



Anchor Items for Measurement of Early Childhood Development

Anchor Items for Measurement of Early Childhood Development (AIM-ECD)

Planning and Implementation Guide

July 2022

This implementation guide provides a step-by-step guide on how to implement the Anchor Items for Measurement of Early Childhood Development (AIM-ECD) Direct Assessment (DA) and the Caregiver Report (CR). These tools measure the early learning and development of children ages 4 to 6 years. The guide outlines the recommended process that teams should follow and explains the complementary resources available for users of these tools. All the resources are publicly available and can be accessed on the <u>Early Learning Partnership webpage</u> under AIM-ECD resources. Contact the central <u>ECD Measurement team</u> for additional guidance or additional technical assistance.

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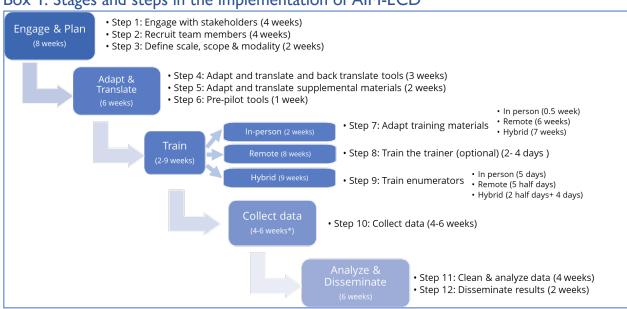
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Introduction and Overview

The Anchor Items for the Measurement of Early Childhood Development (AIM-ECD) are two measurement tools of early learning and development designed for **children aged 4 to 6 years.** These items come from the Measuring Early Learning Quality and Outcomes (MELQO) instruments. The **Direct Assessment (DA)** involves an enumerator engaging in 14 subtasks (activities) directly with a child, takes approximately 20 to 25 minutes to administer, and provides rich information across developmental domains. The Caregiver Report (CR) measures children's development indirectly through a 5-minute interview with the child's caregiver. The CR tool also collects a variety of optional sociodemographic questions that take between 15 to 20-minutes to administer. While it is entirely appropriate to administer the DA to a child and the CR to the caregiver of the same child, most data collection efforts use just one assessment depending on the context, measurement objectives, and information needs of the data collection. The DA is designed for use when detailed domain-level data on development is desired, while the CR is more appropriate for integration into large-scale monitoring surveys.

This document covers the four key stages in the implementation of AIM-ECD, data analysis and use of the results (see Box 1). The document highlights the available World Bank resources that can be used for a more in-depth understanding of each stage. Access the most up-to-date resources the Early Learning Partnership webpage under AIM-ECD resources.



Box 1. Stages and steps in the implementation of AIM-ECD

*The length of time for data collection is approximate and depends on the sample size, number of enumerators, geographic spread, etc.

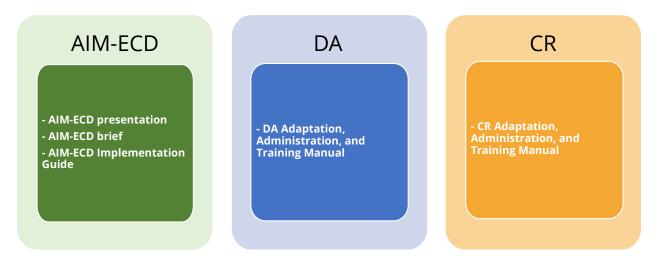


Engage with Stakeholders and Plan

Step 1: Engage stakeholders (4 weeks)

Consult with stakeholders on what AIM-ECD measures to use, how scores from the tool will be used, applicability to the local setting and, if applicable, how data can be linked to existing ECD systems and policies. During this process, we recommend sharing the **AIM-ECD presentation**, **AIM-ECD brief**, this **Implementation Guide** and the **Adaptation**, **Administration and Training Manual** with relevant government counterparts.

AIM-ECD resources available for this step



Step 2: Recruit team members (2-4 weeks)

The successful implementation of any ECD measurement effort at scale relies on a set of experts and trained enumerators responsible for the implementation of specific activities during the planning, adaptation, data collection, analysis and results dissemination process. Box 2 includes a description of the main team members needed during the implementation of AIM-ECD, their role in this process, and their main responsibilities.

The first hire is the **project coordinator**, who oversees the study and will recruit and coordinate the team. The **sampling expert** provides advice on the study design and sample based on the project research questions and works with the project coordinator to ensure locally appropriate consent/assent processes are in place from government officials, ECD center facilitators, and individual parents/caregivers. The **AIM-ECD master trainer** leads the adaptation of the tools and training materials in conjunction with the project coordinator and translators and delivers the training to the trainer or enumerators. If the training is to be implemented remotely, the training



materials require a large amount of translation and adaptation work. If a large number of enumerators will be trained, one or more **quality assurance assistants** can be recruited to support the master trainer with the training. **Translators** are needed to translate and back translate the tools and translate the adapted supplemental materials if they are not available in the local languages. The **child development expert** reviews the adapted and translated tools to ensure child-appropriate language is used and may suggest or add additional items depending on local information needs. The **survey firm** oversees the data collection and data entry activities, and the hiring of field supervisors and enumerators to administer AIM-ECD. The AIM-ECD master trainer will either train a **trainer** or the **enumerators** directly. It might be useful, but not necessary, to create videos of mock administrations of the tool to use during the training. In that case, either a videographer records the administration of the tool or the person administering the tool (master trainer, trainer, or quality assurance assistants) record themselves, and create video clips that will be used for the training, ensuring that proper data clearances and permissions are obtained. Enumerators will be trained on the use and administration of the AIM-ECD tools. Enumerators must pass a reliability exam before going to any field data collection. Once the data collection is completed, a **data analyst** will analyze the data and write reports that summarize the findings.

It is important to ensure that these experts work as a cohesive team, even though some of them may be hired in only a part-time capacity, on a temporary basis, or as consultants. Team members must be flexible and responsive, especially when faced with logistical challenges during implementation. Team members should also be aware of, and demonstrate sensitivity to, local contexts in which children develop.

Box 2. Main team members, roles, and responsibilities



Project Coordinator. This person is the team leader and oversees study implementation and coordinates the whole process, including any translation, adaptation, piloting, data collection, and data analysis of AIM-ECD. Tasks will include management and hiring of a data collection firm or enumerators, support training logistics, travel logistics to preschools or households for data collection, developing and following an operational plan for data collection, oversight of data collection, and ensuring the data compilation during the pilot and full survey implementation. The coordinator is also responsible for liaising with policymakers, stakeholders and the AIM-ECD team.

AIM-ECD Master Trainer. This individual is a necessary hire. This person will review tools and lead the adaptation process in conjunction with the translation team. She or he will also be involved in piloting the tools, training enumerators or trainers in-person or remotely, overseeing data collection, and providing advisory support during data analysis. The consultant must be a certified AIM-ECD master trainer. The list of certified master trainers



and the languages they speak can be found on the <u>Early Learning</u> <u>Partnership webpage</u> under AIM-ECD resources. Please also contact the central <u>ECD Measurement team</u> for additional information on certified master trainers.

Trainer. This individual is an optional hire and will deliver the training to the enumerators in case it is not possible for the master trainer to do it. She or he will be trained and certified by an AIM-ECD master trainer.

Quality Assurance Assistant. This individual is an optional hire. This team member is useful when the training is being conducted for many (e.g. more than 25) enumerators or in a low-capacity context that requires additional training support. The consultant is responsible for helping the main AIM-ECD trainer in the preparation of the training materials, manage and oversee the development of training videos (if applicable) for the enumerator training.

Child Development Expert. This individual is an optional hire. This person will review the local adaptation of the tools. Depending on their information needs, they may also help draft additional items or tasks at the request of the government. The person either drafts the items or tasks or advises government officials on best practices to develop new items or tasks, their scoring and interpretation of results. This person could be a local expert.

Translators. These individuals or firm is an optional hire for when the tool has not yet been translated into the languages of administration. They are responsible for translating or back translating the tools and official AIM-ECD materials from English into the local language(s).

Sampling Expert. This individual is an optional hire. The person supports the survey sampling design based on the study design and research questions.

Data Analyst. This individual is an optional hire and is useful when the project requires a highly technical analysis of the AIM-ECD data and findings. This person cleans, conducts quality checks, and manages data and conducts an in-depth data analysis to be included in an extended results report. Please also contact the <u>central ECD Measurement team</u> for any additional information on data analysis experts.

Survey Firm. The survey firm oversees data collection activities, hiring of field supervisors, and enumerators to administer AIM-ECD.

Enumerators. These individuals will assess children with the DA and/or administer the CR with caregivers. They will be trained on the use and



administration of the AIM-ECD tools. Enumerators must pass a reliability exam before going to any field data collection.

Videographer. This individual is an optional hire. This person is responsible for recording the administration of local mock administration examples of the DA and/or CR for the training. The person is responsible for editing the locally-produced version of videos into domain segments for the training and embedding subtitles into the training videos (where applicable). This role could be also undertaken by the person administering the tool (master trainer, trainer, or quality assurance assistants).

AIM-ECD resources available for this step



Step 3: Define scale, scope and modality (2 weeks)

The best strategy for implementing AIM-ECD depends entirely on the goals of the assessment, the intended use of scores, the tools that will be used, and the local setting. It is important to decide early on the sampling design, the team behind the implementation and data collection, how enumerators will be trained (in-person or online), and data collection logistics.

A. Sample design and selection

AIM-ECD is designed for children aged 4 to 6 years old; using the tool with older or younger children can result in "floor" and "ceiling" effects that limit the usefulness of scores. Depending on the context and goals of the study, children aged 4 to 6 years can usually be sampled either from centers (e.g. ECD Centers or preschools) or with household-based surveys. A consistent sampling strategy is critical to generate reliable and representative results. Two types of sampling



frameworks can be developed based on available information from government ministries that ideally contain the full population of center-based care settings (e.g. preschools or Early Childhood Education centers) or households with children:

1. **Center-based sampling framework** can be drawn from a list of centers or preschools curated by the ministry or institution in charge of Early Childhood Education, usually the ministry of education to draw a representative sample of children in being served by ECE.

2. **Household-based sampling framework** requires partnership with the national statistics offices to estimate population-level sampling that will yield representative samples of all young children in the relevant area.

The sampling framework should be determined for both pilot and the full study. Ensure that the sampling framework of centers or households is complete and that the selected preschools or households exist.

An appropriate sampling strategy must be decided to collect a representative sample of the target population. Many AIM-ECD administrations will use some form of multi-stage cluster sampling to balance statistical and logistical needs. See the Developmental Impact Evaluation <u>Wiki page</u> for an overview and list of sampling references.

Most data collections should consult a sampling expert (e.g., with the <u>Living Standards</u> <u>Measurement Study</u>) before finalization of sampling plans and to answer the following questions:

- a. Who is the target population to be represented?
- b. What sampling frames exist to sample from?
- c. Are there logistical difficulties in reaching certain populations?
- d. What should the total sample size be?
 - i. What should the number of sites/clusters be?
 - ii. What should the number of children per site be?
- e. How should non-response/follow-up/replacement be handled?

Sampling size depends on the level of representation, sampling error, the standard deviation of the population, desired power to detect differences between groups, and sampling design, among others.

Once the preschools and/or communities are selected, inform them about the assessment and the dates of data collection.



The **sampling expert** estimates the sample size and designs the sampling strategy based on the research questions.

Refer to Box 2. for a more detailed description of this expert.



B. Training strategy

AIM-ECD training must be delivered by a certificated AIM-ECD master trainer. The **list of certificate master trainers** and the languages they speak can be found on the <u>Early Learning</u> <u>Partnership webpage</u> under AIM-ECD resources. Those interested in becoming a certified master trainer should contact the central <u>ECD Measurement team</u> for information on future training opportunities.

The master trainer can train enumerator directly, or can train the trainers (ToT) who will deliver the training to the enumerators directly responsible for collecting AIM-ECD data.

A master trainer trains <u>enumerators</u>. This training strategy is preferred since the master trainer has the experience and expertise to train reliable enumerators successfully. In settings where no trainer speaks the local language, teams can hire a certified, English-speaking trainer to co-facilitate the training via simultaneous translation.

A master trainer trains the <u>trainers</u>. This strategy may be used to create local capacity for future trainings, particularly when there are language barriers that would make it difficult to conduct training sessions with simultaneous translation, or when in-person training is required but there are travel limitations for the master trainer. When using this strategy, the master trainer can be hired to support and guide the local trainer in person or remotely as s/he trains local enumerators.

AIM-ECD resources available for this step







The **AIM-ECD master trainer** delivers the training either directly to enumerators or to the trainer(s).

The **trainer** delivers the training to the enumerators in case it is not possible for the master trainer to do it.

The **enumerators** assess children and/or their caregivers. They will be trained on the use and administration of the AIM-ECD tools.

Refer to Box 2. for a more detailed description of these experts.

C. Training mode

There are three modalities of training that have been used: traditional in-person training, remote training, and a hybrid training. Which one to use will depend on the possibility of traveling to the training location and the local capacity.

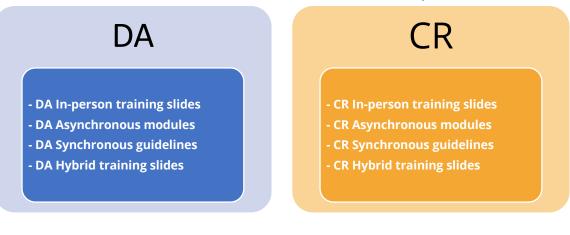
In-person training is the preferred training modality. It makes it easier to keep trainees engaged and provide instant feedback. It also allows the trainer to accompany trainees to field visits and answer questions in real-time. **Training slides** for in-person training have been developed and translated into different languages. If translated and adapted materials do not yet exist for your language and context, detailed adaptation and administration guidance is available. All the resources can be accessed on the <u>Early Learning Partnership webpage</u> under AIM-ECD resources.

Remote training was developed during the COVID-19 pandemic due to the limitations of inperson training. This training uses both **asynchronous modules (to allow enumerators to learn at their** own pace) and **synchronous sessions (online** live sessions facilitated by a trainer) over a three-week period. For those interested in implementing remote training, please contact the central <u>ECD Measurement team</u>.

Hybrid training has been used in some contexts and includes the **asynchronous modules** (to allow enumerators to learn at their own pace) and a shorter version of the in-person training. This training modality allows the enumerator to start the in-person training already familiarized with the tools so they can practice more during in-person sessions. For those interested in implementing the hybrid training, please contact the central <u>ECD Measurement team</u>.



AIM-ECD resources available for this step



D. Data collection plan *Data collection modality*

Data can be collected on paper or using tablets. When possible, daily collection of paper score sheets or upload of surveys from tablets helps prevent data loss and keep track of data collection milestones and deadlines.

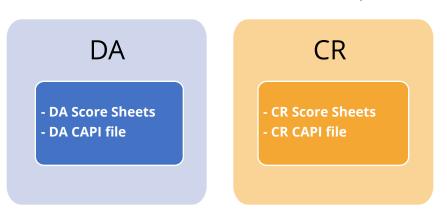
For paper-based data collection, enumerators will need the Score Sheets. These sheets are a paper form to record the responses of an individual assessment when administered on pen and paper.

For electronic-based data collection, enumerators will need tablets and internet connectivity at the time of loading surveys and uploading collected data. Internet is not required during data collection. The DA and CR are programmed using a Computer Assisted Personal Interview (CAPI) file using the XLSForm survey language. This file is an Excel document with CAPI code used to create a digital version of AIM-ECD to use on tablets with Computer Assisted Personal Interview software. This file is optimized to work with Survey CTO, but can be used on any XLSForm based survey software such as Open Data Kit and KoBo Toolbox. Multiple languages can be compiled into a single file so that enumerators can quickly select the appropriate language for assessment. Using electronic data collection will decrease data entry errors and simplify the data collection process. With tablets, logical jumps of the questionnaire are done automatically, and inconsistent responses can be detected and solved immediately. In addition, a tablet can have all the different language versions of AIM-ECD more accessible on a single device.

An appropriate <u>data collection plan</u> must be created ahead of data collection. These documents are highly contextual and depend on the information needs of policymakers and stakeholders, research questions being addressed, and local logistics for implementation. As such, this guide does not offer specific guidance on data collection planning. However, the following aspects should be considered:



- When on-the-spot sampling is required to select children for a study, enumerator team leaders should be trained on techniques to randomly select children from a classroom or household.
- Appropriate consent/assent procedures must be adhered to ensure ethical data collection and compliance with local data collection regulations.
- Surveys must not be distributed to participants for self-evaluation or used without the prior request and approval by the World Bank.
- The collected data is completely confidential and shall not be revealed to any source by survey collectors or external partners.
- All enumerators, data entry, coders, and supervisory staff must sign affidavits of confidentiality and non-disclosure for the survey activities.
- AIM-ECD responses cannot be used to diagnose individual children, report on their developmental status, or make any high-stakes decisions on their schooling prospects.



AIM-ECD resources available for this step

Language of the assessment

The goals of the data collection should guide the choice of language(s) used. The language of administration has important policy and performance considerations. If the DA is not administered in a language the child knows well, then they may perform poorly for language proficiency reasons rather than development reasons. Similarly, the caregiver needs to understand the language of the assessment to answer the CR accurately.

Ideal administrations of the DA and CR use the home language of the child and caregivers by an enumerator who speaks and reads the same language. Thus, the survey firm will need to recruit a sufficient number of enumerators for each language. This can be logistically difficult to achieve in some multicultural contexts but can be achieved with multiple parallel translations. In some cases, time can be saved by only translating the language that the enumerator speaks to the child/caregiver while keeping translations of technical instructions in a shared language that all enumerators will understand.



For practical and policy-relevant reasons, some administrations choose to use a common language of instruction used in ECD centers or schools. While logistically simpler, users should understand that this can result in linguistic minority populations underperforming on the direct assessment or biasing responses from caregivers.

After deciding the language(s) of administration, verify if the DA and CR have already been translated and adapted into the target languages. Both tools have already been translated and adapted for several languages and ready-to-use tools may be available for some users. Please review AIM-ECD resources on the <u>Early Learning Partnership webpage</u> to see if translated and adapted materials exist for your context and language.

Adapt and Translate

Translating the tool and supplementary documents and updating the training materials can take more time than expected, so it is recommended to with adaptation and translation as soon as possible. In many cases, a single translation of all materials is all that is needed. However, in multi-lingual contexts, various documents might need multiple translations into various languages.

Table 1 summarizes the materials that need to be translated. In this table, the "Official Language" is the language used for government documents, the "assessment language(s)" is/are the language(s) used when speaking to the child or caregiver during the assessment, the "trainer language" is the language spoken by the AIM-ECD trainer, and the "enumerator" language is/are the language(s) used during the enumerator training. To avoid unnecessary translation, it is important to carefully follow this guidance and ensure all materials are accurately translated into the necessary languages.

Document	When to translate	Language(s)	Additional notes
A. Engage and plan			
A.1 Engage with stakeholders			
Brief	If needed	Official language ¹	Translate as it is
Presentation	If needed	Official language ¹	Translate as it is
Implementation	If needed	Official language ¹	Translate as it is
guide			
A.2 Recruit Team			
TORs	If needed	Official language ¹	Needs to be customized
B. Adapt and translate tools			

Table 1: List of materials to be translated

¹ Official language is the language used in official government documents



Enumerator Booklet	Always	Assessment language ² and	Needs to be adapted, translated and
		Enumerator language ³	back translated. It is the base for the
			many supplemental materials. In
			multilingual contexts where the
			training language and assessment
			language is different, only language
			used directly with the child
Stimulus Cards	Only for the DA	Assessment language ²	Adapt and translate according to the
			Enumerator Booklet
C. Training			
C.1 For in-person traini			
General Training	When the training will not	Trainer language ⁴	Translate as it is
Guidance	be delivered by the AIM-		
	ECD master trainer		
Training Schedule	Always	Enumerator language ⁴	Needs to be customized
Training Slides	Always	Enumerator language ⁴	Adapt and translate according to the
			Enumerator Booklet
Observation Checklist	When the training will not	Trainer language ³	Translate as it is
	be delivered by the AIM-		
	ECD master trainer		
Enumerator Quiz	Always	Enumerator language ⁴	Translate as it is
Trainer Reliability	When the training will not	Official language ¹	Needs to be customized
Certificate	be delivered by the AIM-		
	ECD master trainer		
Enumerator	Always	Official language ¹	Needs to be customized
Reliability Certificate	-		
C.2 For remote training			
Async training slides	Always	Enumerator language ⁴	Adapt and translate according to the
			Enumerator Booklet. Links to
			translated quizzes need to be
			updated
Async training slides	Always	Enumerator language ⁴	Slides notes are the caption of the
notes			narration. This needs to be
			narration. This needs to be
			translated and re-narrated
Video Captions	Always	Enumerator language ⁴	translated and re-narrated
Video Captions	Always	Enumerator language ⁴	
Video Captions General Quizzes	-		translated and re-narrated Video Captions need to be uploaded to YouTube videos
	Always Always	Enumerator language ⁴ Enumerator language ⁴	translated and re-narrated Video Captions need to be uploaded
	-		translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added
General Quizzes	Always	Enumerator language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms
General Quizzes	Always	Enumerator language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms CAPI files need to be adapted and
General Quizzes	Always	Enumerator language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms CAPI files need to be adapted and translated according to the
General Quizzes Reliability Quizzes	Always	Enumerator language ⁴ Training language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms CAPI files need to be adapted and translated according to the Enumerator Booklet Adapt and translate according to the
General Quizzes Reliability Quizzes	Always	Enumerator language ⁴ Training language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms CAPI files need to be adapted and translated according to the Enumerator Booklet
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General Quizzes Reliability Quizzes Sync training slides	Always Always Always	Enumerator language ⁴ Training language ⁴ Training language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms CAPI files need to be adapted and translated according to the Enumerator Booklet Adapt and translate according to the Enumerator Booklet. Links to translated quizzes need to be updated
General Quizzes Reliability Quizzes	Always Always Always When the training will not	Enumerator language ⁴ Training language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms CAPI files need to be adapted and translated according to the Enumerator Booklet Adapt and translate according to the Enumerator Booklet. Links to translated quizzes need to be
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General Quizzes Reliability Quizzes Sync training slides Trainer Reliability	Always Always Always When the training will not be delivered by the AIM-	Enumerator language ⁴ Training language ⁴ Training language ⁴	translated and re-narrated Video Captions need to be uploaded to YouTube videos Quizzes need to be manually added to Google Forms CAPI files need to be adapted and translated according to the Enumerator Booklet Adapt and translate according to the Enumerator Booklet. Links to translated quizzes need to be updated

² Assessment language(s) is/are the languages used when administering the AIM-ECD to a child and/or caregiver. The assessment languages ideally include the home languages of all child and caregivers included in the study.

³ Enumerator language(s) is/are the common language(s) spoken by enumerators which will be used to conduct the training. The enumerator language should be a common means of both written and oral communication in the context.

⁴ Trainer language is the language spoken by the person who will deliver the training.



C.3 Hybrid training			
Async training slides	Always	Training language ⁴	Adapt and translate according to the Enumerator Booklet. Links to translated quizzes need to be updated
Async training slides notes	Always	Training language ⁴	Slides notes need to be recorded in the new language
Video Captions	Always	Training language ^₄	Video Captions need to be uploaded to YouTube videos
General Quizzes	Always	Training language ⁴	Quizzes need to be manually added to Google Forms
Reliability Quizzes	Always	Training language ⁴	CAPI files need to be adapted and translated according to the Enumerator Booklet
General Training Guidance	When the training will not be delivered by the AIM- ECD master trainer	Trainer language ³	Translate as it is
Training Schedule	Always	Training language ⁴	Needs to be customized
Training Slides	Always	Training language ⁴	Customize and adapt and translate according to the Enumerator Booklet
Observation Checklist	When the training will not be delivered by the AIM- ECD master trainer	Trainer language ³	Translate as it is
Enumerator Quiz	Always	Training language ⁴	Translate as it is
Trainer Reliability Certificate	When the training will not be delivered by the AIM- ECD master trainer	Official language ¹	Needs to be customized
Enumerator Reliability Certificate	Always	Official language ¹	Needs to be customized
D. Collect data			
Score Sheet	For paper-based data collection	Assessment language ²	Adapt and translate according to the Enumerator Booklet
Data Entry Sheet	Adapt when using paper- based data collection. Translation is optional translation	Official language ¹	Adapt according to the Enumerator Booklet. Translation is optional
CAPI Code	For tablet-based data collection	Assessment language ²	Adapt and translate according to the Enumerator Booklet
E. Analyze and dissemi	nate		
Codebook	Adapt when using paper- based data collection. Translation is optional	Official language ¹	Adapt according to the Enumerator Booklet.Translation is optional
Semi-automated Report	Only if the person doing the analysis does not speak English.	Official language ¹	Report needs to be customized according to local contexts. Translation should ideally be completed after preparing report in English.



Step 4: Adapt and translate the enumerator booklet (3 weeks)

All items and tasks included in AIM-ECD have been tested in several contexts around the world. Additional design enhancements allow for the use of these tools in different cultural contexts. Nevertheless, some additional adaptation and translation may be required when using the DA and/or the CR in a new language or specific context. More specifically, in contexts in which different languages are spoken, the tools will need to be translated to multiple "assessment" languages, since the language of the assessment should be the one that the children and/or caregivers speak at home. We recommend adapting and translating the manual into the local "assessment" language(s) as soon as possible. Note that in multi-lingual settings, that only the language in the manual used directly with child and/or caregivers required translation into the "assessment" languages. Instructions for enumerators and other guiding materials can remain in a common "enumerator" language. In some settings, the government leads this process, in others, it is necessary to hire a translation team.

For translation, the principle of "back translation" should always be applied. First, a translator translates the questionnaire into the target language. Second, an **independent** translator should review and translate the translated version back into English. Third, the original version should then be compared with the back-translated version; experts can be consulted for advice when there are disagreements in the translation and back translation of the documents. Note that the translation and back translation may not match perfectly, but this issue can help to identify any items where the intent and framing of the question were lost in the translation process.

The **Enumerator Booklet** is in the Appendix A1 of **Adaptation**, **Administration**, **and Training Manuals**. This booklet is the central document of the DA and CR and includes step-by-step instructions for the administration and scoring of each item or task. The booklet includes both detailed adaptation guidance for the translation team and administration notes for enumerators.

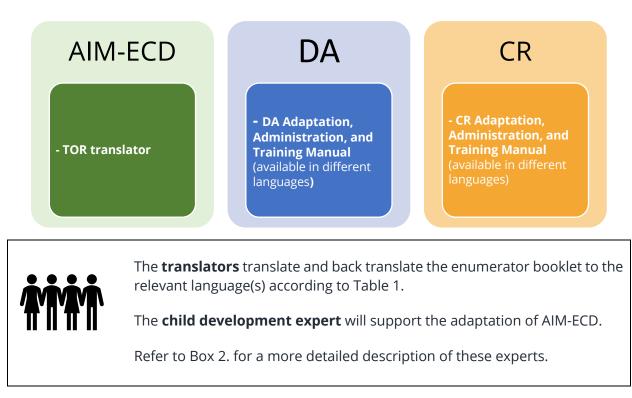
The DA and CR **Adaptation**, **Administration**, **and Training Manuals** include detailed instructions on how to adapt the **Enumerator Booklet** to new contexts, and considerations for maintaining translation fidelity of the tools into new languages. The manual, booklet and supplementary resources are available in different languages on the <u>Early Learning Partnership</u> <u>webpage</u> under AIM-ECD resources. Even if the tool is already available in a specific language, it is still necessary to review the adaptation guidelines and make any local adaptations in consultation with local experts to clarify any mismatches due to culture and context.

In general, most questions/sections should only be **translated** as closely as possible to the English original versions using child- or caregiver-friendly language. Text that requires specific **adaptation** considerations is indicated in the enumerator booklets of the DA and the CR using **yellow highlighting**. The booklets also include **Adaptation & Translation notes** in orange boxes that list the item or subtask-specific procedures for translation and adaptation. Any additional



adaptations should be consulted with the central <u>ECD Measurement team</u>, who can provide guidance for translation and adaptation.

After successfully translating and adapting the Enumerator Booklet, it is advised to remove the **Adaptation & Translation notes** (these notes should not be included in the document given to enumerators) and clear all yellow highlighting from the documents in a new file.



AIM-ECD resources available for this step

Step 5: Adapt and translate supplemental materials (2 weeks)

The DA and CR **Enumerator Booklets** are the main document of AIM-ECD and the supplemental materials for assessment and data collection are all derived from this key document. For example, the Score Sheet is a document with the questions/items of the Enumerator Booklet, but without administration guidance. This means that the wording is exactly the same as used in the Enumerator Booklet. Therefore, translation of the supplemental materials should come only **after** adapting and translating the Enumerator Booklet. This ensures consistency across the entire tool. The manual, booklet and supplementary resources are available in different languages on the Early Learning Partnership webpage under AIM-ECD resources.



The following supplemental resources may need adaption and translation, depending on the training delivery mode and the data collection strategy.

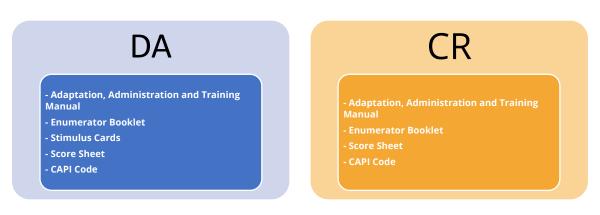
A. Supplemental Materials for Assessment

Stimulus Cards – DA, is a booklet of pictures, numbers, and letters to show the child being assessed during the administration. It needs to be updated, adapted, and translated for administering the Direct Assessment.

B. Supplemental Materials for Data Collection

Score Sheet – DA & CR, is a form used to record an individual child's scores or caregiver's answers when data is collected on paper. It needs to be updated and translated for paper-based data collection or to have a backup in case tablets are not working.

CAPI Code – DA & CR, is code used to create a digital version of the DA and CR to use on tablets with Computer Assisted Personal Interview (CAPI) software. It needs to be updated and translated for electronic-based data collection.



AIM-ECD resources available for this step

The **translator** translates the adapted supplementary materials from English to the local language(s).

The **AIM-ECD master trainer** reviews tools and leads the adaptation process.

Refer to Box 2. for a more detailed description of these experts.



Step 6: Pre-pilot - optional (1 week)

Once the instruments and additional materials have been adapted and translated, it is recommended to pilot them in a convenience sample of children (DA) and/or caregivers (CR). This step is especially important for checking the translation. It is optional if there is no new translation or adaptation involved. This process focuses mainly on the following aspects:

- 1. To check the accuracy of the translation.
- 2. To identify items that were not clear for the respondents and/or enumerators and would need rewording.
- 3. To provide a more accurate estimation of administration time.
- 4. To record videos that can be used for the enumerator training.
- 5. To collect samples of how the children write their names when the DA is administered in non-alphabetic languages.

After the pre-pilot, all materials should be adjusted accordingly, if needed.

The pre-pilot should be conducted by the project coordinator, the trainer, or a trained enumerator.

The **project coordinator** oversees the pilot process.

The **AIM-ECD master trainer** supports the pilot process and later adapts the tools accordingly.

The **trainer** acts as an enumerator to pilot the tools and can be recorded to make videos for the training.

The **videographer** records and edits the administration of the AIM-ECD for the training.

Refer to Box 2. for a more detailed description of these experts.



Step 7: Adapt and translate training materials (0.5 - 7 weeks)

Depending on the context, training can be delivered in-person (recommended), remotely or a hybrid of both. Refer to Table 1 for a detailed list of materials that might need to be translated



depending on training modality. Training slides are available on the <u>Early Learning Partnership</u> <u>webpage</u> under AIM-ECD resources and have been translated into different languages for inperson training. The materials used for remote training have been partially translated into fewer languages. To access the remote training materials, please contact the central <u>ECD Measurement</u> <u>team</u>.

A. General Training Materials

A **General Training Guidance** is located in Appendix B1 of the CR and DA **Adaptation**, **Administration**, **and Training Manuals**. It provides guidance on the hiring and certification of enumerators for data collection.

Enumerator Reliability Certificate is granted to enumerators who successfully complete the training and the reliability exam. Enumerators can become certified for either administering the DA, CR, or both. The certificate lasts for one year; after that, a refresher course is necessary to administer the tools.

B. In-Person Training Materials (3 days)

Training Schedule DA & CR, is a sample training schedule.

Enumerator Quiz DA & CR, is used to assess the acquisition of key knowledge to faithfully administer the DA/CR for certification.

Observation Checklist DA & CR can be used to monitor key behaviors during the enumerator observations for certification.

In-Person Training Slides DA & CR are adapted according to the Training Schedule. The slides are used during in-person enumerator training.

C. Remote Training Materials (6 weeks)

Fully remote trainings require the greatest amount of preparation. If you are planning to implement the training remotely, you will need to start translation of materials as soon as possible given the large amount of text that requires translation.

Asynchronous training modules are seven PowerPoint files (four modules)⁵ with narration in English designed for self-guided training. They contain embedded quizzes and hyperlinks to external quizzes and example videos. These quizzes and videos must be updated if used in other languages. Narration text is included in the notes of each slide of the PowerPoint; the narration text needs to be translated and re-narrated when used in a different language.

⁵ Module 1: one PowerPoint; Module 2: one PowerPoint; Module 3: three PowerPoints; Module 4: one Power Point.



- Quizzes serve as checks for understanding of the Asynchronous training and are located in a Google Drive folder. When using the quizzes in different languages, they need to be copied and translated into a new online drive that can be shared with trainees. Quiz responses are visible to master trainers to ensure proper completion of asynchronous materials.
- Videos are essential for the synchronous and asynchronous remote trainings. They • include enumerators administering the DA and the CR and provide valuable content for discussion and to ensure enumerators understand administration rules. It is important to note that the videos in the existing video bank were recorded using a previous version of the DA and CR tools, but can still be used for training. Subtitles of the videos are available in some languages, and subtitle files can be translated and uploaded so that videos can be viewed in different languages. Please contact the central ECD Measurement team for access to the existing video bank and for subtitle files.
- The Asynchronous training videos and questionnaires index includes the links to the • videos and the transcription of the quizzes to be used in this Asynchronous training.

Synchronous training guidelines are used to promote the discussion during the online live training with enumerators once asynchronous training is completed.

AIM-ECD resources available for this step

DA

In- Person training

- Training Schedule

- Enumerator Quiz

- General Training Guidance

- In-Person Training Slides

- Observation Checklist

Remote training

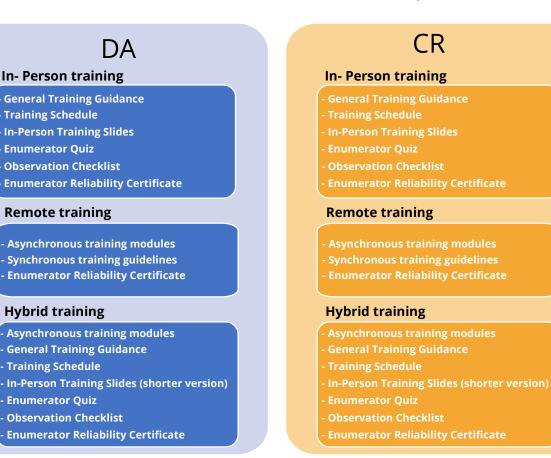
Hybrid training

Training Schedule

Enumerator Quiz

Observation Checklist

- General Training Guidance







The AIM-ECD master trainer prepares the training materials

The **quality assurance assistant** will support the AIM-ECD trainer to prepare the training materials

Refer to Box 2. for a more detailed description of these experts

Step 8: Train the trainer (optional) (1 week)

As discussed in Step 2 section B, in some contexts, when it is not possible that an AIM-ECD master trainer trains the enumerators directly, or there is interest in building government or local capacity to conduct future trainings, an AIM-ECD master trainer will train another person (the trainer) to train the enumerators.

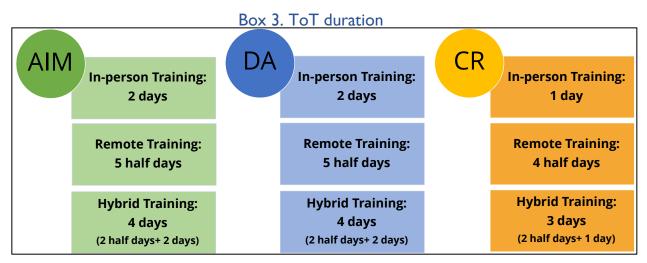
The AIM-ECD master trainer can deliver the training of the trainers (ToT) in-person, remotely or mix of both (hybrid mode). The three training modalities are explained in detail in the next step (Step 9).

The ToT is similar to the enumerator training, however since there are fewer number of participants, there is more time for discussion and practicing in-pairs directly with the master trainer.

For the DA it is still necessary for trainees to practice with children, but instead of going to a preschool, one or two children could go to the last training session.

The ToT is a great opportunity to record local administration videos of the trainers' administration.





AIM-ECD resources available for this step

DA

In-Person training

In-Person Training Slides
Enumerator Quiz
Observation Checklist
Trainer Reliability Certificate

Remote training

Asynchronous training modules
 Synchronous training guidelines
 Trainer Reliability Certificate

Hybrid training

- Asynchronous training modules
- In-Person Training Slides (shorter version)
- Enumerator Quiz
- Observation Checklist
- Trainer Reliability Certificate

CR

In- Person training

- In-Person Training Slides
- Enumerator Quiz
- Observation Checklist
- Trainer Reliability Certificate

Remote training

- Asynchronous training modules
- Synchronous training guidelines
- Trainer Reliability Certificate

Hybrid training

- Asynchronous training modules
- In-Person Training Slides (shorter version)
- Enumerator Quiz
- Observation Checklist
- Trainer Reliability Certificate





The AIM-ECD master trainer will train the trainer

The **trainer** will be trained to lead the enumerators training or support the AIM-ECD master trainer during the enumerator training.

Refer to Box 2. for a more detailed description of these experts

Step 9: Train enumerators (1-1.5 weeks)

As discussed in Step 2 section C, the training could be delivered in-person, remotely, or via a hybrid approach and can be led directly by a master trainer, by a ToT trained trainer, or both. In the last case, the AIM-ECD master trainer can lead the training (in-person or remotely) and the trained trainer can support them (in-person) and "shadow" the training, which will help them to be more prepared to lead another training in the future.

It is essential that only trained, reliable enumerators administer the AIM-ECD. **General Training Guidance** is located in Appendix B1 of the **Manual of Adaptation**, **Administration**, **and Training Manuals**. It provides guidance on the hiring and certification of enumerators for data collection.

It is recommended to deliver the training in an "enumerator" language which is a common language spoken at a high level by most of the enumerators. In many cases, an appropriate language for the training is the official language of the country or a commonly spoken colonial language. Enumerators must be able to fluently understand, read, and speak the language used in the training. In contrast, the language of assessment should be the languages children and caregivers speak at home. In multi-lingual trainings, enumerators should be prepared to use both the enumerator language for the training, and practice in local administration languages. Simultaneous translations can be used if the trainer is not fluent in the training language.

A. In-Person Training

The in-person training consists of mock administration and practical guidelines as described in detail in the **Training Schedule** available on the <u>Early Learning Partnership webpage</u> under AIM-ECD resources.

• For the CR, a one-day training is sufficient most of the time. An additional day, including field practice, is recommended when enumerators have less experience with data collection. CR training includes an overview of the assessment, reviewing all items in the CR, pair practice, and group discussions.



• For the DA, a four-day training is recommended. This training includes two days of an inclass overview of the assessment, administration, and scoring procedures, group discussions, and practice administering and scoring the assessment. The training concludes with two days of field practice with children first in pairs, and then alone.

When implementing the two tools together, the training lasts 5 days, since that the field practice of the DA and CR can be done at the same time.



Box 4. Enumerator in-person training duration

Reliability Procedures for in-person training

Reliability refers to the accuracy with which enumerators score the DA and/or the CR. Reliability is built by having a common understanding of exactly how to administer and score the assessment.

To become certified administrators of the DA and/or CR, enumerators must:

- Attend and actively participate in the training
- Pass the respective Reliability Quiz
- Complete an administration of the assessment under the observation of the trainer (or record the administration session when the trainer cannot be present) using the respective Observation Checklist.

In-person training set up

For the training sessions it is recommended to have the following:



- A large room with enough space for enumerators to split into small groups and pairs to practice comfortably.
- A projector to project the PowerPoint presentation.
- High-speed internet if participants will be connected remotely and/or online videos will be used. If local videos were produced, they can be stored offline.
- Multiple score sheets if administered on paper
- Tablet with survey loaded if using CAPI if administered electronically
- Enumerator Booklet
- For the DA training each enumerator must have:
 - Stimulus Cards that are ideally laminated and printed on heavy paper
 - A timer (or a cell phone)
 - Writing utensils (pencil/pen)
 - Several blank pieces of paper
 - A writing surfaces
 - 20 small objects for counting
- For the DA training: Access to a preschool or children need to be arranged before the training of the DA, to allow enumerators to practice. For the first field visit, at least as many children as enumerators are required to ensure every enumerator can practice with one child and observe/score a second administration. For the second field visit, at least double the number of children as enumerators are required so each enumerator can practice with two children.

B. Remote Training

This training uses both **asynchronous modules** (with self-paced training modules) and **synchronous sessions** (with live sessions facilitated by the trainer). If you are interested in implementing a remote training contact the central <u>ECD Measurement team</u> for further information and support.

The **Asynchronous** section is a self-paced online component of the training, in which participants watch four modules in the form of a recorded PowerPoint presentation with narration. It is designed to help the participants to build knowledge of the AIM-ECD toolkit by exploring the two tools, their components, and their corresponding administration guidelines. The estimated time to complete this part of the training for the two tools together is around 8 hours. It is recommended to split the training in at least 2 half days. It takes around 6 hours for the DA and 5 for the CR when doing it independently, because it includes Module 1 and Module 4.

o Module 1: Introduction to Early Childhood Measurement and the AIM-ECD (1.5 hours)

o Module 2: Caregiver Report (2 hours)

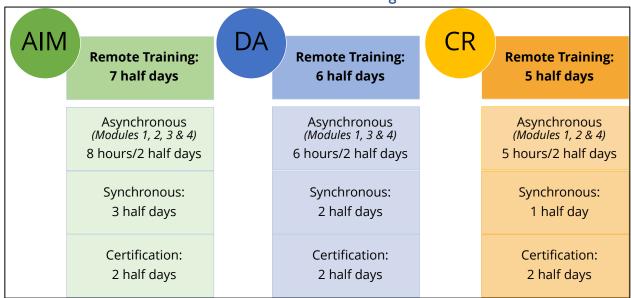
o Module 3: Direct Assessment (3 hours)

o Module 3.1: DA Administration and Scoring Overview

- o Module 3.2: DA Early Literacy and Early Numeracy
- o Module 3.3: DA Executive Functioning and Social-Emotional
- o Module 4: Implementing AIM-ECD training and data collection (1 hour)



The **Synchronous** part is an online live training session in which participants watch videos and practice with mock administrations of the AIM-ECD DA and CR tools. Synchronous training also involves live discussions of administration strategies. This part of the training takes 3 half days for the two tools together. Only participants who successfully complete all asynchronous modules and assignments are allowed to participate in this synchronous session.



Box 5. Enumerator remote training duration

Reliability Procedures for remote training

To become certified administrators of the DA and/or CR, enumerators must:

- Complete all asynchronous modules and achieve an average of 80 percent of correct answers on the end-of-module quizzes.
- Attend and actively participate in all synchronous training sessions.
- Pass the Reliability Quiz that tests knowledge and proper tool administration
- Submit a video of a sample administration of the DA and/or CR to ensure key administration rules are followed and correct scores are produced. The submission and revision of the video can add 2 half days more to remote the training.

Remote training set up

For the training sessions each enumerator must have:

- A computer or tablet to view asynchronous PowerPoints
- High-speed internet to answer quizzes and watch videos (the asynchronous can be downloaded, but quizzes and videos are still online)



- Headphones in case enumerators are completing asynchronous materials together
- An online platform that allows breakout rooms (Zoom, Webex, etc.)
- Multiple score sheets if administered on paper
- Tablet with survey loaded if administered electronically
- **Enumerator Booklet**
- For the DA training each enumerator must have:
 - o Stimulus Cards that are ideally laminated and printed on heavy paper
 - A timer (or a cell phone)
 - Writing utensils (pencil/pen)
 - Several blank pieces of paper
 - A writing surfaces
 - 20 small objects for counting
- For the DA training: Access to a preschool or children (and consent of caregivers) need to be arranged before the training of the DA, to allow enumerators to record their DA administration for certification. A system for sharing those videos with the training to review them, needs to be put in place.

C. Hybrid Training

This training uses both asynchronous modules (with self-paced training modules) and the inperson sessions described above. This has the advantage that enumerators arrive the in-person session familiar with the tools and ready to practice. If implementing the two tools together, the training last around 6 days (2 half days for asynchronous modules and 4 days for the in-person session). If you are interested in implementing a hybrid training contact the central ECD Measurement team for further information and support.



Box 6. Enumerator hybrid training duration



Reliability Procedures for hybrid training

To become certified administrators of the DA and/or CR, enumerators must:

- Complete all asynchronous modules and achieve an average of 80 percent of correct answers on the end-of-module quizzes.
- Attend and actively participate in the training
- Pass the respective Reliability Quiz
- Complete an administration of the assessment under the observation of the trainer (or record the administration session when the trainer cannot be present) using the respective Observation Checklist.

Hybrid training set up

For the **asynchronous** sessions each enumerator must have:

- A computer or tablet to view asynchronous PowerPoints
- High-speed internet to answer quizzes and watch videos (the asynchronous can be downloaded, but quizzes and videos are still online)
- Headphones in case enumerators are completing asynchronous materials together
- Tablet or link to survey sheet
- Enumerator Booklet

For the **in-person** part of the training, the following are required:

- A large room with enough space for enumerators to split into small groups and pairs to practice conformable in the in-person session.
- A projector to project the PowerPoint presentation.
- High-speed internet if someone will be connected remotely and/or videos will be used. If local videos were produced, they can be stored offline.
- Multiple score sheets if administered on paper
- Tablet with survey loaded if using CAPI
- Enumerator Booklet
- For the DA training each enumerator must have:
 - o Stimulus Cards that are ideally laminated and printed on heavy paper
 - A timer (or a cell phone)
 - Writing utensils (pencil/pen)
 - Several blank pieces of paper
 - A writing surface
 - 20 small objects for counting
- For the DA training: Access to a preschool or children need to be arranged before the training of the DA, to allow enumerators to practice. For the first field visit, at least as many children as enumerators are required to ensure every enumerator can practice with one child and observe/score a second administration. For the second field visit, at least double the number of children as enumerators are required so each enumerator can practice with two children.



AIM-ECD resources available for this step

DA	CR
All training	All training
- Enumerator Booklet - Enumerator Reliability Certificate	- Enumerator Booklet - Enumerator Reliability Certificate
In- Person training	In- Person training
- General Training Guidance - Training Schedule - In-Person Training Slides - Enumerator Quiz - Observation Checklist	 General Training Guidance Training Schedule In-Person Training Slides Enumerator Quiz Observation Checklist
Remote training	Remote training
- Asynchronous training modules - Synchronous training guidelines	- Asynchronous training modules - Synchronous training guidelines
Hybrid training	Hybrid training
- Asynchronous training modules - General Training Guidance - Training Schedule - In-Person Training Slides (shorter version) - Enumerator Quiz	 Asynchronous training modules General Training Guidance Training Schedule In-Person Training Slides (shorter version) Enumerator Quiz
- Observation Checklist	- Observation Checklist



The **AIM-ECD master trainer** trainins the enumerators in-person or remotely or oversees the training.

The **trainer** trains to leads the enumerators training or support the AIM-ECD master trainer during the enumerator training.

The **quality assurance assistant** supports the main AIM-ECD trainer during the enumerator training.

The **enumerators** are trained to assess children and/or their caregivers.

Refer to Box 2. for a more detailed description of these experts



Collect Data Step 10: Collect data (4-6 weeks)

Data collection should follow the data collection plan defined in Step 2 and could be done on paper or with tablets. Guidelines on data collection can be found in the DR and DA **Adaptation**, **Administration**, **and Training Manual** sections and include:

- Ensure that the authorities supporting this initiative obtain permits and provide letters to enumerators authorizing school visits to assess children.
- Follow proper consent and assent processes to ensure ethical and legal data collection.
- Data collection should be conducted as soon as possible, and no longer than two weeks, after the conclusion of the training to ensure that enumerators retain the information as well as possible.
- As a general principle, data collection should be finished within a three to four-week time window.
- Most data collections benefit from the creation of enumerator teams. Within these teams, it is advised to designate skilled enumerators as team leaders to help manage logistical aspects of data collection (for instance, distribution of materials, tablet tracking, score sheet collection and accuracy, etc.)
- Form enumerator teams based on the language(s) of administration and the number of sites to be visited, the number of days data collection will be conducted over, and the number of children and/or caregivers required to be sampled per site.
- An individual enumerator should not conduct more than (at most) 10-12 CR surveys per day or 4-6 DA in order to maintain data quality.
- Collected data must be handled in a way that protects personally identifiable information and complies with local data and personal privacy regulations.

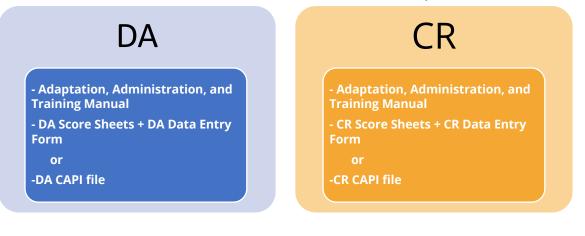
When data is collected using tablets, it is strongly recommended to use the DA/CR CAPI file for survey programming. If data is collected on paper, then data collected on Score Sheets should be consolidated using the **Data Entry Form**.

CAPI code ensures that the correct survey logic is programmed and that variables are properly named. As mentioned in Step 3, this file is an Excel document used to create a digital version of AIM-ECD to use on tablets. The default file is optimized to work with Survey CTO, but can be used on any XLSForm based survey software, such as Open Data Kit and KoBo Toolbox. Users can add new translations to the AIM-ECD CAPI code but should not alter variable names.

Data Entry Sheet is an Excel template for manually inputting data collected when DA or CR are administered on paper using the Score Sheets. The Data Entry Sheet has can be used to manually transfer scores in score sheets to an Excel data file. The data entry file is a template for data entry aligned with the STATA do-files that automatically labels, cleans, and analyzes AIM-ECD data.



AIM-ECD resources available for this step



Analyze and Disseminate

Step 11: Clean and analyze data (4 weeks)

The AIM-ECD implementation tools include a **Semi-Automated Workflow** that make data cleaning and analysis relatively easy. By using the **Semi-Automated Workflow Guide**, the data analyst can input raw data collected either electronically with the CAPI file or input into the Data Entry Form to create a report with minimal effort using Stata software. For advanced users that want to conduct deeper AIM-ECD analyses, the **Codebook** provides a comprehensive data dictionary for data collected according to Step 10 and the **Template Report** describes the recommended scoring approaches and basic descriptive and inferential analyses possible with AIM-ECD data.

The **Semi-automated Workflow** is a zipped folder structure containing a series of Stata .do files, Excel files, and Word files that can be used to clean, process, and analyze raw data using a standardized methodology and with minimal user input to populate the Template Report. Users should unzip the .zip file to a folder location where they can put the raw data.

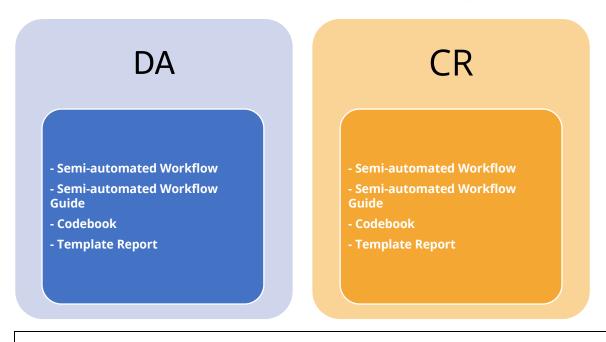
The **Semi-automated Workflow Guide** outlines the recommended process that teams should follow to clean and analyze raw data collected either 1) electronically via the AIM-ECD CAPI files or 2) on paper and input in the AIM-ECD Data Entry Form. This file describes the step-by-step process of editing and running the various Stata .do files to produce output in graphs, tables, and charts that can be copied directly into the Template Report.

A **Codebook** provides a comprehensive data dictionary that describes each variable in a standard AIM-ECD dataset as well as the corresponding values that each variable can take.



The **Template Report** is a pre-formatted report template that utilizes the graphs, charts, and tables produced by the semi-automated workflow to create a brief report on the findings of the DA or CR data collected. After adding these figures, users can refer to them to draw meaningful conclusions about the data and answer the research questions posed by the study. Information that must be customized is conveniently highlighted in yellow. Even when conducting deeper analyses not included in the semi-automated workflow, the Template Report can serve as a useful starting point of descriptive analysis and boilerplate descriptions about AIM-ECD.

AIM-ECD resources available for this step





The **project coordinator** oversees the data analysis and the accuracy of the reports that will be presented to policymakers and stakeholders

The **data analyst** cleans, conducts quality checks, manages data using the semi-automated workflow and conducts any in-depth additional data analysis to be included in a report.

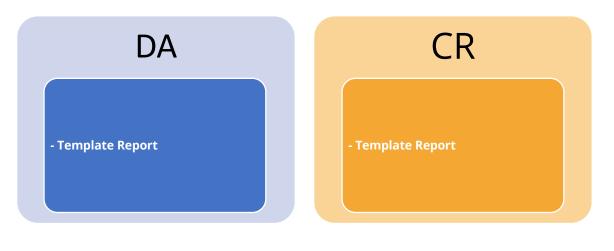
Refer to Box 2. for a more detailed description of these experts

Step 12: Disseminate and use results to inform policy decisions (1-2 weeks)

The last step of AIM-ECD implementation is disseminating the results to inform key findings and recommendations for policy decisions. Dissemination can be done by distributing the customized **Template Report** and facilitating a one-day workshop with the country teams to



present results, brainstorm dissemination activities, and address any final observations before making results public.



AIM-ECD resources available for this step

The **Project coordinator** presents the results to policymakers and stakeholders

The **data analyst** produces the tailored Template Report and any further dissemination prodructs.

Refer to Box 2. for a more detailed description of these experts