



Crawling, Walking, Running!

Supporting physical development in babies
and toddlers

12-month-old Alicia is in the park, where her mother has taken her to sit and crawl in a large grassy field. Suddenly, Alicia grabs onto the grass in front of her, pulls herself forward, and rises up onto her two legs. Alicia's mother is amazed at her daughter's sudden ability to stand—she has always been a quiet and somewhat inactive baby. Later that evening at home, Alicia again pulls herself to a stand. To her parents' surprise and delight, she begins taking cautious steps. Within a week, Alicia is walking everywhere, and her parents scratch their heads over how quickly she was able to learn to stand and then walk.

Parents, caregivers, and teachers often report sudden bursts of physical development in young children. One moment a child is crawling or creeping; the next, she is up and walking and even running. A careful look at toddler motor development, however, reveals that walking and running abilities actually take a long time to develop. Although motor milestones seem to miraculously emerge, achieving these milestones involves many small stages of learning and development along the way. One of the best examples of this gradual progress toward motor competence is the way children learn to walk.

Foundations of walking

Babies are hard-wired for walking, and this can be seen shortly after birth. Most newborns will engage in “stepping” behaviors if an adult holds them up so that their feet touch the floor or another flat surface. It was once believed that this was purely a reflex. However, new studies suggest that babies move deliberately based on what they see—for example, they are more likely to move their legs in a stepping action when they see the ground passing under their feet. Already their bodies and brains are getting them ready for walking. Adults can influence the development of these abilities. Babies who spend more of their awake time on their stomachs on the floor, unrestricted by baby seats or playpens, will more quickly learn the skills they need to walk. Those who come from families and cultures where walking is actively encouraged will also receive better preparation for walking during their first year of life.



Setting the stage for walking: the role of adults

Teachers and caregivers can do much to provide babies with opportunities to develop the skills they will need for learning to walk later on.

- **Avoid restricting babies' movements:** A baby who is confined to a seat or playpen is restricted in his movements—he has less opportunity to develop his motor skills. Adults should limit the use of walkers, exersaucers, playpens, jumpers, swings, baby seats, high chairs, and other furniture and equipment that limits babies' movements. To address safety concerns, adults can child-proof rooms as much as possible and block off unsafe areas with baby gates.
- **Set up the environment for movement:** Adults can encourage babies to develop the muscles needed for later walking by providing safe, engaging play environments where babies can crawl or “cruise” freely around the room. Providing babies with toys that produce an interesting sound or visual effect when moved—such as rattles or scarves—encourages movement in babies who are not yet moving around the room. Adults may also consider attaching large bells or other toys to a bar that an infant can kick with her feet while lying on her back.
- **Move with babies:** Giving babies opportunities to feel the sensation of motion helps them to understand how bodies move through space. Adults can help this understanding develop by taking babies for walks, rocking them, dancing with them, or holding them facing outward and moving about. These motion activities are especially useful if the infant's legs are free to move.
- **Plan “tummy time”:** Placing babies on their stomachs to play helps them build up the chest and arm strength that they'll soon use in crawling. Adults can encourage babies to develop these muscles by placing interesting toys within reach and by responding with enthusiasm to babies' efforts to lift their heads, reach for objects, push up on their hands/elbows, and begin to crawl or creep.
- **Support early walking attempts:** Adults can encourage early attempts at walking by setting up the room to support “cruising” (walking around the room while holding on to furniture). By strategically placing two pieces of furniture near each other, but just far enough away so that a child must take one “unsupported” step to move between them, adults can encourage children to move from one stage of early walking to the next stage.

Away they go!

Once children take their first steps, they are considered to be “toddlers.” This suggests that infancy and toddlerhood are separate, clearly defined stages—children can either walk, or they can't. In fact, even after children can walk, their walking and running behaviors continue to develop in small increments. It is important that adults are aware of the more subtle accomplishments of early walking when they are observing and assessing children's motor development. Children just learning to walk use a stride that is unsteady and variable; they may use a very long stride with one step, a short stride with the next step. It is as if they are experimenting to find just the right length of step to keep them from falling down. In contrast, the width of their strides is very consistent. They are not as capable at narrowing or widening

their step in response to different walking conditions. Adults can study the consistency of stride length and width to determine how well toddlers are progressing in their walking and running. If children are using more consistent strides and are varying stride width, parents and teachers can conclude their motor development is on track.

Toddlers also become more skillful in walking on different kinds of surfaces as they develop. For example, they learn to adjust their stride and use “braking behaviors” when walking or running down a hill. They acquire greater muscle strength and coordination to allow them to walk on surfaces of different textures and characteristics. They also begin to think about their walking and other motor actions. For example, toddlers have been found to modify how they walk across a bridge, depending on its characteristics. If a bridge is wide, they walk or run across with confidence. If it is narrow, they move slowly, take short strides, and use handrails.

Supporting walkers and runners

Teachers and caregivers play an important role in supporting toddlers’ walking and running abilities. They can encourage toddlers to take safe risks that will challenge them. As with younger infants, adults can also create challenging, engaging, and safe play spaces for toddlers that are free of restrictive equipment, such as walkers. The following are some ways adults can support walking and running skills in centers and homes:

- **Set up obstacle courses:** Obstacle courses help build toddlers’ walking skills by giving them new movement challenges. Adults can design simple obstacle courses by using pillows, blankets stretched over two tables, mats, hula hoops, and other inexpensive materials for toddlers to walk over, around, or under.
- **Provide active movement experiences every day:** Walking and running abilities are directly related to the number of steps children take in play at home and in child care. Adults can make sure that children have opportunities to go outside every day. If the weather is bad, adults can dance with toddlers or set up indoor obstacle courses to encourage active play.
- **Provide play spaces with varying surfaces:** Toddlers will master walking and running skills more quickly if they can experiment with walking on different types of surfaces. Adults can encourage toddlers to walk on soft mats and pillows on the floor, in addition to giving toddlers the chance to walk on grass, hard floors, and carpeting.
- **Encourage risk-taking:** Adults can encourage toddlers to try new things to build their movement skills. Giving toddlers the opportunity to walk or run up and down hills, to jump onto a soft mat, and to walk across a makeshift “bridge” builds toddlers’ confidence in their own abilities—especially when adults respond to their efforts with enthusiasm. Teachers and parents who carefully watch toddlers to see what they can already do will be the most successful in setting up challenges that stretch children’s abilities just above their current level of locomotor ability.

Additional Resources

For more information about supporting children’s physical play, including videos with ideas you can try in your own classroom, visit www.easternct.edu/cece.

For references, visit: www.easternct.edu/center-for-early-childhood-education/about-us/publications.html

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