Early Movement Indicator (EMI)

Administration Guidelines
Introduction

The Early Movement Indicator (EMI) assessment is designed to measure infants' and toddlers' emerging and developed movement skills. The specific key elements of movement measured are: Transitional Movements, Grounded Locomotion, Vertical Locomotion, Throwing/Rolling and Catching/Trapping. The frequency of each movement element is measured, and then the scores are added together for a total movement score. The EMI has two alternate forms (Blocks/Balls, and School House with balls), which involve the child playing with toys along with a familiar adult.

Setting up the EMI Testing Situation

The adult and child should be in an area that is comfortable for them to move and play with the materials. They can start out sitting or standing.

The child should have enough room to move around and play with the toys. Position the materials so the child can move around and explore the various toys. Make sure the child can see the various types of toys.

Positioning for children with mobility problems:

1. If the child is not completely mobile (very young children or children who have physical limitations), position the child on the floor near the materials so the child can move to reach them (i.e., reach out a hand, roll, scoot, crawl, walk)
2. If the child has severely limited mobility, position the child on the floor (on a clean blanket or rug) near the toys to encourage as much movement as possible. Bring toys closer to child if necessary. Do not prop child in a boppy or bolster as this will limit possible movement. If necessary, move toys slightly out of reach to encourage movement toward them.
   - make sure toys are in front of and within reach of the child
   - play partner should be able to have eye contact with child
Materials

Set the toys up in the area selected so the child can easily see and reach all the toys. When using the School House and Balls – open school house and scatter balls around it so child may see all of them (may place one inside the school house); also make sure you can see the openings and can see the children climbing through the toy on the camera. When using the blocks and balls, scatter them throughout the area where the child and adult will be playing. For younger children (i.e., 12-18 months or younger), you may use a rattle with either toy set. Rotate between alternate toy forms from one session to the next to maintain the child’s interest in the toys.

Video Camera

Set up the camera so the entire play area is in view – children may move around while engaged in play. If you have a separate video camera operator, he/she should 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 camera range. As the child moves and plays with the toys, the camera will need to be able to swivel to keep the child in the picture at all times.

Warm Up

With a new child (first test setting), spend a few minutes in the child’s classroom or daycare room. Join in the child’s play with the familiar caregiver to help the child become comfortable with you. Be positive and enthusiastic with the child.

After the child is comfortable with you, let the child know via the familiar adult or yourself that you have interesting toys and games to play with the child. Describe to the child what you do with her as you are doing it (i.e., “We are going to see the toys”). The familiar adult can come with you to the testing 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, testing should be terminated. The following directions can be used when the adult play partner is not familiar with all portions of the EMI assessment (this play partner can be a caregiver, teacher, or parent).

**Directions to adult play partner:** “We are interested in how (child’s name) moves. Use these toys to play with (child’s name) as you usually would. The session will last for 6 minutes.”

Hints for playing with the child:
- Follow the child’s lead (play with the materials that interest the child).
  Encourage new play with toys 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 the child to join you in your movement and play, just make sure you are not consistently directing the child in specific types of movement or play.
- Encourage the child to move without your support, but provide support when needed.

**Winding Down the Play Assessment**

Tell adult the time has elapsed. The adult can begin assisting the child to end their play with the toys. Thank the child (and adult) for playing today. If the child becomes upset having to leave the toys, 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.

**Clean Toys**

You will need to clean the toys so you may use them with other children, wipe down all toys after each session using antiseptic moist disposable towelettes according to the directions of the towelettes. If there is more time between assessment sessions, you can clean the toys using bleach/water solution (1 tablespoon bleach to 1 quart of cool water) – let soak for 2 minutes, and left to air dry. Toys that are cleaned using antiseptic wipes should be cleaned using a bleach solution regularly.
Some modifications may need to be made for children with physical limitations, visual impairments, or hearing impairments. The suggestions listed here are general 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 movement that occurs in a play format.

For children with physical limitations, you may want to modify how the toys are placed before the child: the toys can be moved closer or the child positioned on the floor in a way that allows best access to the pieces.

For children with visual impairments, you may want to orient the child to the toys each session, or provide several weeks of introduction to the different toys and then start assessments. You may also want to introduce the child to each of the toy pieces and parts of the toy sets (allow him/her to touch each part – e.g., school house, blocks, balls). 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. Set up play materials in a consistent arrangement from play session to play session to encourage safe movement.

For children with hearing impairments, you may want to position yourself 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 aid or audio trainer, position yourself so the child can best hear what you are saying.

No matter what modifications are made, the focus of the assessment should remain on encouraging the child to play with the adult play partner.