



Expressive Communication

Early Communication Indicator (ECI)

Administration Guidelines

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Introduction

The Early Communication Indicator (ECI) assessment is designed to measure infants' and toddlers' expressive communication. The specific elements of communication measured are Gestures, Vocalizations, Single-Word Utterances and Multiple-Word Utterances. The frequency of each communication element is measured, and then the scores are added together to obtain a total communication score. The ECI has two forms (House and Farm); both of which involve the child playing with the toys along with a familiar adult.

Setting up the ECI Assessment Situation

The adult and child should sit in an area that is comfortable for them where they can play with the materials. They can sit on the floor or at a table.

If a child is **not independent** in sitting, the following options may be used for positioning the child during the ECI assessment:

1. Seated position in a chair with a tray or at a table
 - make sure toys are in front of and within reach of the child
 - support feet with block or bolster
 - use a blanket or towel to support child's back if needed
2. Seated position and held by play partner (or other adult if needed)
 - make sure toys are in front of and within reach of the child
 - play partner should be able to have eye contact with child
3. Sitting position on the floor -- propped by examiner to sit up (child may be held on play partner's lap, or child's back may be resting against adults leg)
 - make sure toys are in front of and within reach of the child
 - play partner should be able to have eye contact with child
 - place a blanket/towel under child if needed for cleanliness or warmth
4. Sitting position on the floor -- propped by examiner to rest on tummy (child is placed on a bolster or floor)
 - make sure toys are in front of and within reach of the child
 - play partner should be able to have eye contact with child
 - place a blanket/towel under child if needed for cleanliness or warmth

If a child is **independent** in sitting the following options can be used for positioning:

1. Seated position in a chair with a tray or at a table with a booster seat
 - make sure toys are in front of and within reach of the child
 - support feet with block or bolster
2. Sitting position on the floor
 - make sure toys are in front of and within reach of the child
 - play partner should be able to have eye contact with child
 - place a blanket/towel under child if needed for cleanliness or warmth

Materials

The following describes the toys required to administer the ECI. The most current information about the toys and how to purchase them are located on our website at <http://www.igdi.ku.edu/measures/toys.htm>. Because toy manufacturers often modify toys and their costs, it is important to refer to the website for more specific information, including additional items you may add to the primary toys and how to purchase replacement items.

Set up either the Fisher Price Little People Farm or the Fisher Price Home Sweet Home (with the batteries removed) in the area selected for the assessment. Arrange the house or farm with the sides open so that the adult and child can see the toy and items inside. Arrange the toys in an inviting manner (e.g., set up table and chairs, put the animals in their stalls etc.). The toy should be placed on either the floor or at a table where there is room to play. The farm and the house should be rotated across assessment sessions to keep children interested in playing with the toys over time. To maintain comparable assessment situations across children and across assessment occasions, it is important to use only the listed farm and house (or older versions of these toys are also acceptable but make sure they are in good working order and that they have not been involved in any past manufacturing recalls). Substitutions may include using different ethnic dolls or rattles only.

Fisher Price Little People Animal Sounds Farm Cost: \$35.00 (approx.)

The Fisher Price Farm comes with an assortment of animals, a farmer, wagon, hay, etc. All of the items in the farm may be used. **NOTE:** Use the farm with the batteries removed.

In addition to the items that come with the farm, you may add:

1. A rattle (or something that shakes) with a face and head that moves and/or rolls that is appropriate for younger and older infants.
2. Add 3 Little People dolls (or similar dolls that fit in the farm) including female and males, children and adults that are multiethnic and multicultural, including, African American, Asian, Hispanic and Caucasian female and male dolls (see attached suggestions).
3. If you make more than one kit for the farm, you may alternate the Little People (or other dolls) so that 3 different dolls are included in each ECI barn assessment kit if possible.
4. Include one or more plastic Ziploc bags for transporting toys (keep away from children).
5. Box of antibacterial wet wipes to wipe down toys when session is finished (keep away from children).
6. A digital timer that has a large display and that can be set to beep at the end of 6 minutes.
7. A sports bag that fits all items to transport the assessment kit (different colors for each kit recommended).

2. Fisher Price Little People Home Sweet Home Cost: \$35.00 (approx.)

The house comes with an assortment of furniture, figures, potty, refrigerator, bed, etc. All of the items in the house may be used. **NOTE:** Use the house with the batteries removed.

In addition to the items that come with the house, you may add:

1. A rattle that rolls or moves, that has a face or looks like an animal or another figure.
2. Add up to 6 (3 – 6) Little People dolls (or similar dolls that fit in the house) including female and males, children and adults that are multiethnic and multicultural, including, African American, Asian, Hispanic, and Caucasian female and male dolls (see table).
3. If you make more than one kit for the house, you may alternate the Little People (or other) dolls in each kit as well as alternate rattles so that different figures and rattles are included in each kit.
4. Include one or more plastic Ziploc bags for transporting toys (keep away from children).
5. Box of antibacterial wet wipes to wipe down toys when session is finished (keep away from children).
6. A small digital timer that has a large display and that can be set to beep at the end of 6 minutes.
7. A sports bag that fits all items to transport the assessment kit (different color for each kit recommended).

Some recommendations for multiethnic figures to add to each kit:

We have included some recommendations for Fisher Price Little People figures to be included in the farm and house. These are just suggestions. Toy manufacturers change inventory with some frequency so some of these numbers may not correspond to toys currently available. If you have a source for multiethnic dolls or figures that fit into the barn and house and that are appropriate for infants and toddlers (no small parts that come off, made of a material that can be wiped off) they may be substituted.

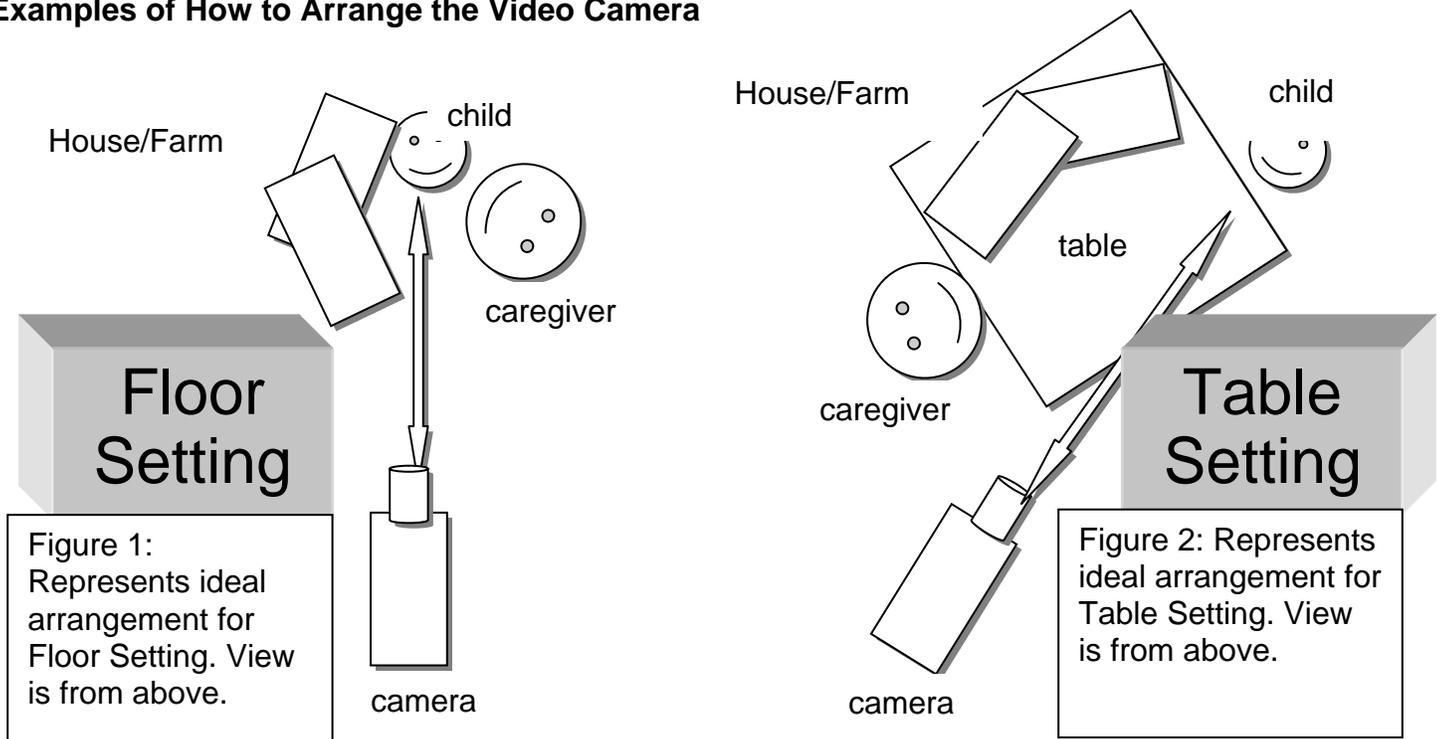
Note: This list is not complete and we cannot guarantee that stores will have these in stock or that Fisher Price will continue to carry these specific items. Fisher Price changes their figures so check their website or your local department store for additional figures.

Video Camera

Follow protocol to set up the camera properly. Stay as still as possible as to not distract the child or assessor. If the child leaves the area to play somewhere else, keep the child in the viewfinder while they are encouraged to return to the play area. The camera should be set up on a tripod and focused on the child and toy. Zoom the view so that faces of the child and play partner are in full view as is the play situation if possible. Using the tripod and the zoom focus will ensure a steady view later when recording. Check the viewing and sound quality. If possible, have a parent or another person manage the video camera. If another person is working the camera, that person should not interrupt the session but they can help to signal when the session is over. If you are videotaping the session on your own, set up the camera, start recording, join the child and state, "Start" to record a voice marker for the beginning of

the timing and state, “Stop” to mark the end of the session.

Examples of How to Arrange the Video Camera



Warm Up

With a new child (first time for assessment), spend time with the child in their child care classroom or home. Join in the child’s play with a familiar caregiver to help the child become comfortable with you and for you to become a “familiar” play partner. Be positive and enthusiastic with the child.

After the child is comfortable with you, let the child know that you have fun toys to play with and that you would like to play with the child and the toys. Describe to the child what you do with him/her as you are doing it (i.e., “We are going to see the toys,” or “You can sit in this chair and we can play with these toys”). The familiar adult can come with you to the assessment room if necessary to comfort the child.

Administration (Play) Instructions

The adult should play with the child in a way that encourages interaction with the toy and the adult. If the child becomes distressed, the assessment should be stopped until the child is interested in continuing or postponed for another time. If the child becomes interested in another toy or activity, try and bring the child back to the ECI assessment session by talking about the toys in the farm or house and that they can play with that other toy after they finish playing with you.

Hints for playing with the child:

- Follow the child's communicative lead (play with and talk about things that interest the child). Play with toys or talk about new topics if the child does not become engaged with the toys, or becomes disinterested in the toys.
- Comment about what the child is doing, or describe what you are doing.
- It is OK to ask some questions, however, using questions should not be the primary manner of interacting with the child.

Ending the ECI Play Assessment

When the 6-minute session has elapsed, stop recording the session and let the child know that it is the end of the play session. Begin assisting the child to end their play with the toys (this may take a minute or two so that the child does not feel rushed). Thank the child for playing. If the child becomes upset at having to leave the toys or the play session, mention that he/she will be able to play with the toys another day, but now he/she is going to go back to his/her classroom to play with friends, or back to their activities at home. We recommend that you have another toy ready for the child to play with at the end of the session.

Clean Toys

Wipe down all toys after each session and table area using an antibacterial disposable towelette. This should be done after every use. It is recommended that you wait until the child is engaged in another activity or taken back to their classroom before cleaning the toys.

Modifications for Children with Sensory Impairments

Some modifications may need to be made for children with physical disabilities, visual impairments, or hearing impairments. The suggestions listed here are just suggestions, and should not be considered the only modifications that can be made to the format. The important component is to arrange the toys to encourage communication that occurs in a play format. However, the Fisher Price Farm and House should be used.

For children with physical disabilities, you may want to modify how the toy is placed before the child: the toy can be moved closer; the child propped up in a way that allows best access to the pieces; or the adult may do more of the physical movement of the toys (e.g., the child wants the farmer to drive the tractor but cannot get the farmer onto the tractor and move it, so the adult moves the farmer at the child's request and then has the farmer drive the tractor where the child directs).

For children with visual impairments, you may want to orient the child to the toy. You may familiarize the child with each of the toy pieces (allow him/her to touch each one), and then show the child the different rooms/parts of the play set (e.g., hay loft and stalls in the farm, or table and chairs in the house). Tell the child where you have placed each of the toys for him/her to pick up or touch, and be more active in bringing toys within the child's reach. You could change toys in each play set to include animals that can be distinguished from one

another by feel (some animals feel generic, but others are more proportionate – pigs are much smaller than cows and have tails, hooves, etc. that may be distinguished by touch.

For children with hearing impairments, you may position yourself so you do not sit beside the child, but across the toy to allow each of you to see each other easily for using sign language or lip reading to communicate. If the child uses a hearing aide or audio trainer, position yourself so the child can best hear what you are saying or see you sign, or watch your lips.

The ECI may be given to children who speak English as a second language or who speak another language as long as the play partner and the person coding speak the same language as the child and are able to understand the child's initiations and responses. The norm sample includes some children with English as a second language. A note should be made in the child's file that they have English as a second language.

No matter what modifications are made, the focus of the assessment should remain on encouraging the child to play and communicate with the adult play partner. Modifications that are made should be noted for each child so that other assessors will make similar modifications in subsequent assessments.

Reproduction of this Manual for purposes other than training or learning how to use the ECI requires permission of the developers. Please contact: Dr. Dale Walker (Walkerd@ku.edu) or Dr. Jay Buzhardt (jaybuz@ku.edu) or voice: 913.321.3143.

ECI Administration Checklist

Trainee _____ Date: _____ Tape: _____

This checklist may be used to score the administration tapes for the ECI. To be certified to administer the ECI, the adult play partner should complete the administration steps to **at least an 81% (13 out of 16) criterion level.**

Setting up the ECI Administration Situation: Materials & Positioning

1. Adult play partner sets up the House or Barn prior to session.
2. The toys inside have been arranged to attract child's attention.
3. Barn or house is set up with sides open.
4. Adult and child are positioned so they can see and reach toys.
5. Adult Play partner and child can have eye contact.
6. Child is positioned appropriately for his/her developmental level (head, neck and feet supported as needed).
7. Session is timed

ECI Assessment Administration: Play Situation

8. Adult play partner follows child's lead in play situation.
9. Adult play partner comments about what child is doing.
10. Adult play partner describes what he/she is doing.
11. Adult play partner interacts in non-directive, friendly manner.
12. Adult play partner uses questions sparingly.

Ending ECI Session

13. Session ends exactly after 6 minutes have elapsed.
14. Adult play partner lets child know that it is time to stop.
15. Adult play partner thanks child for playing.
16. Adult play partner cleans toys (may be reported).

Administration Accuracy = [(Total Number of Steps Completed Correctly/16 Steps) x 100] = _____% (Need 81%)

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| 16 | | |
| Total | Yes | No |