



## **HOW-TO:** Random Sampling of Children in the Field

# How to randomly sample children for an ELOM assessment in the field

*Your role in assessing children's development is crucial to understanding and improving early learning outcomes. To ensure that Early Learning Outcomes Measure (ELOM) assessments are fair, it is essential to select children for assessment randomly. But what does that mean?*



## **Purpose of random**

**sampling:** helps to prevent bias by giving every child an equal opportunity to be part of the study, making sure your results can be generalisable beyond your study sample.

Random sampling is a method used in research and evaluation to select a group of people to assess from a larger population in a way that each person has an equal chance of being chosen for the study. The key idea is randomness - every person has an equal chance of being included, rather than being selected because of some particular reason or characteristic.

In an ELOM study, random sampling helps to ensure that the sample of children included in the study is representative of all children attending the same early learning programme (ELP), not only a chosen few. This helps to ensure that the results of the ELOM assessments represent all children attending the ELP, not only those who have a particular characteristic (e.g., the most capable). When each child has an equal opportunity to be chosen, we can be more confident that our findings are reliable.

The purpose of this guide is to provide you with straightforward, easy-to-follow methods for randomly selecting children in an ELP.

## **PREPARING FOR RANDOM SELECTION**

### **STEP ONE:**

**Obtain a full list of all children at the ELP** (if you are selecting children from multiple classes) or a list of children in the class that you are assessing.

### **STEP TWO:**

Before you enter the classroom, **make sure you have the necessary materials ready**, including the class list. Other materials may include slips of paper or a bowl or bag for drawing names (these are discussed in more detail below).

### **STEP THREE:**

Be sure to **explain the process to the children and ELP teachers** so that everyone understands the fairness of the selection process, and that you are not there to choose a special group of children.

## STEP FOUR:

**Consider which children need to be excluded** from the class list. This needs to happen before you randomly select your sample of children. Children may need to be excluded for a number of reasons, including:

- If parental consent is a part of your study, children whose parents have not provided consent for their assessment should be excluded.

### PARENTAL CONSENT

Before ELOM fieldwork, the study organisers would have sent a consent form to the caregivers of all children in the participating ELPs. This form provides information about the study and ELOM assessments, and asks for their permission to assess their children. Teachers at the ELPs you are visiting should be able to share these signed consent forms with you. There are a few very specific situations where consent is not required. If consent forms are not available for any children, first check with the study organiser before proceeding.

- Any children who fall outside of the age range.

### ELOM AGE RANGES

The ELOM tool that you are using applies to specific age groups of children. Your study would be looking at one or both age groups - 50-59 months and/or 60-69 months if you are assessing using the ELOM 4&5. It is critical to ensure that children outside of these age groups are not assessed.

- Any children who have a disability that may impact their ability to complete the assessment.

### CHILD DISABILITY

The ELP teacher should be able to tell you which, if any, children have a disability that affects their learning. If a child has compromised vision, hearing, motor abilities or cognitive abilities, they should be excluded from your sampling. The following guiding questions may assist you to screen for disability:

1. Does this child seem to have difficulty seeing?
2. Does this child appear to have difficulty with hearing? (Uses a hearing aid, hears with difficulty or is completely deaf?)
3. When you tell this child to do something, does he/she seem to have difficulty understanding what you are saying?
4. Does this child have difficulty in walking or moving his/her arms, or does he/she have weakness and/or stiffness in the arms or legs?

- Any children who are enrolled in the class but are absent on the day of the assessment.

## STEP FIVE:

Once you have removed these children from the class list, **divide the list into two**: one for girls and one for boys.

## WHAT NOT TO DO

Once you have made your exclusions and divided your list into boys and girls, you are ready to sample. Now let us first look at what not to do. The points below represent non-random sampling and would lead to unreliable ELOM results:

- ⊗ Do not ask the teacher which children they think you should assess.
- ⊗ Do not let the teacher make changes to your selected children.
- ⊗ Do not ask the children to volunteer.
- ⊗ Do not pick children based on what they look like or how they behave (e.g., they are friendly and interested, or they are dressed a certain way).

## WHAT TO DO

So, what do you do? Here are three practical ideas for randomly selecting children. Choose the method that works best for your situation, and remember that you should use the same method of selection throughout your assessments.

When making your selections, it is a good idea to have 'backup' selections in case a child refuses to take part, or does not complete the assessment. So, if you need to select a total of 8 children, randomly select 10 or 11.

### OPTION ONE: Alphabetical order

1. Order the lists of boys and girls alphabetically according to their first name or surname.
2. Choose every third name on the list until you have your required number.

### OPTION TWO: Name drawing

1. Write the children's names on slips of paper, and place the slips into a bag, bowl or container (one for boys and one for girls).
2. Mix the slips.
3. Draw the required number of slips one by one without looking.

### OPTION THREE: Assign numbers

1. Line the girls up.
2. Give each child a number from one to three or four (i.e., the first child in line is given a one, the second a two, the third a three).
3. Place slips of paper with the numbers one to three or four (whichever you did) in a bag or bowl, mix them up, and choose a slip without looking.
4. Select all girls assigned the chosen number.
5. Repeat the same process for boys.

⊗ **What if a child refuses?** Some children may not want to take part. Remember that it is their choice and they cannot be forced or convinced. If a selected child refuses to take part, select one of your backups.

⊗ **What if there are not enough children?** Some ELP classes are small, and there might not be enough children in the necessary age range to randomly sample. If this is the case, then you should include all age-eligible children and make a note of this.