

# Adapting AMPL instruments

Assessment of Minimum Proficiency Levels (AMPL)  
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## Background

As part of SDG 4, Indicator 4.1.1 aims to measure the “proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex.” To meet this goal, UIS has coordinated efforts to establish common reading and mathematics scales for all three points of Indicator 4.1.1, building on existing cross-national and national assessments. As a result of these efforts, two important points of consensus have been reached: the definition of the Minimum Proficiency Level (MPL) and the Global Proficiency Framework (GPF).

Instruments to assess MPLs of students at the end of lower and upper primary, using an assessment that aligns with MPL-b, will:

- enable the collection of more informative data about where students are performing in terms of the GPF in reading and mathematics,
- produce baseline measures to set targets and compare learning gains/losses
- facilitate reporting on SDG 4.1.1
- aid the tracking of learning progress over time
- complement tools that had been already developed in 2021 in the Monitoring the Impacts on Learning Outcomes (MILO) study.

Four sets of instruments have been developed for the assessment of minimum proficiency levels (AMPL):

- AMPLa: measures student achievement equivalent to end of lower primary school, consisting of two test booklets.
- AMPLb: measures student achievement equivalent to end of upper primary school, consisting of two test booklets.
- AMPLab: measures student achievement at both – equivalent to end of lower and upper primary school. It is to be undertaken by students at the end of primary school, consisting of four booklets. This instrument has been designed for education systems where it is expected many students are not meeting the end of early primary MPL by grade 3.
- Contextual questionnaires: a school questionnaire, to be completed by a school leader; and a student questionnaire, to be undertaken by the students undertaking the assessment.

# Introduction

In undertaking AMPL across various education systems, the instruments may benefit from adaptations. Adaptations are modifications to the instruments intended to enable the instruments to perform as designed, and to collect data about learning that is comparable across diverse education systems. The fundamental principle underlying all adaptations is that any modifications must preserve the intention of the item. This document describes different types of adaptations, clarifies to what extent the different kinds of adaptations are permissible, and explains why.

## Types of adaptations

The following three types of adaptations to the assessment materials<sup>1</sup> will be described, and their permissibility explained: linguistic, structural and cultural. An overview of their permissibility is presented in Table 1.

**Table 1: Permissibility of different types of adaptations**

Type of adaption	Permissible	Minor adaptations permissible	Not permissible
Linguist			
Structural			
Cultural			

## Linguistic adaptation (translation)

Linguistic adaptations (also referred to as 'translation') to the AMPL instruments should be undertaken when participants are not fluent in English. This is to ensure the generalisability of the instruments; that is, the instruments are able to measure the same phenomena (i.e. MPLs) in different language contexts. This methodological principal is also known as 'external validity'

Linguistic adaptation will involve translating the English source version of the instruments into other languages. The assessment instruments must be translated via a 'double translation and reconciliation' process. This involves two translators independently translating the source material, and then a third translator independently reconciling the two translations, creating a new version.

## Structural adaptations

Structural adaptations involve modifying the structure or format of the instrument as a whole, or individual items. For example, changing the order of items, changing the

<sup>1</sup> This document refers only to assessment materials. Questionnaire materials associated with AMPL are not discussed.

format of response options from multiple choice to open-response, or adding a response option to an item..

Structural adaptations of the AMPL assessment instruments are NOT permitted. This is because such adaptations undermine the consistency of the instruments, also referred to as form of 'internal validity'. Making structural adaptations to the instruments could result in the variance in student learning reflecting differences in the instruments, rather than the capabilities of the students. To maintain the validity of the instruments, structural inconsistencies must be avoided.

## Cultural adaptations

Cultural adaptations refer to modifying instruments with the intention to make them more culturally appropriate and relevant to the target population. This may involve accommodating cultural norms.

Some cultural adaptations involve significant changes, such as replacing the content of items. For example, an item may refer to boys and girls in various roles, and in some cultures such roles might not be common, thus a cultural adaptation might make changes to the genders of characters.

Conversely some cultural adaptations are minor, such as changing proper nouns. For example, changing the names of characters to names that the children are familiar with, to prevent confusion. It may also be permissible to substitute the names of kinds of things or products. For example, in certain circumstances, a kind of animal, such as a hyena could be substituted for a jackal, to adapt to children's familiarity.

Only minor cultural adaptations to the AMPL instruments are permissible. The underlying principal determining whether a cultural adaptation is minor is:

*a cultural adaptation can only be made if is necessary to enable students to understand the material, to a similar extent to that of English speakers engaging in the source material.*

This means that adaptations made on the basis of accommodating cultural sensitivities are not permitted to the AMPL. Modifications should not be made to AMPL even if the instruments present material that children may have no personal experience with and cannot relate to (and even if content might be considered taboo), so long as children can *understand* the content.

Note that any reference in the items to historical characters must be preserved. For example, if an item describes the role of Isaac Newton in the development of the laws of motion, then "Isaac Newton" cannot be adapted.

Only permitting minor cultural adaptations is for methodical reasons. All of the items in AMPL have been validated. Specifically, the instruments accurately measure MPLs. Changing the instruments risks undermining this validity. Significant changes would

need to be re-validated, meaning that the application of the AMPL in such contexts would need to be considered a pilot..

This methodological reason is connected to a practical limitation. The items forming the AMPL assessment instruments are derived from the global item bank. Hence, any modifications may require permission from the copyright holder of those items.

Currently, there are insufficient items that have been validated to AMPL scales to allow adaptations. The approach to developing the AMPL instruments was to draw on national studies. This highlights the importance of adding more items to the Global Item Bank. This would then enable a broad range of items that can be selected from, enabling the substitution of items, such as replacing item deemed culturally inappropriate.

## Process of making adaptations

All adaptations must be undertaken through the Translation Adaptation Verification Monitoring (TAVM) spreadsheet. The TAVM is a spreadsheet used to ensure that all suggested changes to instruments are clearly presented and described by translators and national teams, and then considered by technical experts (i.e. test and questionnaire developers), so that the proposed changes can be verified and documented. Only once the TAVM process is complete, can changes be made to instruments.

## Summary

Linguistic adaptations are essential to enable the broad application of AMPL across education systems. Structural adaptations are not permissible and this ensures that AMPL is applied consistently across contexts. Minor cultural adaptations are permissible to enable AMPL to be applicable across cultural contexts, without undermining the validity of the instruments.

Major changes to the assessments, such as substituting items, are not permitted. There is currently a limited range of validated items available to allow this. As the Global Item Bank and AMPL are developed further, there will be a broad range of validated items that can potentially be substituted, enabling AMPL to accommodate a broader range of cultural norms.