



United Nations  
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## 4.2.1 Action plan: Examining developmental milestones within and across countries

Proposal by GAML Task Force 4.2

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GAML4/13



## Introduction

At the expert meeting on 27 October 2017, GAML 4.2 outlined a series of steps to address the interim reporting on Target 4.2. This note outlines the action plan for the first of these steps, to use existing data to define developmental milestones across countries, which will serve as an empirical base for defining what it means for a child to be developmentally on track. This work is intended to inform the process of reporting on Target 4.2 and will also support the revision of the MICS ECDI, by identifying items that may be possible to report across countries.

## Action plan

The action steps outlined below assume that data are available from existing data sets.

### *Steps for completing analytical work*

**Define characteristics of data sets that will be used in analyses, and define a similar approach to be used across data sets.** Before beginning analyses, the expert group will agree on the technical characteristics of data sets to include in analyses. An analyses plan will also be outlined that investigators working with each data can follow.

**Define developmental milestones using individual country data files from each assessment.** Use existing data to explore timing of developmental achievements across countries, as part of defining “developmentally on track.” There are several existing assessments of early childhood development, many of which contain similar items indexing children’s development and learning. Item-level analyses can be used to determine the average ages at which children are achieving developmental milestones in different countries. These results can then help identify similarities and variation in timing of developmental milestones across countries.

**Examine cross-country functioning of items from each assessment, looking across countries:** Identify items demonstrating cross-country relevance, which could then serve as a starting point for both defining on track and informing the UIS reporting scale.

**Examine cross-country functioning of items, using data from multiple assessments:** Develop methodologies for “linking” items across existing country data sets, by first identifying common items across data sets and then creating an approach to examining timing of developmental achievements across countries.

### *Proposed process and timeline*

To complete the proposed work as expediently as possible, it is recommended that existing teams with expertise in each data set are asked to engage in the proposed analyses, with agreement to follow similar approaches and with a designated coordinator to work across teams and report back to UIS.

Proposed process includes the following steps:



1. Convene researchers/holders of large-scale data sets to map out methodology and approach (virtual work to be explored; possible in-person meeting required). Data sets may include MICS ECDI; MELQO; EDI; IDELA and EAP-ECDS. Timeline: Jan-Mar 2018
2. Identify psychometricians from each team to work in partnership with the expert group to complete the analyses and make recommendations for using the findings to inform the interim reporting strategy. Timeline: Mar - August 2018
3. **Finalize deliverables and generate recommendations** for the interim reporting strategy and defining “developmentally on track.” Final deliverables to include:
  - Paper outlining methodology and/or guidance for psychometricians
  - Interim report on results and preliminary findings
  - Final report and implications for reporting scale and other ECD instruments

### ***Structure and funding***

Given expertise in existing research teams, a coordinated approach to work across teams is proposed. While individual research teams can complete the first steps of analyzing the data within countries, a team with expertise in child development analyses will be required to merge data files and conduct analyses across countries. It is anticipated that approximately \$200K will be required to complete this project.