

## Learning Progression: *Coordination-Small Motor*

**Ways to Support Small Motor Coordination:** Provide children with opportunities to manipulate a variety of items such as stringing beads, lacing, buttoning, and zipping. Make construction toys available such as Legos and blocks. Encourage children to cut with safety scissors, draw and color with a variety of tools, play with puzzles, explore musical instruments, turn book pages, copy and trace shapes, practice emergent writing, and complete mazes or dot-to-dot activities. Play with wet sand or other media. Mold, squeeze, and roll clay or dough.

### Data-Driven Decision Making Directions:

- 1. Gather** information by observing and interacting with the child to learn how they demonstrate *small motor coordination*.
  - Gather information across at least three different sessions. A session can include a particular situation (e.g., signing in), location (e.g., creative arts area) and/or an activity (making a “Book About Me”).
  - Talk with family members and/or other caregivers about ways the child demonstrates *small motor coordination* at home or in the community.
  - For additional information, see Key Terms and Additional Supports.
- 2. Document** a child’s small motor coordination on the recording form. Watch how the child manipulates and moves different objects and tools. Also pay attention to the child’s writing tool grasp.
  - Include a brief description of the session, including the date and activity name, situation, or location of the observation/interaction.
  - Place a tally mark in the Session column each time a child demonstrates one of the listed behaviors.
  - Use the Notes column to add important details. For example, under *Tool and Object Manipulation* make note of observations such as eye-hand coordination, size of tools manipulated, use of both hands vs. one or the other. Under *Writing Tool Grasp*, make note of the fingers used; the degree of web space between the index finger and thumb; the role of the child’s hand, wrist, elbow, and shoulder; and note if the child’s “writing” is fluid.
  - For additional information, see Key Terms and Additional Supports.
- 3. Summarize** the information narratively.
  - Review the data recorded across the different sessions. Briefly describe what was manipulated (the types of objects), how they were manipulated (which fingers, which hands), and the degree of accuracy.
  - For additional information, see Key Terms and Additional Supports.
- 4. Analyze** the information on the recording form and any additional information you may have gathered from other sources such as interviews with families or caregivers, other relevant assessments, or interactions with the child. Look for patterns and trends, by asking questions such as:
  - Is the child able to manipulate a variety of objects? Which ones? How much support/what kind of support, if any, does he/she need?
  - How does the child grasp a variety of tools? Does he/she use a consistent grasp when holding scissors? Writing tools? Other tools such as paintbrushes?
  - For additional information, see Key Terms and Additional Supports.
- 5. Interpret** by drawing conclusions about the child’s knowledge and skills related to *coordination-small motor*.
  - Draw conclusions using the information you analyzed in the step above.
  - Use conclusions to rate the child’s performance on the *Coordination-Small Motor Learning Progression*.

## Small Motor Coordination Recording Form

Child's Name: \_\_\_\_\_ Observer(s): \_\_\_\_\_ Dates: \_\_\_\_\_

**Directions:** Place a tally mark in the Session column each time a child demonstrates one of the listed behaviors. Use the Notes column to add important details.

Child's Behaviors	Observations/Interactions			
	Session	Session	Session	Notes
<b>Tool and Object Manipulation</b>				
Manipulates objects with both hands at same time (e.g., uses rolling pin)				
Manipulates objects with hand crossing middle of the body (e.g., passing napkins, sorting coins)				
Manipulates object with one hand, while the other hand holds or steadies object (e.g., cuts paper in half, pours from one container into another)				
Manipulates objects using both hands, each performing different actions (e.g., cutting out shapes with curved lines, playing the guitar)				
Demonstrates eye-hand coordination (e.g., brushing, catching, writing)				
<b>Writing Tool Grasps</b>				
<i>Grasp A</i> <i>Use of Fingers:</i> Grasps with <b>whole</b> hand (i.e., palm, fingers, and thumb); Palm can face left or right, and fingers and thumb wrap around the writing tool and/or fingers and thumb hold the top of the writing tool <i>Web Space:</i> <b>Little to no space</b> is visible between index finger and thumb <i>Movement:</i> Movement of writing tool comes mostly from the <b>shoulder</b>				
<i>Grasp B</i> <i>Use of Fingers:</i> Grasps with <b>two fingers and thumb or three fingers and thumb</b> ; Fingers and thumb are not mobile <i>Web Space:</i> <b>Some space</b> is visible between index finger and thumb <i>Movement:</i> Hand and fingers work as <b>one unit</b> to move the writing tool				
<i>Grasp C</i> <i>Use of Fingers:</i> Grasps with <b>two fingers and thumb or three fingers and thumb</b> ; Fingers are flexed and mobile; thumb is used to stabilize <i>Web Space:</i> <b>Some space</b> between index finger and thumb, tool may <b>rest</b> in that space <i>Movement:</i> <b>Fingers and thumb</b> move the writing tool, wrist is relaxed, and forearm may rest on surface				
<i>Grasp D</i> <i>Use of Fingers:</i> Grasps with <b>two or three fingers and thumb</b> ; Fingers move independently from the hand; Ring finger and little finger curl gently into the palm; Writing tool is held closer to the pointed end (nib) <i>Web Space:</i> Space between index finger and thumb is <b>larger</b> , more <b>circular</b> <i>Movement:</i> Movements come from the <b>fingertips</b> ; the hand, wrist, elbow, and shoulder are stabilized				

Summarize Child's Behaviors

Analyze Patterns and Trends

## Key Terms and Additional Supports

### Key Terms:

- **Eye-hand coordination:** When a child uses his/her eyes to guide his/her hand(s) to complete tasks related to daily life skills, playing sports, as well as reading and writing
- **Manipulation:** Uses hand or hands to act upon and/or to activate (e.g., by opening, closing, stirring, rotating, pouring, tearing, steadying, dipping, stringing, spreading, turning, stacking, turning, pulling)
- **Additional manipulation examples:**
  - **Manipulates objects with both hands at the same time** (e.g., closing a lid using both hands, folding paper in half, pulling snaps apart)
  - **Manipulates objects with hand crossing the middle of the body** (e.g., dealing cards, turning pages of a “Big Book”)
  - **Manipulates object using one hand, while the other hand holds or steadies an object** (e.g., dipping brush into paint can, stirring a pot of pretend soup, holding jacket and unzipping, holding a block and stacking another, scooping sand into a bucket)
  - **Manipulates objects with both hands, each performing a different action** (e.g., threading and zipping zippers, tying laces, stringing beads, removing wrappers)

### Support for Documenting:

- **Examples of writing tool grasps:**

Examples of Grasp A	Examples of Grasp B	Examples of Grasp C	Examples of Grasp D
			
			
			

### **Support for Summarizing (Alternatives)**

- **Numerical summary idea:** Generate a numerical summary of the total number of times a child chooses to write/draw each day and/or calculate the total number of times a child struggled when writing and the types of errors that were produced.
- **Visual summary idea:** Create a bar or pie graph to illustrate number of objects across sessions and types of actions primarily used to manipulate objects. Capture children's manipulation of objects (including writing tools) in photos and/or video.

### **Support for Analyzing (Identifying Patterns and Trends)**

- **Patterns** are behaviors that repeat in predictable ways. For example, does the child demonstrate a wide variety of small motor coordination behaviors? Are there tools that the child manipulates easily? Are there others that are more difficult for the child to manipulate? Does the child need adult support in order to manipulate tools?
- **Trends** are the general direction that something is headed. When looking at the way a child demonstrates behaviors for this Learning Progression, ask questions such as: Is the demonstration of skills increasing, decreasing, or staying the same? Was the child's ability to grasp writing tools or manipulate objects very different from one observation to the next, or relatively consistent? What does the child's "typical" performance look like?