

Early Childhood Indicators of Progress: Minnesota's Early Learning Standards

Introduction to Physical and Movement Development Domain



"I'm eight-months-old and I'm pushing myself up on my hands and knees and rocking myself back and forth. My care provider, Ellen, knows that I need many opportunities for tummy time in a space that is safe and inviting so that I can feel motivated to propel myself forward until I am crawling. She stays nearby encouraging me as I figure out how to use my body to move. I'm excited and happy as she claps and smiles and enthusiastically urges me on. She's been letting me hold items while she changes my diaper and dresses and undresses me, too. I like grasping the fresh diaper or holding on to a sock that I know I'll be wearing shortly. I can pick up some of my own food off of my tray if I concentrate on using my thumb and fingers together. When I get the food to my mouth, I clap my hands together just like Ellen does. When she holds me in her lap to read a book, she lets me turn the pages and point to my favorite pictures. When I squirm to get down, she helps me to stand for a minute or two with her hands in mine. I can feel the strength growing in my legs as I support myself. I'm learning to do so many things with my body!"

Early childhood is a time for incredible changes in children's physical development. In gross motor development, infants begin as non-mobile beings, and in a matter of months, most creep, crawl, stand, and walk. Toddlers develop balance and coordination as they run and jump and climb. Preschoolers refine their movements and learn to use their large muscles to move with purpose and intent, to catch and throw, and to coordinate as they climb and gallop. Children's use of the muscles of their hands and fingers (fine motor development) continues to develop as they learn to feed and dress themselves and using drawing, writing, and other tools.

With widespread concerns about obesity among children and more sedentary lifestyles in general, there is agreement that rigorous physical development is essential for children's overall health. Researchers are finding direct links between how active babies are and how their brain development is affected.

"In infancy, you can see the relationship between a baby's motor development and the resultant learning. As a baby moves from a lying to a sitting to a creeping and finally to a standing position, his perspective changes, as do his perceptions of the world and its possibilities. The more mobile he becomes, the more he increases his knowledge about himself and the people and things around him, acquiring information through his tactile (touch), kinesthetic (muscular), proprioceptive (body awareness), and vestibular (motion awareness) senses. With each new experience, new neural connections are made." (Pica 2010, 48)



The expectations that are set out in the Physical and Movement Development Domain of the Early Childhood Indicators of Child Progress (ECIPs) show the ways that children demonstrate physical capabilities at different ages. The indicators in this domain are written in such a way that teachers and providers can know appropriate expectations for young learners and understand how best to support children in their development related to physical development. There is no alignment with the indicators in this domain with the Minnesota Academic Standards for Kindergarten because there is no similar domain in K-12 Standards.

The Physical and Movement Development Domain includes two components:

Component P1-4 Gross Motor

Component P5-6 Fine Motor

The subcomponents and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus on the ways that children that young infants move both involuntarily and with purpose, how they begin to move through space, and how they reach and grasp and use their hands and fingers.
- The indicators for toddlers include how they are beginning to walk, climb, run, and jump, to roll, push, and throw balls, to use their hands and fingers to manipulate books, crayons, blocks, and other items, and to participate in dressing and personal hygiene.
- The indicators for preschoolers focus on how children show their increasing coordination and balance as they walk, run, climb, hop, jump, and gallop, kick, throw, catch, and bounce balls, and use their hands and fingers to manipulate puzzle pieces, to draw and write, and to put on articles of clothing.

The skills and concepts in the Physical and Movement Development Domain are interrelated with children's development in other domains. There are direct consequences to brain development for infants and ongoing connections to active movement and general health for all children. The physical health of a child is an important component for the optimal development of the whole child and impacts learning, social and emotional well-being, and realization of the child's full potential.

Working closely with children and their families to advocate for an active, healthy lifestyle leads to supports for the development of children's gross and fine motor skills in programs and at home.

"By showing children the natural connections between all areas of learning and development and the activities they do at school and at home, [early educators can help] young children see themselves as learners and movers. This requires mutual cooperation and support among teachers, families, and children. After all, it takes a whole village to raise a healthy child." (Schilling and McOmber 2006, 2)

Resources:

Pica, Rae. 2010. "Babies on the Move." Young Children. 65, no. 4: 48-50.

Schilling, Tammy and Kelly Anne McOmber. 2006. Beyond the Journal: Young Children on the Web. May. Washington, D.C.: NAEYC.

Domain: Physical and Movement Development

Component P1- 4: Gross Motor

Subcomponent		0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
<p>P1 Early infancy - reflexive movements: Child moves involuntarily: not purposefully initiating movement</p>		<p>P1.1 Laying on back, kicks legs and waves arms</p> <p>P1.2 Laying on tummy, holds head up</p>				
<p>P2 Early infancy movement In and out of position: Child moves voluntarily and purposefully</p>		<p>P2.1 Rolls over: tummy to back/back to tummy</p> <p>P2.2 Moves into/out of sitting</p>				
<p>P3 Locomotion: Childs moves their body through space from one place to another</p>		<p>P3.1 Crawls by one of these methods:</p>	<p>P3.5 Crawls up a few stairs with adult observing</p> <p>P3.6 Walks independently</p>	<p>P3.8 Crawls up 3 to 5 stairs</p> <p>P3.9 Walks on some</p>	<p>P3.14 Crawls under and around 3 or more objects in an obstacle course</p>	<p>P3.21 Walks on a wide (12>) slightly raised pathway</p>

Subcomponent		0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
		<p>-On tummy using arms/legs (tummy/commando)</p> <p>- Two straight arms and one bent leg (3-point),</p> <p>- Scoots instead of crawls: from a seated position by pushing forward with legs (bend & straighten)/arm assist</p> <p>P3.2 Pulls to <i>stand</i> up against furniture</p> <p>P3.3 Cruises along surfaces (e.g., low tables, chairs, shelves)</p> <p>P3.4 Walks with assistance</p>	<p>P3.7 Runs freely</p>	<p>different surfaces</p> <p>P3.10 Walks up and down a few stairs with adult support or holding handrail (step up on stair, then brings next foot to same stair)</p> <p>P3.11 Runs in games and freely</p> <p>P3.12 Climbs onto/off furniture</p> <p>P3.13 Jumps with two feet <i>over</i> a line</p>	<p>P3.15 Walks along a wide (12" >) slightly raised straight pathway with assistance</p> <p>P3.16 Walks up and down a few stairs with adult support or holding handrail using alternating feet (step up on stair one foot, then use other foot to go to the next stair)</p> <p>P3.17 Climbs on play equipment</p> <p>P3.18 Hops on one foot a few times</p> <p>P3.19 Jumps <i>off</i> slightly elevated height with two feet</p> <p>P3.20 Jumps with two feet</p>	<p>P3.22 Walks up and down stairs holding handrail</p> <p>P3.23 Jumps off variable heights using a one-foot lead or with two feet</p> <p>P3.24 Gallops freely or in a game (one foot and a step-hop, other foot and a step- hop)</p> <p>P3.25 Moves many times through an obstacle course: over, under and around</p>

Subcomponent		0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
					<i>over and out of</i> spaces or objects on floor ("river" w rope or tape markers/hula hoops)	

Component P4: Gross Motor continued

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
P4 Object control: Child can manipulate objects to propel or receive		P4.1 Pushes and pulls toys while walking P4.2 Throws small balls	P4.3 Pushes medium size ball forward with foot P4.4 Rolls a small ball to close target P4.5 Throws a small ball close to target P4.6 Pushes with legs while sitting on a scooter or balance bike	P4.7 Kicks a medium-sized ball P4.8 Throws a large playground ball using two hands P4.9 Catches a large or medium ball by cradling in arms toward body P4.10 Peddles a tricycle or riding toys	P4.11 Kicks playground ball or small soccer ball to a close wide target P4.12 Throws a small ball with some accuracy to a target or person P4.13 Catches a large or medium-sized ball using two hands P4.14 Bounces and catches a playground ball a few times using two hands P4.15 Attempts to pump legs to swing on swing

Component P5-6: Fine Motor

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
<p>P5 Dexterity: Child can coordinate and control movement of hands and fingers to grasp and manipulate objects</p>	<p>P5.1 Reaches for toy, grasps it and releases</p> <p>P5.2 Grasps small food objects using finger and thumb</p> <p>P5.3 Transfers object from one hand to other hand</p>	<p>P5.4 Grasps toys, objects to release into container</p> <p>P5.5 Dumps out toys and objects from a container</p> <p>P5.6 Turns pages of a board book</p> <p>P5.7 Begins to grasp crayon to scribble</p> <p>P5.8 Stacks a few blocks</p>	<p>P5.9 Turns pages of a book</p> <p>P5.10 Grasps a crayon to scribble</p> <p>P5.11 Stacks 4 blocks</p>	<p>P5.12 Grasps a simple puzzle piece and can place a few pieces in the puzzle</p> <p>P5.13 Draws freely on paper</p> <p>P5.14 Strings large beads</p>	<p>P5.15 Grasps puzzle piece and can place 5-7 pieces in the puzzle</p> <p>P5.16 Draws letters and/or part of name with some reversals</p> <p>P5.17 Draws stick people and some objects</p>

Component P5-6: Fine Motor

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
<p>P6 Self Care: Child participates in daily care routines for feeding, dressing and personal hygiene</p>	<p>P6.1 Assists with dressing by lifting leg, arm, etc.</p> <p>P6.2 Feeds self with hands</p> <p>P6.3 Begins to drink from a cup</p>	<p>P6.4 When being dressed or undressed, assists with some clothes</p> <p>P6.5 Feeds self with hands and begins to use a child-size spoon</p> <p>P6.6 Drinks from a cup</p> <p>P6.7 Helps put away a few toys</p>	<p>P6.8 Attempts to dress self for indoors with support (help with buttons and zippers)</p> <p>P6.9 Helps put away toys</p> <p>P6.10 May use the bathroom with assistance</p>	<p>P6.11 Assists with putting shoes on and taking them off</p> <p>P6.12 Assists with putting boots on and taking off</p> <p>P6.13 Puts on coat and takes coat off with assistance</p>	<p>P6.14 Dresses with near independence</p> <p>P6.15 Puts shoes on the correct feet. May need help with ties and fasteners</p> <p>P6.16 Puts boots on correct feet and takes boots off. May need help with ties and fasteners</p> <p>P6.17 Puts coat on and takes off</p> <p>P6.18 Uses the bathroom independently</p>