover page (eg AMPL school number, student/principal ID) to see all records matching that value. OR
- Enter an appropriate “from-to” date range to show all records entered with that date range. OR/AND
- Enter the username of a data entry operator to show all records entered by that operator.

The screenshot shows a search interface with two tabs: 'New' and 'Existing'. Below the tabs, there are several search criteria fields:

- Instrument (total records):** A dropdown menu with 'ALL' selected.
- Identifier on cover page:** A text input field containing '1005'.
- Added date:** Two date input fields separated by a hyphen.
- Added by:** A text input field.
- Show latest N records:** A dropdown menu with '100' selected.

A 'Search' button is located at the bottom right of the form. Below the form, there is a small disclaimer:

*\* For data operator, (1) pop types are restricted to the ones with assigned instruments, (2) instruments are restricted to the assigned instruments, (3) data is restricted to self-created records*

**Figure 101: Search keyed in data records**

4. Click **Search**. All records matching the search terms that have been entered will be listed in the middle of the *Key in responses* screen (Figure 102). If no records match the entered search terms, the message “No data available in table” will display in the centre of the screen.



	School	Respondent No.	ID	Instrument	Added at	Added by	Admin	Action
1	1005	08	18100508	1	2021-05-04 13:10:08	ZZAdeo1	01	<input type="button" value="Edit"/> <input type="button" value="Reset"/> <input type="button" value="Delete"/>
2	1005	06	18100506	1	2021-05-04 13:09:42	ZZAdeo1	01	<input type="button" value="Edit"/> <input type="button" value="Reset"/> <input type="button" value="Delete"/>
3	1005	04	18100504	1	2021-05-04 13:08:59	ZZAdeo1	01	<input type="button" value="Edit"/> <input type="button" value="Reset"/> <input type="button" value="Delete"/>
4	1005	07	18100507	2	2021-05-04 12:55:08	ZZAdeo1	01	<input type="button" value="Edit"/> <input type="button" value="Reset"/> <input type="button" value="Delete"/>
5	1005	01	18100501	2	2021-05-04 12:54:24	ZZAdeo1	01	<input type="button" value="Edit"/> <input type="button" value="Reset"/> <input type="button" value="Delete"/>

Showing 1 to 5 of 5 entries

Previous  Next

Figure 102: Keyed in data record search results

### 10.2.5 Edit

This option allows data entry operators to make changes to an existing data record.



A data entry operator login must be used for the following function.

To edit keyed in response data for an existing record:

1. Follow the instructions in section 10.2.2 to access the *Key in responses* screen.
2. Use the **Search** function (section 10.2.4) to locate the data record that needs to be changed. It will be listed in the centre of the screen.
3. Underneath the *Action* column heading, click **Edit**. The corresponding data entry screen containing keyed in data will appear in a pop-up window.
4. Make the required corrections to the data by directly editing the text in any field in the *Cover Page* or *Responses* section of the template.
5. When all data has been entered and there are no red fields, click **Save**.
6. A pop-up window will appear saying the data will be saved and asking if you want to continue. Click **OK**. ACER Maple then performs a number of validity checks on the data entered in the template.

The possible outcomes and required actions are described in Table 61.

Table 61: Possible outcomes when editing a response data record in ACER Maple

Outcome	Next steps
<ul style="list-style-type: none"> <li>All fields are entered and ACER Maple found no discrepancies.</li> <li>A pop-up window appears saying the record has been saved. It will automatically disappear after a few seconds.</li> <li>The DEO does not need to edit any more records.</li> </ul>	<ol style="list-style-type: none"> <li>Click <b>Back</b> to return to the Main screen.</li> </ol>
<ul style="list-style-type: none"> <li>All fields are entered and ACER Maple found no discrepancies.</li> <li>A pop-up window appears saying the record has been saved. It will automatically disappear after a few seconds.</li> <li>The DEO needs to edit another record.</li> </ul>	<ol style="list-style-type: none"> <li>Repeat steps 2 to 6 to edit another record.</li> <li>Follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>
<ul style="list-style-type: none"> <li>There is an error in the data entered.</li> <li>A pop-up window appears describing the error that is preventing the data from being saved. It will automatically disappear after 10 seconds. It can also be closed manually by clicking 'X' in the top right corner.</li> </ul>	<ol style="list-style-type: none"> <li>Make any required corrections before clicking <b>Save</b> again.</li> <li>Follow the steps that correspond to the appropriate outcome described in this table.</li> </ol>

### 10.2.6 Reset

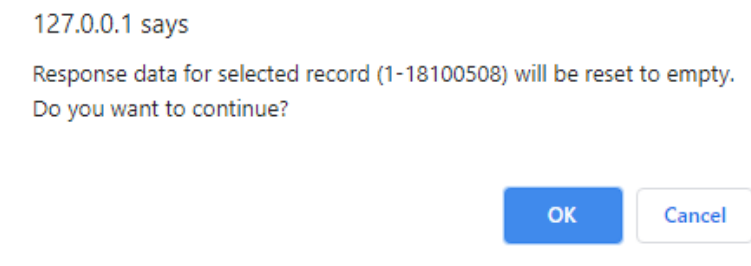
The reset function deletes all keyed in response data for a record, without deleting their cover page identifiers, so that an “empty” record is retain in the database.



A data entry operator login must be used for the following function.

To reset the keyed in data for an existing record:

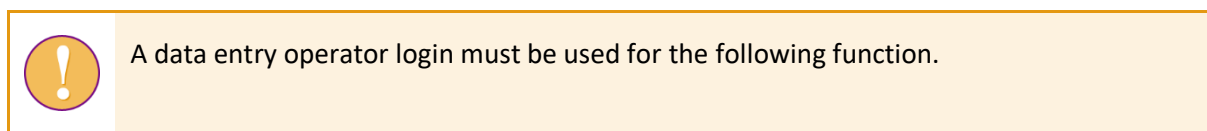
- Follow the instructions in section 10.2.2 to access the *Key in responses* screen.
- Use the **Search** function (section 10.2.4) to locate the data record that needs to be changed. It will be listed in the centre of the screen.
- Underneath the *Action* column heading, click **Reset**. A pop-up message will appear warning that the response data for the specified record will be reset to empty (Figure 103).



**Figure 103: Reset response data warning**

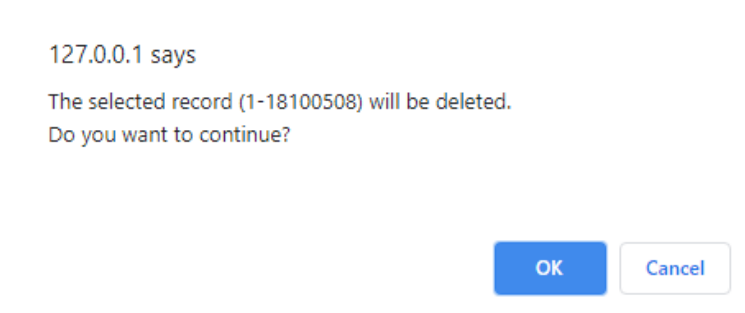
- Click **OK**. Another pop-up message will appear saying the record has been updated. It will automatically disappear after a few seconds.
- To re-enter data for the reset record, click **Edit** (underneath the *Action* column heading), and follow the instructions into section 10.2.5 to edit the empty record.

### 10.2.7 Delete



To delete an existing response data record from ACER Maple:

- Follow the instructions in section 10.2.2 to access the *Key in responses* screen.
- Use the **Search** function (section 10.2.4) to locate the data record that needs to be deleted. It will be listed in the centre of the screen.
- Underneath the *Action* column heading, click **Delete**. A pop-up message will appear warning that the selected record will be deleted (Figure 104).




**Figure 104: Delete response data record warning**

- Click **OK**. Another pop-up message will appear saying the record has been deleted. It will automatically disappear after a few seconds.


## 10.3 Validating Respondent List

After all response data has been successfully entered into ACER Maple, it needs to be checked against the student and school questionnaire tracking data updated in ACER Maple.

 Every data administrator **must** validate respondent list for their domain AFTER:

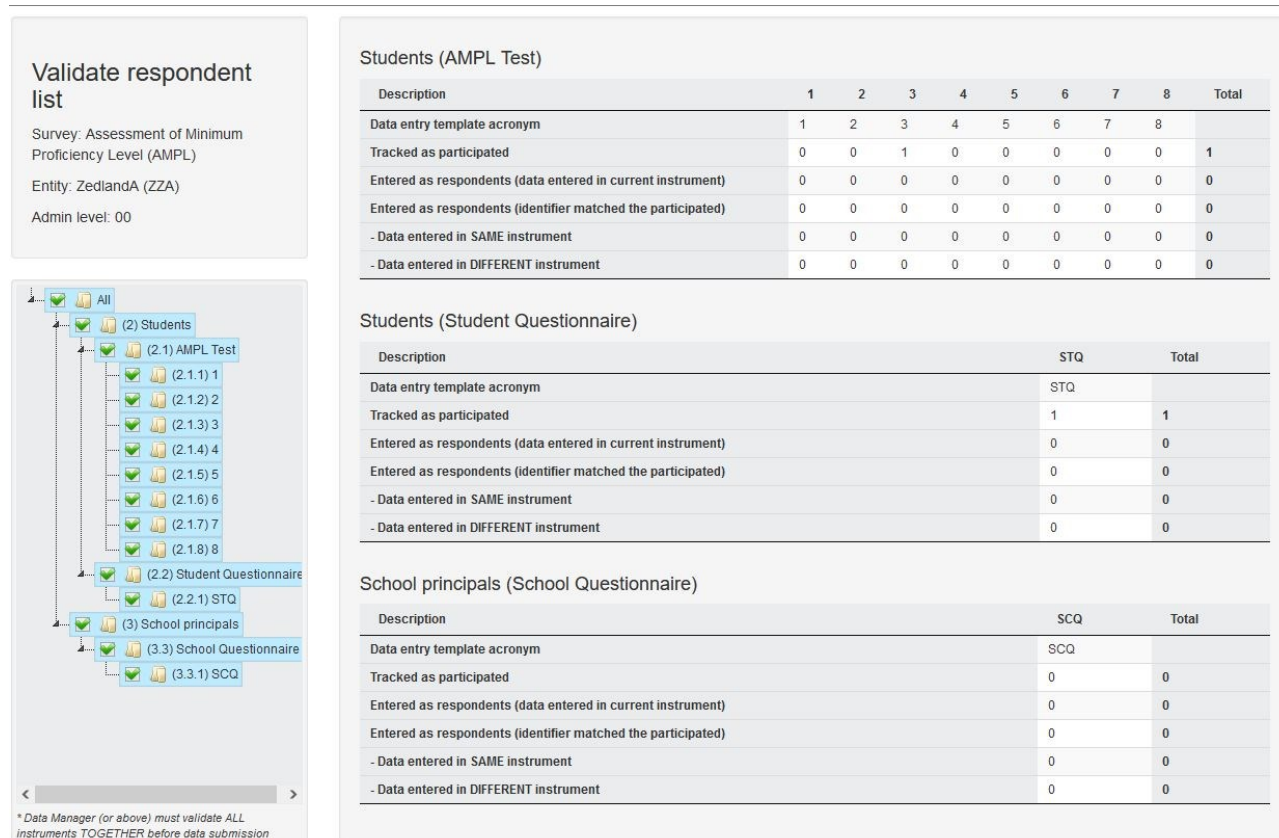
- ALL tracking data in the domain has been updated; and
- ALL response data in the domain has been keyed in.

Each data manager **must** validate respondent list for the entire entity AFTER ALL data administrators validated data in their domains, but BEFORE data is submitted.

 The data administrator or the data manager login can be used for the following function.

To validate response data against student and school questionnaire tracking data:

1. On the Main screen select **Response data > Validate respondent list** and then click **Activate**. The *Validate respondent list* screen will appear (Figure 105).



**Figure 105: Validate respondent list screen**

2. A summary of the keyed in data is provided in the middle of the screen. The following information is listed for each instrument:
  - The number of students/schools listed as participating (for the listed instrument) in the appropriate tracking form;
  - The number of students/schools that have had response data entered into the listed instrument; and
  - The number of records in both. If all data for the listed instrument has been entered correctly, the three numbers will be the same.

3. On the left-hand side of the screen you can select or deselect the instruments that you want to validate.
  - The first time you validate response data, ensure that all instruments are selected.
  - On subsequent occasions, you may choose to only validate response data for instruments that contained errors that you have tried to correct.
  - You should **validate response data for all instruments one final time** before submitting your data to ACER.
4. Click **Validate data for selected instrument(s)**. Two pop-up messages will appear, the first asking if you have entered all response data, the second all tracking data. Click **Yes** for both. ACER Maple then performs the validity checks.
 

The possible outcomes and required actions are described in Table 62.

**Table 62: Possible outcomes when validating respondent list data**

Outcome	Next steps
<ul style="list-style-type: none"> <li>• The data has been validated with no discrepancies</li> <li>• A pop-up message appears saying the validation has been successful</li> </ul>	<ol style="list-style-type: none"> <li>1. Click <b>Dismiss</b>.</li> <li>2. Click <b>Back</b> to return to the Main screen.</li> </ol>
<ul style="list-style-type: none"> <li>• The data contains some discrepancies that need to be checked or corrected.</li> <li>• A pop-up message appears saying the data contains errors and/or warnings.</li> <li>• <i>Respondent List Validity Report</i> is available for download.</li> </ul>	<ol style="list-style-type: none"> <li>1. Click <b>Download Validity Report</b>, save the file in an appropriate location. Click Cancel to close the pop-up message.</li> <li>2. Manually enter or navigate to the location of the saved report and open it.</li> <li>3. Refer to section 10.4.2 to check the records that appear in the report.</li> <li>4. If any corrections are required, make them in the corresponding tracking forms and/or data entry screens.</li> <li>5. Explanations of warnings listed in the report must be entered into the report by the data manager before data can be submitted (see section 11.1)</li> </ol>

## 10.4 Respondent List Validity Report

If there are discrepancies between the response data that has been keyed in by data entry operators and corresponding student or school tracking information, ACER Maple will produce a *Respondent List Validity Report* (in Excel format) that contains information about these issues. Before you try to resolve them, make sure you have the relevant tracking forms and assessment instruments handy.

There are two types of data inconsistencies listed in the report: errors and warnings. Errors and warnings in the report are organised into separate spreadsheets. Spreadsheet names clearly indicate which type of discrepancy the spreadsheet lists.



The *Respondent List Validity Report* can contain multiple worksheets. Make sure you have checked the records in **all** worksheets in the report.

#### 10.4.1 Errors in Respondent List Validity Report

Table 63 (page 175) lists errors that may appear in particular Error worksheets of the *Respondent List Validity Report*. Table 63 also explains how these errors can be resolved.



Column names in square brackets appearing in messages within the report, such as [AMPL School No.] and [Line No.], will be replaced by the translated column names for LST\_FRE.

After all corrections have been made in the appropriate data, attempt to validate the respondent list again. Your database cannot be submitted to ACER until all errors have been resolved and all warnings explained.

#### 10.4.2 Warnings in Respondent List Validity Report

Table 64 (page 175) lists discrepancies that may appear in Warning worksheets of the *Respondent List Validity Report* and explains how they can be resolved.

Table 63: Respondent List Validity Report: Error worksheets – Possible errors and their resolutions

Description	Warning message in report	How to resolve	Action required
<b>&lt;Instrument Name&gt; (Error) worksheet</b>			
One or more respondents are listed as participating in the tracking data but there is no data entered for them in the corresponding survey instrument	<i>Recorded as participating or attending instrument &lt;Instrument ID&gt; in tracking data, but is not entered in this instrument</i>	<ul style="list-style-type: none"> <li>Check the values in that column in the appropriate tracking Excel file.</li> <li>Check the paper instruments for any instruments that may have been missed during data entry.</li> <li>Contact the school to locate any missing instruments, and to verify information in STF.</li> </ul>	<ul style="list-style-type: none"> <li>Correct any errors in tracking data and update tracking in ACER Maple</li> </ul> OR <ul style="list-style-type: none"> <li>Enter any missing records into corresponding assessment instrument template in ACER Maple</li> </ul>
Data is entered for a respondent in a survey instrument, but the respondent is listed as not participating in the tracking data	<i>Response data is entered, but respondent is not recorded as participating or attending instrument &lt;Instrument ID&gt; in tracking data</i>	<ul style="list-style-type: none"> <li>Check the values in that column in the appropriate tracking Excel file.</li> <li>Check the paper instruments for any errors made during data entry</li> <li>Contact the school to verify information in STF.</li> </ul>	<ul style="list-style-type: none"> <li>Correct any errors in tracking data and update tracking in ACER Maple</li> </ul> OR <ul style="list-style-type: none"> <li>Correct or remove incorrect instrument records from ACER Maple</li> </ul>

Table 64: Respondent List Validity Report for student lists: Warning worksheets – Possible warnings and their resolutions

Description	Warning message in report	How to resolve	Action required
<b>&lt;Instrument Name&gt; (Warning) worksheet</b>			
One or more respondents have data entered in one survey instrument but in the tracking data assigned a different survey instrument (only possible for rotated AMPL test forms)	<i>Candidate was allocated &lt;Instrument ID 1&gt; in tracking data, but data entered into &lt;Instrument ID 2&gt;</i>	<ul style="list-style-type: none"> <li>Check that the student was accessed using the paper instrument that the data was entered into.</li> <li>Enter student data into correct instrument there was a data entry mistake made in ACER Maple</li> <li>Contact the school to get information on why different instrument was given to the student.</li> </ul>	<ul style="list-style-type: none"> <li>Correct or remove incorrect instrument records from ACER Maple</li> </ul> OR <ul style="list-style-type: none"> <li>Save the report excel file produced by ACER Maple</li> <li>Specify the reason for assigning assessment instrument different from what specified in tracking form and save the report Excel file.</li> </ul>

## 11 FINAL TASKS

11.1	Explaining Warnings .....	176
11.1.1	Exporting remaining warnings from ACER Maple .....	177
11.1.2	Explaining warnings in the Participation & Attendance Warnings Form (PAWF).....	178
11.1.3	Main & Replacement Warnings Form (MRWF) .....	178
11.1.4	Explaining warnings in the Respondent List Warnings Form (RLWF) .....	178
11.1.5	Importing explained warnings into ACER Maple .....	180
11.1.6	Explain Warnings Validity Report .....	181
11.2	Data submission .....	183
11.2.1	Data Submission Schedule.....	183
11.2.2	Checking that ACER Maple Data is Ready for Submission .....	183
11.2.3	Delivery Method.....	184
11.3	Data Cleaning Participation .....	185



Data manager should perform the tasks described in this chapter.

### 11.1 Explaining Warnings

Due to the complexity of test administration and data processing in large scale surveys, it is possible that some discrepancies reported by ACER Maple are actually valid data. These inconsistencies are listed in various validity reports as **warnings**. Therefore, the presence of warnings in validity reports will not prevent the **Submit data** function from being enabled in ACER Maple. However, explanations **must** be provided as to how these inconsistencies occurred otherwise data cannot be submitted.

It is essential for the data manager in the NC to provide explanations for all warnings that are kept in the ACER Maple database. There are three types of such warnings (see Table 65). To be explained, these warnings must be exported from ACER Maple using **Export > Remaining warnings** function as explained in section 11.1.1.

**Table 65: Validity reports that may produce warnings that require explanations**

Validity reports that may produce warnings kept in the ACER Maple database	Form containing warnings	Form acronym
<i>Update Field Data Validity Report</i> produced when STFs are updated in ACER Maple (sections 9.4 and 9.5)	Participation & Attendance Warning Form	PAWF
<i>Update Institution Participation Validity Report</i> produced when school participation information is imported into ACER Maple (sections 9.6 and 9.7)	Main & Replacement Warning Form	MRWF
<i>Respondent List Validity Report</i> produced after all participant responses have been entered into their corresponding assessment instruments (sections 10.3 and 10.4)	Respondent List Warning Form	RLWF

After warnings had been exported, unzip and open exported Excel files:

- if ALL exported files are empty, go to section 11.2 on page 183;
- otherwise:
  - ▶ provide explanations in the last column of the exported Excel files (sections 11.1.2 - 11.1.4);



- ▶ import the Excel files with explanations into ACER Maple (section 11.1.5);
- ▶ once all remaining warnings previously saved in ACER Maple have been explained, submit your data to ACER (see section 11.2 on page 183).



Errors listed in the validity reports produced by ACER Maple will prevent users from completing the corresponding tasks and the **Submit data** function will not be activated.

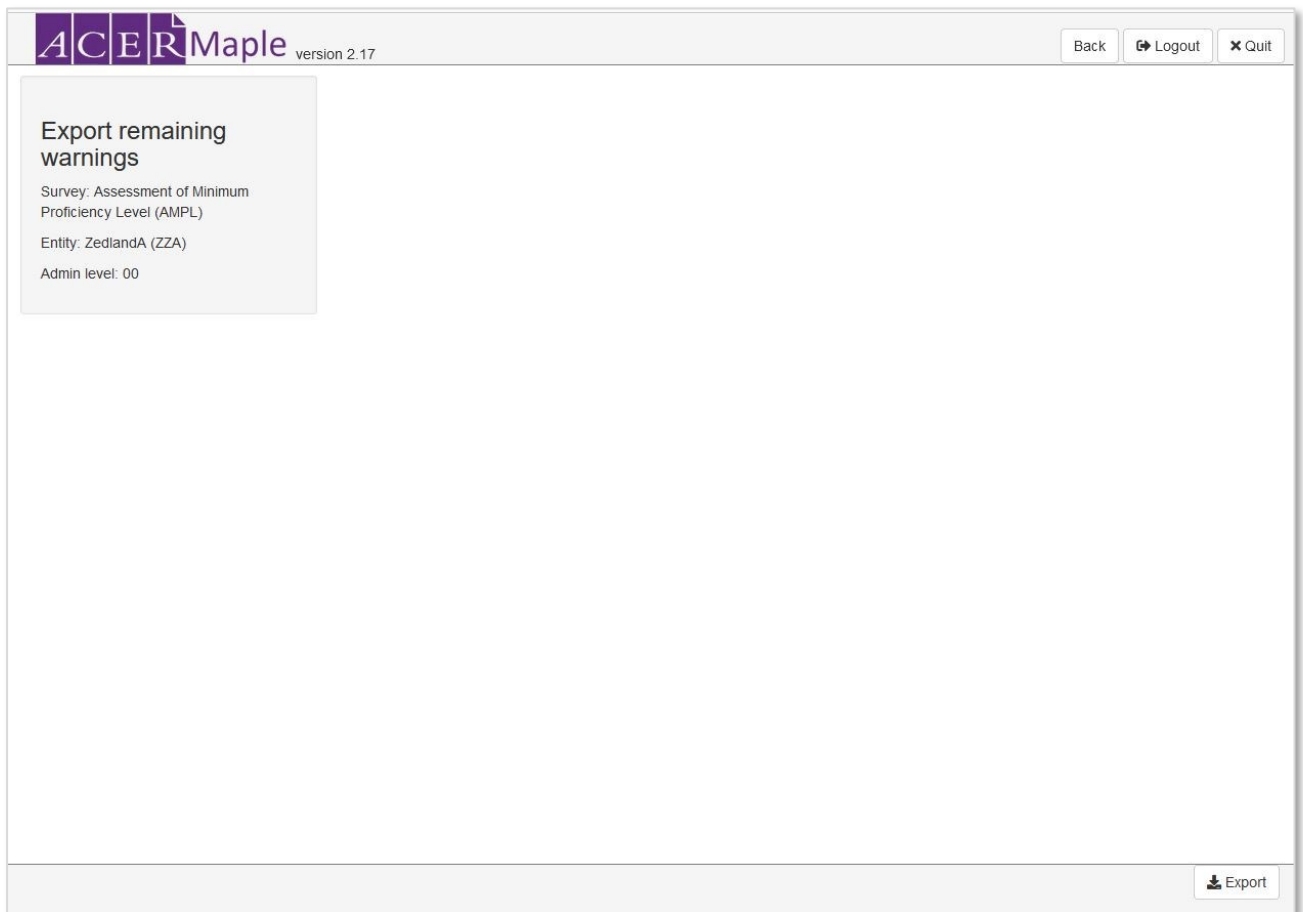
### 11.1.1 Exporting remaining warnings from ACER Maple



The data manager login must be used for the following function.

To export remaining warnings:

1. On the *Main screen* select **Export > Remaining warnings** and then click **Activate**. The *Export remaining warnings* screen will appear (Figure 106).



**Figure 106: Export remaining warnings screen**

2. Click **Export**. The zip file will be available for download.
3. Select 'Save File' and save the zip file in an appropriate location.
4. Unzip the file and follow instructions in sections 11.1.2-11.1.6 to explain warnings and import your explanations in ACER Maple.

### **11.1.2 Explaining warnings in the Participation & Attendance Warnings Form (PAWF)**

The warnings saved in this form come from the *Update Field Data Validity Report* that had been performed when the tracking data had been updated (see section 9.5).

This form can contain the following warning: *Candidate is marked as participating but is not attending all instruments (Sampling level:0)*.

- If the student indeed was present for the test but not for the Student Questionnaire or vice versa, provide the Test Administrator explanation in the *Explanation* column (see example in Table 66).
- Otherwise, this discrepancy must have been an error that must be corrected:
  - ▶ Please correct attendance on the STF and update it in ACER Maple again (section 9.4).
  - ▶ Re-run the *Respondent List Validity Report* again (section 10.4).
  - ▶ Export remaining warnings again.

### **11.1.3 Main & Replacement Warnings Form (MRWF)**

The warnings saved in this form come from the *Update Institution Participation Validity Report* that had been performed when the school participation had been updated (see section 9.7)

This form can contain the list of schools for which:

- Main and first replacement school both participating
- Main and second replacement school both participating
- First replacement and second replacement school both participating

Carefully check again that this indeed what happened and there are no errors in the SPF.

- If there are still errors:
  - ▶ correct SPF
  - ▶ update school participation again (section 9.6)
  - ▶ export remaining warnings again.
- If replacement schools were used for a reason, please provide it in the *Explanation* column (see example in Table 67).

### **11.1.4 Explaining warnings in the Respondent List Warnings Form (RLWF)**

The warnings saved in this form come from the *Respondent List Validity Report* that had been performed after all response data had been entered (see section 10.4).

This form can contain the following warning: *Candidate was allocated <Instrument ID 1> in tracking data, but data entered into <Instrument ID 2>*.

- If the test administrator indeed allocated to the student listed on this form a different test booklet from the one indicated on the STF, he/she must have a reason for that. Please provide this reason in the *Explanation* column (see example in Table 68).
- Otherwise, this discrepancy must have been an error that must be corrected. Please correct this error, re-run the *Respondent List Validity Report* and export remaining warnings again.

Table 66: Example warnings in the Participation &amp; Attendance Warnings Form

Survey ID	Entity ID	Admin ID	AMPL School No.	Row No.	Participation lower grade	Participation upper grade	Attendance test	Attendance questionnaire	Warnings	Explanations
033	098100	01	1003	5	9	7	1	0	<i>Candidate is marked as participating but is not attending all instruments (Sampling level:0).</i>	Student had been present at the first day of assessment but was absent at the second

Table 67: Example warnings in the Main &amp; Replacement Warnings Form

Survey ID	NC	AMPL School Number 1	Admin ID 1	Stratum ID 1	School ID within the stratum 1	AMPL School Number 2	Admin ID 2	Stratum ID 2	School ID within the stratum 2	Explanation
033	098100	1004	01	01	0002	1005	01	01	1002	Only 3 students were present for assessment in the main school and follow-up session was not possible to organise, so replacement school was used instead

Table 68: Example warnings in the Respondent List Warnings Form

Survey ID	Entity ID	Admin ID	AMPL School No.	AMPL Participant ID	Test(1)/STQ(2)/SCQ(3)	Test/Questionnaire Form	Instrument ID entered	Students(2)/Principals(3)	Warnings	Explanations
033	098100	01	1003	92100305	7	1	8	2	<i>Candidate was allocated 7 in tracking data, but data entered into 8</i>	Booklet 7 had missing pages and had to be replaced

*In the examples above the discrepancies are highlighted in red to attract your attention to them. This is not done in the Excel forms exported from ACER Maple.*

### 11.1.5 Importing explained warnings into ACER Maple

After all warnings have been explained you need to import the Excel files containing your explanations following the steps in this section.



The data manager login must be used for the following function.

To import explained warnings:

1. On the *Main screen* select **Final tasks > Explain warnings** and then click **Activate**. The *Explain warnings* screen will appear (Figure 107).

**Figure 107: Explain warnings screen**

2. In the *Available Templates* drop-down list, select the relevant template as required. The first available template will already be selected. In the *Selected Template Preview* a preview of the selected template will appear. If required, use the horizontal scrollbar beneath this preview to view all the columns in the template.
3. Click **Browse...** and browse to the location of the required file containing your explanations. Select the required file with explained warnings. The chosen Excel file will be uploaded into ACER Maple and its filename will appear in a tab beside the **Browse...** button.
4. Click **Import**. ACER Maple performs some checks on the data in the selected Excel file. The possible outcomes and required actions are described in Table 69.

Table 69: Scenarios when importing explanation for the remaining warnings

Outcome	Next steps
<p>Import successful, no discrepancies found.</p> <ul style="list-style-type: none"> <li>• ACER Maple produces a pop-up message indicating the number of records successfully uploaded,</li> </ul>	<ul style="list-style-type: none"> <li>• Click <b>Dismiss</b> on the pop-up message.</li> <li>• If there are other forms where remaining warnings should be explained, provide explanations and repeat the steps provided in this section for all remaining forms. <ul style="list-style-type: none"> <li>▶ If remaining warnings has been explained in all forms, follow data submission steps in sections 11.2.1-11.2.3.</li> </ul> </li> </ul>
<p>Import unsuccessful.</p> <ul style="list-style-type: none"> <li>• ACER Maple produces a pop-up message prompting to save <i>Explain Warning Validity Report</i>.</li> </ul>	<ul style="list-style-type: none"> <li>• Click <b>Dismiss</b> on the pop-up message and navigate to an appropriate location to save the report.</li> <li>• Refer to section 11.1.6 to check records that appear in the report. <ul style="list-style-type: none"> <li>▶ Make corrections in the Excel version of your template.</li> <li>▶ Attempt to import again.</li> <li>▶ If there are any warnings or errors left, you will be prompted to save another report.</li> </ul> </li> </ul>

### 11.1.6 Explain Warnings Validity Report

Table 70 on the following page gives detailed information about the types of inconsistencies that may be listed in the Explain Warnings Validity Report, and the steps to resolve them.

To resolve the inconsistencies, you may need to export remaining warnings again following steps in section 11.1.1 and compare freshly exported version to the versions filled with explanations. Make sure that changes are made only in the last column where explanations are provided. All other data should stay unchanged. After all corrections in the relevant Excel file have been made, attempt to update the warnings data again.

Table 70: Explain Warnings Validity Report: Errors worksheets – possible errors and their resolutions

Description	Error message in report	How to resolve	Action required in the remaining warnings Excel file
<b>Incorrect columns worksheet</b>			
Excel file corresponds to a different template. OR Excel file is missing one or more columns. OR Excel file has one or more extra columns. OR Excel file has one or more columns with incorrect names.	<i>Incorrect columns: Missing – &lt;Column Name&gt;, Extra – &lt;Column Name&gt;</i>	Check that you are selecting the correct Excel file to import and the correct template in ACER Maple.  OTHERWISE Make sure that no adaptations were made to the chosen Excel file.	Select the correct Excel file to import or select the correct template in ACER Maple. OR Add all missing columns. OR Delete all extra columns. OR Correct all column names.
<b>Key violations worksheet</b>			
There are one or more illegitimate AMPL School Numbers.	<i>[AMPL School No.] is illegitimate</i>	Compare freshly exported version to the versions filled with explanations.	Correct all AMPL School Numbers in the Excel file filled with explanations.
There are one or more empty cells for AMPL School Numbers.	<i>[AMPL School No.] is missing</i>	6. Compare freshly exported version to the versions filled with explanations.	Add missing AMPL School Numbers in the Excel file filled with explanations.
<b>Validation rules worksheet</b>			
One or more records contain one or more values that violate variable validation rules.	Description of validation rule violation(s)	Compare freshly exported version to the versions filled with explanations.	Correct all invalid values in the Excel file filled with explanations.
<b>No explanation worksheet</b>			
Not all warnings are explained.	<i>All warnings in the [template acronym] must be explained</i>	Check the Excel files filled with explanations	Explain the warnings in the specified rows

## 11.2 Data submission

### 11.2.1 Data Submission Schedule

The data must be submitted to ACER within eight weeks of the completion of the assessment.

### 11.2.2 Checking that ACER Maple Data is Ready for Submission

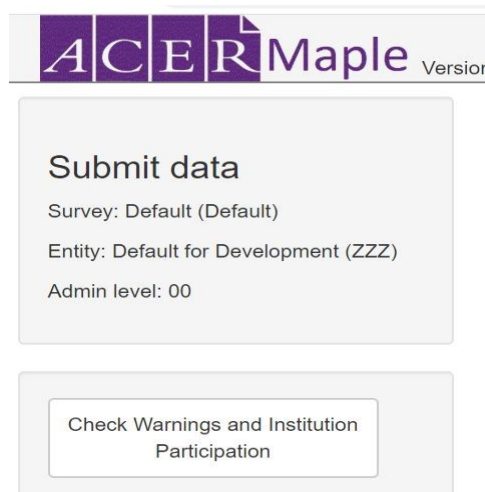
Once all required data has been successfully entered into ACER Maple and all errors has been corrected in ACER Maple, the **Submit data** function will be enabled. This function will combine all data files necessary for submission into a single zip file, which you will upload to your MS Teams NC directory, Data Management folder.



A data manager login must be used for the following function.

To check that ACER Maple data is ready for submission to ACER:

1. On the Main screen select **Final tasks > Submit data** and then click **Activate**. The *Submit data* screen will appear (Figure 108).



**Figure 108: Submit data screen**

2. Click **Check Warnings and Institution Participation**. ACER Maple then performs a number of checks. The possible outcomes and required actions are described in Table 71.

**Table 71: ACER Maple messages when checking warnings and institution participation**

Message	Action required
<i>Your warnings and participation files are incomplete. Once these are finalised you will be able to export your data for submission.</i>	<ol style="list-style-type: none"> <li>1. Update school participation in ACER Maple so that no errors are listed in <i>Update School Participation Validity Report</i> (section 9.6).</li> <li>2. Resolve all errors are listed in <i>Respondent List Validity Report</i> (section 10.4.1).</li> <li>3. Attempt to submit the data again.</li> </ol>
<i>Your warning and participation files have been completed, you can now export your data for submission.</i>	<ol style="list-style-type: none"> <li>1. Take a screenshot of ACER Maple and save the picture in an appropriate location, as explained in the note below. The saved picture will need to be inserted into the <b>Data submission Checklist</b> document (see section A1.2).</li> <li>2. After the screenshot has been saved, click <b>Export</b>. All required data files will be combined into a single zip file which will be available for download.</li> <li>3. Select 'Save File' and save the zip file in an appropriate location.</li> </ol>



To take a screenshot:

1. Press the 'Alt' and 'PrintScn' keys on your keyboard simultaneously.
2. Open the Paint app.
3. Press the 'Ctrl' and 'V' keys on your keyboard simultaneously (i.e. 'paste' function).
4. Save a copy of the file in an appropriate location.

3. After the screenshot and data has been saved follow the steps in section 11.2.3.

### 11.2.3 Delivery Method

To deliver your complete data submission package to ACER:

1. Complete the *Item Information for Cleaning* documents (see section A1.1) and the *Data Submission Checklist* (see section A1.2)<sup>19</sup>.
  - ▶ Summarise information from the Session Reports and provide responses to all questions in the *Item Information for Cleaning* document.
  - ▶ Paste the screenshot of the ACER Maple message (see section 11.2.2) into the *Data Submission Checklist*.
  - ▶ Provide responses to all questions in the *Data Submission Checklist*.
2. Add your 3-letter NC code to the file name of the zip file exported from ACER Maple in section 11.2.2.
3. Login to MS Teams and locate the Data Management folder within your NC directory.
4. Within the Data Management folder for your NC, upload the database submission package that includes the following:
  - ▶ **Submit\_Data\_<Date\_Time>\_[CNT].zip** file as exported from ACER Maple
  - ▶ Completed **Data Submission Checklist** document (MS Word document) (section A1.2)
  - ▶ Completed *Item Information for Cleaning* document (MS Word document) (section A1.1)

<sup>19</sup> The Word versions of these checklists can be found in the MS Teams>AMPL Partner Collaboration>COVID-19 MILO>MILO International resources>Data Management Resources



5. Send an e-mail to Maple Helpdesk <[maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org)> with the subject line “Data is ready for submission” and your 3-letter NC code in square brackets (i.e. [CNT]).



ACER Maple only exports data necessary for analysis and reporting. This does not include confidential information, such as names collected by your NC during the AMPL survey. Please keep the latest version of ACER Maple that was used to export data for submission, in case it is needed for future checks.

### 11.3 Data Cleaning Participation

Please designate a data manager who will work actively with ACER during the data processing. This person should be able to respond to any queries in a timely manner during a period of four to six weeks after database submission to ACER.

Please do not hesitate to contact Alla Routitsky at <[alla.routitsky@acer.org](mailto:alla.routitsky@acer.org)> (cc to Maple Helpdesk <[maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org)>) if you have any questions regarding data submission.

## APPENDIX 1 DATA SUBMISSION CHECKLISTS

A1.1 Item Information for Cleaning .....	186
A1.2 Data Submission Checklist .....	190

The *Item Information for Cleaning* and *Data Submission Checklist* word documents have been uploaded into the *MS Teams>AMPL Partner Collaboration>Data Management* folder. Please download the updated documents and use them in your data submission.

Please fill these documents and include them into data submission package to ACER (see section 11.2.3).

### A1.1 Item Information for Cleaning

#### ITEM INFORMATION FOR CLEANING



Please complete this form and return it with your data.

Country

---

NPM

---

e-mail

---

Data manager

---

e-mail

---



You may need to summarise relevant information from the Session Reports returned by Test Administrators to be able to answer the following questions.

**Q1 Were there any problems with the Test Forms?**

YES NO

<sub>1</sub> <sub>2</sub>

For example, poor printing; errors or omissions; missing pages; faulty cutting, folding or stapling

**If 'Yes', please describe the nature and extent of the problem.**

---



---



---



---



---



---

**Q2 Were there any problems with specific test items?**

YES NO

<sub>1</sub> <sub>2</sub>

For example, errors or omissions, problems with graphics.

**If 'Yes', please identify the booklet number, item number and student ID, and describe the problem.**

If an item has a problem for a large number of students, please describe this problem in Q1 providing the booklet number, the item number, and the number of students effected. **This question is about problems affecting only few students.**

Booklet	Item	Student ID	

**Q3 Were there any problems with the questionnaires?**

YES NO

<sub>1</sub> <sub>2</sub>

For example, poor printing; errors or omissions; missing pages; faulty cutting, folding or

**If 'Yes', please describe the nature and extent of the problem.**

---



---



---



---



---



---

**Q4 Were there any problems with specific student questionnaire items?**

YES NO

<sub>1</sub> <sub>2</sub>

For example, errors or omissions, problems with graphics.

**If 'Yes', please identify the item number and student ID, and describe the problem.**

If an item has a problem for a large number of students, please describe this problem in Q3 providing the item number, and the number of students effected **This question is about problems affecting only few students.**

Item	Student ID	

**Q5 Were there any problems with specific school questionnaire items?**

**YES NO**

<sub>1</sub> <sub>2</sub>

For example, errors or omissions, problems with graphics.

**If 'Yes', please identify the item number and principal ID, and describe the problem.**

Item	Principal ID	

**Q6 Please notify us about any other matter that may require additional data cleaning**

---



---



---



---



---



---



---

**THANK YOU!**

## A1.2 Data Submission Checklist

### DATA SUBMISSION CHECKLIST



Please note that this is a checklist only. Please refer to Chapter **Error! Reference source not found.** for more information

Please insert a screenshot from data submission screen in ACER Maple here:

**Q1 Have ALL of your required data been entered into ACER Maple?**

**YES NO**

**Required data:**

<sub>1</sub> <sub>2</sub>

- List of Classes
- List of Students
- Student Tracking Forms
- School Questionnaire Tracking Form
- AMPL Test Forms
- Student Questionnaire
- School Questionnaire

**If 'No', please enter ALL the data BEFORE you proceed with data submission**

**Q2 Have you entered student details in your ACER Maple List of Students for sampling?**

**YES NO**

<sub>1</sub> <sub>2</sub>

**If 'No', please upload a complete set of hard copies of LSTs to:**

*MS Teams>AMPL Partner Collaboration>{Your country folder}>Data Management*

- Q3 Have you summarised Item Information for Cleaning?** YES NO
- <sub>1</sub> <sub>2</sub>

If 'No', please summarise item information BEFORE you submit your data.

- Q4 Please check that you included all materials required for submission:** Included
- ACER Maple Database extracted for data submission
- Item Information for Cleaning

- Q5 Please notify us about any other matter that may require additional data cleaning**

---

---

---

---

---

---

---

THANK YOU!

## APPENDIX 2 TROUBLESHOOTING

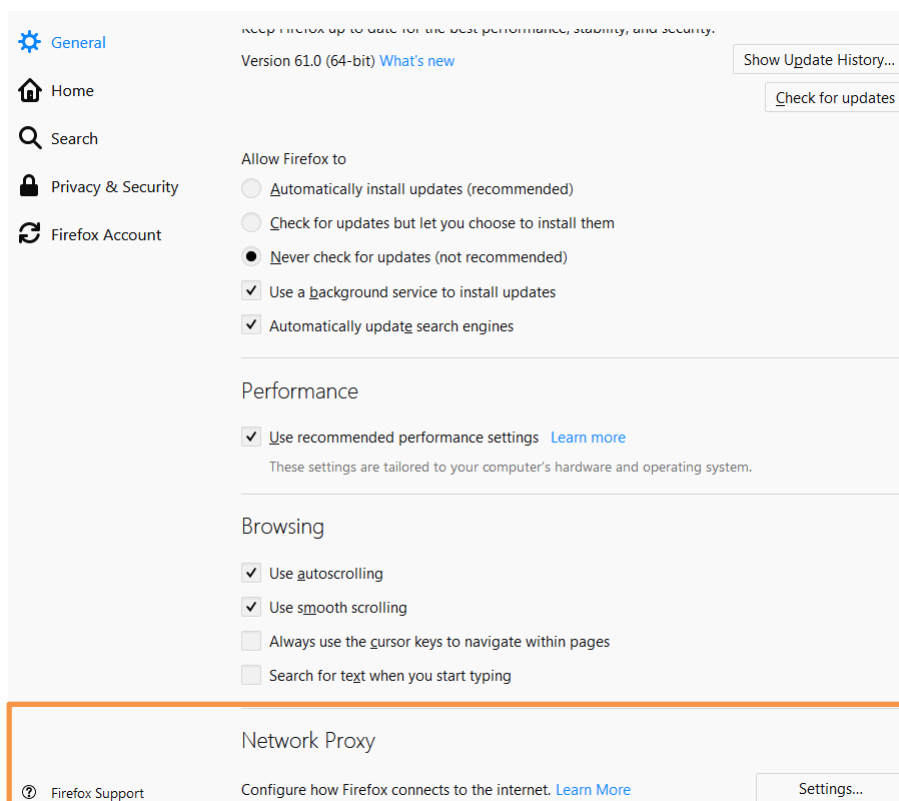
A2.1 Installation troubleshooting .....	192
Manual exception configuration in the LAN settings to bypass the proxy.....	192
“Not in a hypervisor partition” error.....	193
A2.2 Resetting forgotten password .....	195
A2.3 Restoring data in ACER Maple .....	198
A2.4 Extracting anonymised database for troubleshooting.....	198
A2.5 Re-sampling students.....	199

### A2.1 Installation troubleshooting

#### *Manual exception configuration in the LAN settings to bypass the proxy*

This section explains how to configure exception in the LAN settings of the **Mozilla Firefox** on each PC to bypass the proxy when connecting to the IP of the PC hosting ACER Maple.

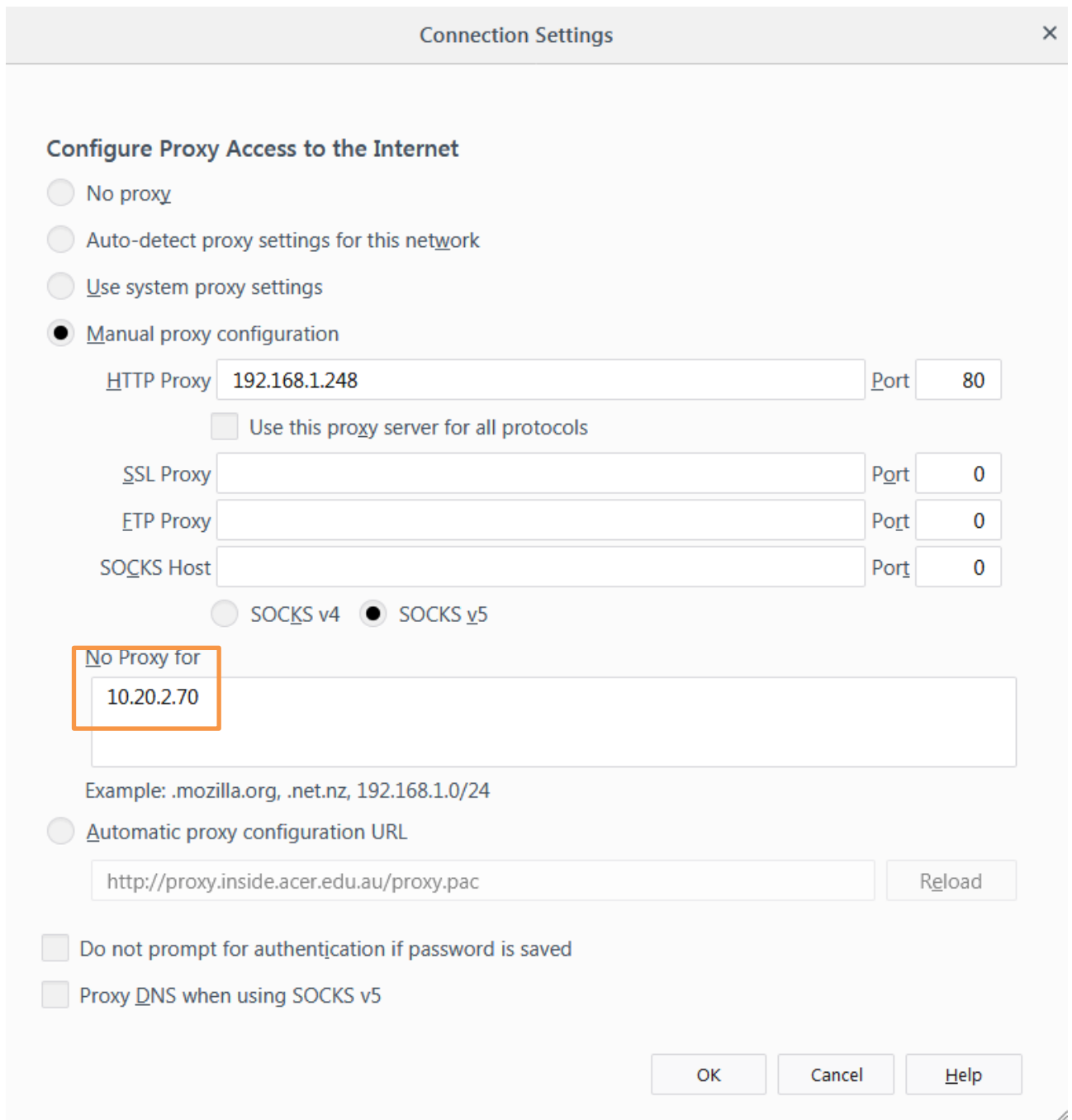
1. Go to **Options** and scroll down to the Network Settings or Network Proxy section (Figure 109).



**Figure 109: Mozilla Firefox Options – Network Proxy section**

2. Click **Settings**. The Connection Settings window will appear.
3. Select ‘Manual proxy configuration’ and in the **No proxy for** field enter the IP address of the host PC (Figure 110).





Connection Settings

**Configure Proxy Access to the Internet**

No proxy

Auto-detect proxy settings for this network

Use system proxy settings

Manual proxy configuration

HTTP Proxy  Port

Use this proxy server for all protocols

SSL Proxy  Port

FTP Proxy  Port

SOCKS Host  Port

SOCKS v4  SOCKS v5

No Proxy for

Example: .mozilla.org, .net.nz, 192.168.1.0/24

Automatic proxy configuration URL

Do not prompt for authentication if password is saved

Proxy DNS when using SOCKS v5

**Figure 110: Mozilla Firefox Connection Settings**

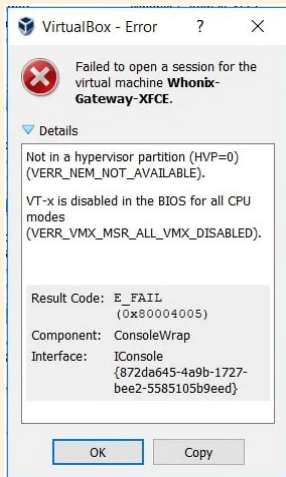
- Click **OK** and then close the Options tab.

### *“Not in a hypervisor partition” error*



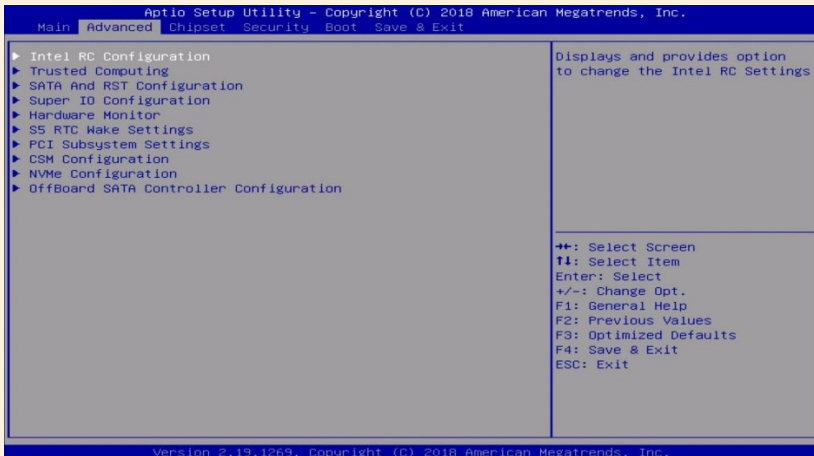
If you see a pop-up error message saying **“Not in a hypervisor partition”** instead of the purple UBUNTU window, please follow below steps to solve the issue.

#### **The error message**

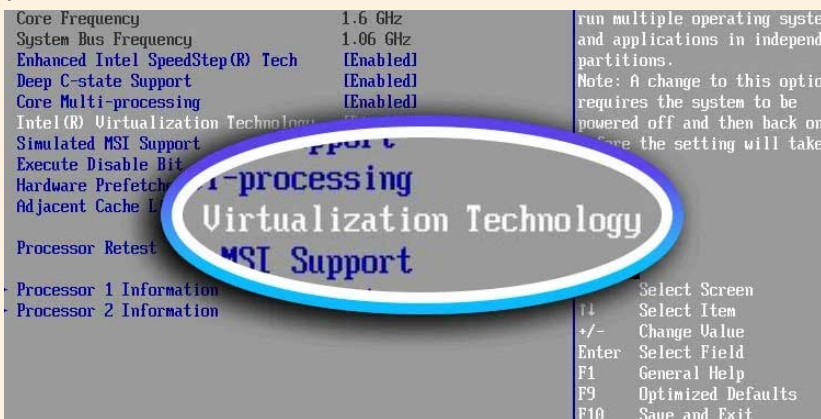


**The solution**

Step 1. Restart your laptop or desktop computer. Then, press the **BIOS key** when the boot screen appears to enter BIOS mode. *(The BIOS key is usually the “ESC” key on the keyboard, but different computer models may have different BIOS keys)*



Step 2. Use the arrow keys to navigate the Configuration tab in the BIOS interface, where you can find the virtualization.



Step 3. Once you've located the virtualization item (IVT, AMD-V, or something related to virtualization), press Enter to confirm that it is enabled.



Step 4. Click F10 to save your changes and exit BIOS.



After enabling Virtualization in BIOS, restart your computer to restart the virtual machine in VirtualBox. You will open this VM smoothly this time.

## A2.2 Resetting forgotten password



Only data managers can reset forgotten passwords. Data administrators must ask their data manager to reset their forgotten password for them.

To reset a forgotten password:

1. Open ACER Maple:

- If using single user deployment, in **ACER\_MAPLE\_V<#>** folder double-click **acer\_maple\_start.bat**.
- If using multiple user deployment, paste the IP address of the host PC into the address bar of a browser.

The Login screen will appear (Figure 111).

**Figure 111: ACER Maple Login screen**

2. **If you are a data manager**, on the left-hand side of the *Login* screen under ‘Help’, click **Forgot password**. The *Reset Password* screen will appear (Figure 112).

**Figure 112: Reset Password screen**

3. Enter your domain: Survey ID (033), Entity ID (6 digits) and Admin ID (00).
4. Enter your username.
5. Click **Get passkey**. A passkey will appear in the **Passkey** field.
6. E-mail the passkey, domain and username to Maple Helpdesk [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org).
7. You will receive an e-mail from ACER containing the data required for the fields **ACER public key**, **Reset code** and **TempMsg**. Due to the time difference between your country and Australia, it may take up to 24 hours to receive this e-mail.

8. After you receive e-mail from ACER, enter the ACER public key, reset code and TempMsg into the relevant fields.
9. Click Reset password.
10. Your password will be reset, and a temporary password will appear in a pop-up message.
11. Copy the temporary password.
12. Click **Back**.
13. On the left-hand side of the *Login* screen under 'Help', click **First time login**.

## A2.3 Restoring data in ACER Maple

ACER Maple can back up the entire database every time a user clicks **Quit** if this user clicks **YES** on the prompt asking whether the user wants to back up the data (see section 2.7.4). The data backed up earlier will be overwritten. Therefore, the back-ups have to be regularly exported and archived as explained in section **Error! Reference source not found.**.

To restore a back-up kept in the archive into ACER Maple:

14. Copy the zip file you want to restore into the *C:\MapleFiles* folder.
15. Re-name it into *Maple\_Update.zip* (Figure 113).

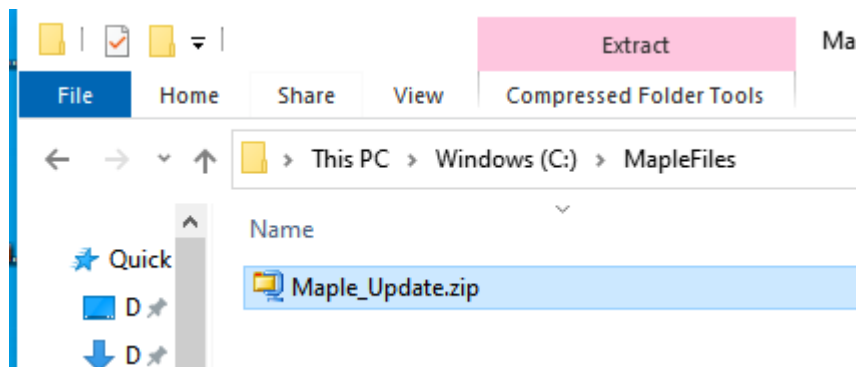


Figure 113: *Maple\_Update.zip* file in the *C:\MapleFiles* folder

16. Within 5 minutes the ACER Maple VM will be updated with the database files with the files from the zip file. If update was successful, the zip file will be renamed automatically to *Maple\_Update\_<Date>-<Time>.zip* (Figure 114).

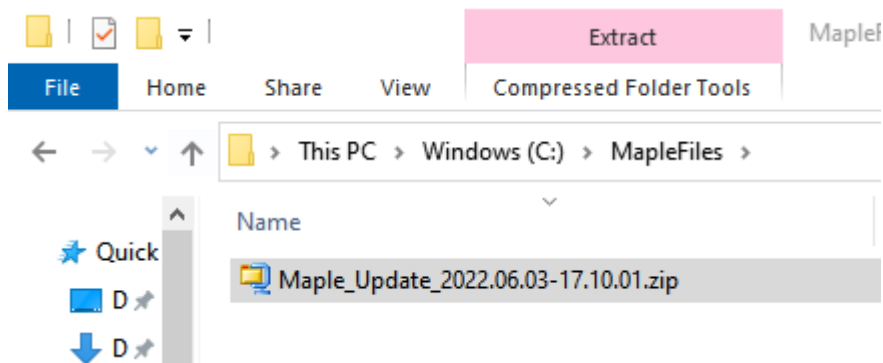
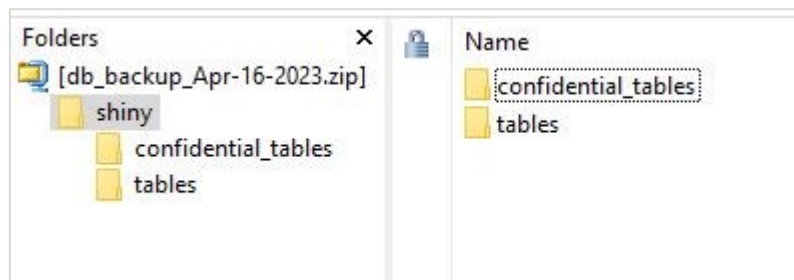


Figure 114: ACER Maple VM updated with the database files from the back-up made earlier

## A2.4 Extracting anonymised database for troubleshooting

To extract the anonymised database for troubleshooting:

1. Create a back-up as explained in section 2.7.4.
2. Export back-up as explained in section 2.7.7,
3. Double click on the zip file within the back-up folder
4. Open the *shiny* folder. **Do not unzip the file.**
5. The actual backup consists of two folders: *confidential\_tables* and *tables* (Figure 114).



**Figure 115: Subfolders in the shiny folder in the backup file**

6. Delete the *confidential\_tables* subfolder.
7. Close the *shiny* folder.
8. Upload your anonymised back-up file *db\_backup\_<date>.zip* onto *MS Teams>AMPL Partner Collaboration >Country Folder>Data management (Maple)*.
9. Send e-mail to ACER Helpdesk at [maplehelpdesk@acer.org](mailto:maplehelpdesk@acer.org):
  - ▶ Include your 3-letter NC code and a short description of your issue in the subject line of the email, e.g. *CNT\_problems importing LST*.
  - ▶ Include as much detail in your email as possible.
  - ▶ Indicate in the e-mail that you uploaded data for troubleshooting into your country folder.
  - ▶ Please take into account the time difference, helpdesk works standard business hours within the AEST/AEDT (Australian Eastern Standard/Daylight Savings Time)

## A2.5 Re-sampling students.

You may need to re-sample classes or students from a school if the initial list was incorrect and you are sure there is enough time to produce new tracking forms and send these updated forms to the school before the test day. In this case, make sure that all old tracking form versions are deleted by the School Coordinator and the Test Administrator before you start the process.



**Do not re-sample classes** in a school from which List of Students has already been sent to the NC **unless**:

- the LCL was completely wrong; and
- you will have enough time to send the updated LST to the School Coordinator; and
- you have agreed with ACER that you are permitted to do this (contact Clare Ozolins at [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org)).

**Do not re-sample classes unless this has been agreed with ACER.**



**Do not re-sample students** in a school to which STF has already been sent **unless**:

- the LST was completely wrong; and
- you will have enough time to send the updated STF to the School Coordinator and test Administrator; and
- you have agreed with ACER that you are permitted to do this (contact Clare Ozolins at [Clare.Ozolins@acer.org](mailto:Clare.Ozolins@acer.org)).

**Do not re-sample classes unless this has been agreed with ACER.**



If you reached the agreement with ACER for re-sampling, a data administrator login must be used for the following function.

To re-sample classes or students and allocate instruments to students:

1. On the Main screen select **Sample and allocate instruments > Sample and allocate** and then click **Activate**. The *Sample and allocate instruments* screen will appear (Figure 116).
2. In the **Select Population Type** box select: **1: classes** OR **2: students** depending on whether you are sampling classes or students.
3. In the **Select Combined Option** box select the available option. The option will be:
  - 2** - if you are sampling **classes**; OR
  - XXX** - if you are sampling **students**; XXX is assigned on your LSS in the *Student combined option* column and is usually, but not always is a standard ISO 3-letter code for your country (see Table 2 or your LSS).

**You have to select the option even if there is only one.**
4. In the **Select School Type** list select '*Already sampled*'.
5. Click **List Available Institutions to Sample**. In the **Available for Sampling** box the AMPL School Number of all schools which are available for sampling for the selected population type and combined option will be listed.

**Figure 116: Sample and allocate instruments screen with a school selected for re-sampling**

6. In the **Available for Sampling** box select the AMPL School No. of the school in which classes or students need to be re-sampled. (Figure 117).



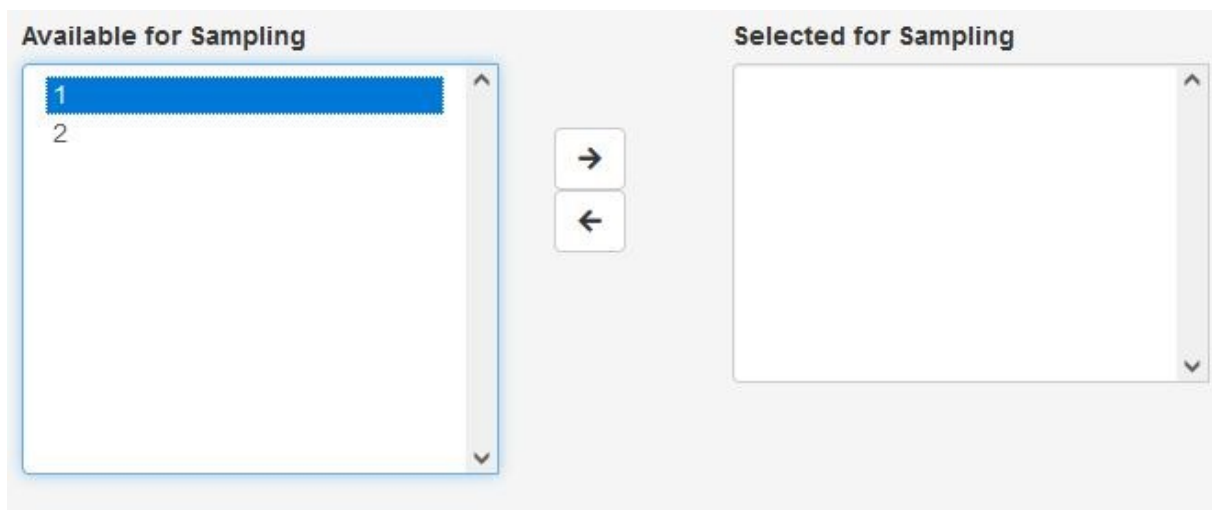


Figure 117: Selecting a school for re-sampling

7. Click  to move this school into the **Selected for Sampling** box (Figure 118). Once the school have been added to the **Selected for Sampling** box the **Sample** button will appear.

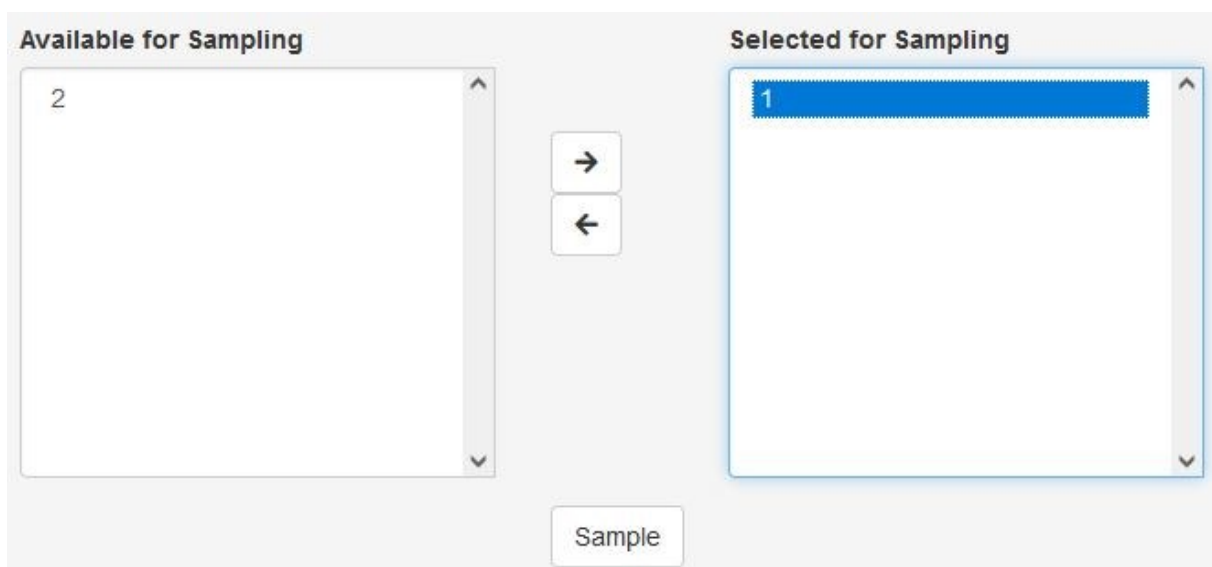


Figure 118: Multiple schools moved to the Selected for Sampling box

8. Click **Sample**. ACER Maple will sample and allocate instruments to the selected population for the selected combined option in the selected schools.

During the sampling and instrument allocation process ACER Maple performs some checks. The possible outcomes and required actions are described in Table 32 on page 104.

## APPENDIX 3 BLIND SAMPLING



This procedure can only be used if a school has agreed to participate, but the List of Students will not be received from the School Coordinator in time for student sampling. Blind sampling is more expensive and less reliable than sampling from a List of Students with complete - and carefully checked - data.

**Blind sampling does not excuse the School Coordinator from preparing a List of Students.**

If blind sampling is being used:

1. The number of students in the grade eligible for assessment must be obtained from the School Coordinator.
2. The LST data must be prepared by the data administrator as shown in Table 72, and imported into ACER Maple (see section 5.4). Then students must be sampled (see chapter 6), and the STF template populated with students ID.
3. At the same time, the LST data must be completed by the School Coordinator at least two days before the assessment takes place, as explained in the School Coordinator Manual.
4. The Test Administrator must visit the school a day before the assessment and manually transfer the records into the STF according to Line No. value in the STF.

For example, if line number 00003 appears in the STF, then the details of the third student from the LST completed by the School Coordinator must be transferred into STF.

This must be done for every listed line number in the STF.

5. The LST completed by the School Coordinator must be collected by the Test Administrator and sent to the NC after the assessment, along with all other materials.

**Table 72: Example LST data in Excel format ready to be imported into ACER Maple for blind sampling**

1			AMPL		(F=1; M=2)	MM	YYYY	Special Educational Needs
2	Class name	Student name	School No.	Line No.	Gender	Month of Birth	Year of Birth	SEN
3			1001	00001	9	99	9999	0
4			1001	00002	9	99	9999	0
5			1001	00003	9	99	9999	0
6			1001	00004	9	99	9999	0
7			1001	00005	9	99	9999	0
8			1001	00006	9	99	9999	0
10			1001	00007	9	99	9999	0
11			1001	00008	9	99	9999	0
12			1001	00009	9	99	9999	0
13			1001	00010	9	99	9999	0
14			1001	00011	9	99	9999	0

## APPENDIX 4 INDEX OF TABLES

Table 1: Entity IDs for countries participating in the AMPL.....	12
Table 2: LSS codes with respect to national options .....	24
Table 3: LSS example for ZZA grade 6 .....	25
Table 4: QSA Question type ID for questionnaire items .....	26
Table 5: Auxiliary values added to the questionnaire items in the QSA .....	26
Table 6: QSA Example (ZZA, grade 6).....	27
Table 7: ACER Maple functionality in relation to different users.....	51
Table 8: Overview of field operation forms and ACER Maple functions .....	57
Table 9: Codebook columns in the worksheet containing variables .....	60
Table 10: LST template codebook – variables worksheet .....	61
Table 11: LST template codebook – value labels worksheet .....	61
Table 12: Data manager tasks in relation to data administrator training .....	65
Table 13: Example of LCL School information to be used training (as if ‘returned from school’) .....	66
Table 14: Example of LCL data in Excel format to be used training (as if ‘returned from school’).....	67
Table 15: Example of LST School information to be used training (as if ‘returned from school’) .....	69
Table 16: Example of LST data in Excel format to be used in training (as if ‘returned from school’) .....	71
Table 17: Example of STF data in Excel format ready to be updated in ACER Maple during training .....	73
Table 18: Grade levels assessed by AMPL countries .....	78
Table 19: Possible queries regarding LCL checks, and actions required .....	79
Table 20: Example LCL data in Excel format ready to be imported into ACER Maple (lower and upper grades) .	82
Table 21: Example LCL data in Excel format ready to be imported into ACER Maple (lower grade only) .....	82
Table 22: Example LCL data in Excel format ready to be imported into ACER Maple (upper grade only).....	82
Table 23: Possible queries regarding LST checks and actions required.....	85
Table 24: Example LST data in Excel format ready to be imported into ACER Maple (two grade levels).....	88
Table 25: Possible outcomes when importing List of Classes data .....	91
Table 26: Possible outcomes when importing List of Student data .....	92
Table 27: Import Field Data Validity Report for class lists: Errors worksheets – Possible warnings and their resolutions.....	94
Table 28: Import Field Data Validity Report for class lists: Warning worksheets – Possible warnings and their resolutions.....	95
Table 29: Import Field Data Validity Report for List of Students: Error worksheets – Possible errors and their resolutions (all sampling options).....	97
Table 30: Import Field Data Validity Report for student lists: Warning worksheets – Possible warnings and their resolutions.....	98
Table 31: Scenarios when re-importing List of Student data for a school.....	101
Table 32: Scenarios when using the <i>Sample and allocate</i> function .....	104
Table 33: Example SCF (two grade levels assessed). .....	109
Table 34: Example STF ready to be sent to Test Administrator and School coordinator for administration of grade 6 assessment.....	110
Table 35: Messages when generating tracking forms populated with data.....	112
Table 36: Example of SALF data in Excel format to be used for labelling Student Test Forms and Questionnaires .....	115
Table 37: Example of SQTF data in Excel format to be used for labelling School Questionnaires .....	115
Table 38: STF Attendance codes for empty instruments and for instruments with at least one response.....	120
Table 39: School Questionnaire participation codes to be entered into SQTF.....	123
Table 40: Scenarios when updating field data .....	126
Table 41: Update Field Data Validity Report for student tracking forms: Error worksheets – possible errors and their resolutions.....	128

Table 42: Update Field Data Validity Report for student tracking forms: Warning worksheets – possible warnings and their resolutions.....	130
Table 43: Update Field Data Validity Report for School Questionnaire Tracking Form: Error worksheets – possible errors and their resolutions.....	132
Table 44: School Participation Codes for the AMPL.....	134
Table 45: Scenarios when updating school participation data .....	137
Table 46: Update Institution Participation Validity Report: Error worksheets – possible errors and their resolutions.....	139
Table 47: Update Institution Participation Validity Report: Warning worksheets – possible warnings and their resolutions.....	141
Table 48: Instruments used in various designs .....	143
Table 49: Grades assessed, and test designs selected by participating NCs .....	143
Table 50: Expected records and responses in survey instruments .....	144
Table 51: Example of the data entry plan for AMPLa and AMPLab with three data entry operators per domain .....	145
Table 52: Possible outcomes when adding a new DEO credentials and data entry allocation .....	149
Table 53: Possible outcomes when editing a DEO login .....	152
Table 54: Data manager tasks in relation to data entry operator training.....	155
Table 55: Data to be entered from the test cover page .....	156
Table 56: Data to be entered from the Student Questionnaire cover page.....	157
Table 57: Data to be entered from the School Questionnaire cover page.....	157
Table 58: Data to be entered from the cover pages of various instruments .....	158
Table 59: ACER Maple variable types used for the AMPL.....	164
Table 60: Possible outcomes when adding a new response data record in ACER Maple .....	167
Table 61: Possible outcomes when editing a response data record in ACER Maple .....	170
Table 62: Possible outcomes when validating respondent list data .....	173
Table 63: Respondent List Validity Report: Error worksheets – Possible errors and their resolutions .....	175
Table 64: Respondent List Validity Report for student lists: Warning worksheets – Possible warnings and their resolutions.....	175
Table 65: Validity reports that may produce warnings that require explanations .....	176
Table 66: Example warnings in the Participation & Attendance Warnings Form.....	179
Table 67: Example warnings in the Main & Replacement Warnings Form .....	179
Table 68: Example warnings in the Respondent List Warnings Form .....	179
Table 69: Scenarios when importing explanation for the remaining warnings .....	181
Table 70: Explain Warnings Validity Report: Errors worksheets – possible errors and their resolutions.....	182
Table 71: ACER Maple messages when checking warnings and institution participation .....	184
Table 72: Example LST data in Excel format ready to be imported into ACER Maple for blind sampling .....	202

## APPENDIX 5 INDEX OF FIGURES

Figure 1: Data management tasks for the AMPL.....	9
Figure 2: VirtualBox website landing page.....	18
Figure 3: VirtualBox website Downloads page.....	18
Figure 4: VirtualBox setup wizard screen 1.....	19
Figure 5: VirtualBox setup wizard screens 2 and 3.....	19
Figure 6: Networking feature warning.....	20
Figure 7: VirtualBox setup wizard screen 5.....	20
Figure 8: VirtualBox setup complete.....	21
Figure 9: VirtualBox desktop icon.....	31
Figure 10: The Oracle VM VirtualBox Manager screen.....	31
Figure 11: Select appliance to import screen.....	31
Figure 12: Appliance settings screen.....	32
Figure 13: ACERMapleVBox VM import error.....	32
Figure 14: ACERMapleVBox VM loaded in VirtualBox.....	33
Figure 15: Network adapter settings error message.....	33
Figure 16: ACERMapleVBox VM network settings screen.....	34
Figure 17: Oracle VM VirtualBox and Ubuntu loading screens.....	34
Figure 18: ACERMapleVBox VM login screen.....	35
Figure 19: VM security certificate warning.....	36
Figure 20: VM security certificate warning advanced.....	36
Figure 21: ACER Maple Login screen.....	37
Figure 22: VirtualBox desktop icon.....	37
Figure 23: ACERMapleVBox VM loaded in VirtualBox.....	38
Figure 24: ACERMapleVBox VM login window.....	38
Figure 25: Obtaining IP address.....	39
Figure 26: The ACER Maple <i>Login</i> screen.....	40
Figure 27 Quit confirmation prompt.....	41
Figure 28 Database backup prompt.....	41
Figure 29 Quit confirmation prompt.....	41
Figure 30 Database backup prompt.....	41
Figure 31: Close Virtual Machine window.....	42
Figure 32: User-created “backup” folder in C:\MapleFiles directory.....	43
Figure 33: System-created “backup_<date>_<time>” folder in C:\MapleFiles directory.....	43
Figure 34: Password-protected zip file containing database backup.....	43
Figure 35: NoTodaysBackupFound.zip file.....	44
Figure 36: Contents of db_backup zip file.....	44
Figure 37: <i>First time login</i> function on the ACER Maple <i>Login</i> screen.....	46
Figure 38: <i>Password Creation</i> screen.....	46
Figure 39: ACER Maple Main screen.....	47
Figure 40: <i>Change your password</i> screen.....	47
Figure 41: <i>Manage data administrators</i> screen.....	48
Figure 42: Number of new users selected.....	48
Figure 43: New administrators’ table.....	49
Figure 44: Newly created data administrator logins in the <i>Existing administrators</i> table.....	49
Figure 45: Deleting data administrator logins in the <i>Manage data administrators’</i> screen.....	50
Figure 46: ACER Maple Main screen.....	51
Figure 47: ACER Maple Back, Logout and Quit buttons.....	52
Figure 48: Back confirmation message.....	52

Figure 49: Session timeout message .....	53
Figure 50: <i>Export Initial Data</i> screen .....	55
Figure 51: Initial data download pop-up.....	55
Figure 52: <i>Export template documentation</i> screen .....	58
Figure 53: Template documentation zip file .....	58
Figure 54: <i>Export institution list</i> screen .....	63
Figure 55: Data administrators' tasks for the AMPL.....	64
Figure 56: Sampling logistics .....	76
Figure 57: Sorting LCL.....	80
Figure 58: Populating LCL 'Line No.' column.....	80
Figure 59: Sorting LST.....	86
Figure 60: Populating LST 'Line No.' column.....	86
Figure 61: <i>Import field data</i> screen .....	89
Figure 62: Uploaded File Preview for a List of Classes (LST) .....	90
Figure 63: <i>Import field data</i> screen .....	100
Figure 64: <i>Sample and allocate instruments</i> screen.....	102
Figure 65: Schools available for sampling listed in the Available for Sampling box .....	103
Figure 66: Selecting multiple schools in the Available for Sampling box .....	103
Figure 67: Multiple schools moved to the Selected for Sampling box.....	104
Figure 68: <i>Export field data</i> screen.....	105
Figure 69: Schools available to populate tracking forms with data are listed in the Available for Export box-..	106
Figure 70: Selecting multiple schools in the Available for Export box .....	106
Figure 71: Multiple schools moved to the Selected for Export box .....	107
Figure 72: Pop-up to select the Excel file template.....	107
Figure 73: Downloaded zip file containing populated tracking forms .....	108
Figure 74: <i>Export list of candidates</i> screen .....	114
Figure 75: The Export button at the bottom of the screen .....	114
Figure 76: Save list of candidates .....	114
Figure 77: Mail Merge <i>Label Options</i> dialog box.....	116
Figure 78: Mail Merge document with fields inserted .....	117
Figure 79: Labels ready to be printed .....	118
Figure 80: <i>Update field operation forms</i> screen.....	124
Figure 81: Uploaded File Preview for a student tracking form .....	125
Figure 82: <i>Update institution participation form</i> screen .....	135
Figure 83: Updated SPF Excel file uploaded into ACER Maple .....	135
Figure 84: Uploaded File Preview for a school participation form.....	136
Figure 85: <i>Manage data entry operators</i> screen.....	146
Figure 86: Add new data entry operator details .....	147
Figure 87: New DEO login details .....	147
Figure 88: Allocate instruments to DEO.....	148
Figure 89: Search data entry operators .....	150
Figure 90: DEO search results.....	150
Figure 91: Edit DEO details.....	151
Figure 92: <i>Export data entry documentation</i> screen.....	154
Figure 93: Question 5 from the AMPL Student Questionnaire .....	159
Figure 94: Question 2 from the AMPL Student Questionnaire .....	160
Figure 95: Question 14 from the AMPL School Questionnaire .....	161
Figure 96: Example MC test items .....	161
Figure 97: Example CMC item .....	162
Figure 98: ACER Maple data entry screen for a test form .....	163
Figure 99: Key in responses screen.....	165

Figure 100: A data entry screen for a new record.....	166
Figure 101: Search keyed in data records .....	168
Figure 102: Keyed in data record search results .....	169
Figure 103: Reset response data warning.....	171
Figure 104: Delete response data record warning .....	171
Figure 105: <i>Validate respondent list</i> screen.....	172
Figure 106: <i>Export remaining warnings</i> screen.....	177
Figure 107: <i>Explain warnings</i> screen .....	180
Figure 108: <i>Submit data</i> screen.....	183
Figure 109: Mozilla Firefox Options – Network Proxy section.....	192
Figure 110: Mozilla Firefox Connection Settings.....	193
Figure 111: ACER Maple <i>Login</i> screen .....	196
Figure 112: <i>Reset Password</i> screen .....	196
Figure 113: <i>Maple_Update.zip</i> file in the <i>C:\MapleFiles</i> folder .....	198
Figure 114: ACER Maple VM updated with the database files from the back-up made earlier.....	198
Figure 115: Subfolders in the shiny folder in the backup file .....	199
Figure 116: Sample and allocate instruments screen with a school selected for re-sampling .....	200
Figure 117: Selecting a school for re-sampling .....	201
Figure 118: Multiple schools moved to the Selected for Sampling box .....	201