Critical Concepts of Physical Growth and Motor Development

Critical Concept 1

Significant changes in physical growth and motor development occur in the preschool years. Children get taller, stronger, and more coordinated. They acquire gross motor skills (abilities to use the large muscles) and fine motor skills (small-muscle abilities) in a predictable sequence.

Application #1 Teachers, caregivers, and parents should provide opportunities for preschoolers to exercise large muscles every day. Areas should be created in classrooms to ensure active play even in inclement weather. These might include low climbers, tossing games, a balance beam, and any other equipment that will fit well in a classroom.

Application #2 Preschool children should be engaged in games that involve running and walking, such as open-ended chasing on the playground, tag, follow-the-leader, and giant steps.

Application #3 Climbing equipment should be provided on preschool and child care playgrounds. Safe playscapes with platforms children can jump off of will promote important motor skills.

Application #4 Preschool children should be given toys for catching and throwing, such as soft, large balls, beanbags, and other objects, both in the classroom and on the playground.

Application #5 Balance materials should be available for preschool-age children. Low balance beams, tires, and lines on the sidewalk or classroom floor are examples.

Application #6 Teachers and caregivers should appreciate the importance of rough-and-tumble play. Safe areas for rough play, such as soft mats and grassy hills, can be identified. Rules for rough-and-tumble play, such as taking your shoes off when wrestling on the mat, can be instituted. Careful monitoring will ensure that rough play does not lead to injury.

Application #7 Teachers and caregivers can offer preschoolers a range of small motor experiences in the classroom. Fine motor development is promoted by art activities such as drawing, painting, sculpting, cutting, and making collages and materials such as blocks, puzzles, books, stringing beads, and felt boards.

Critical Concept 2

Children's motor development varies across cultures. Children in some cultural groups acquire certain abilities quickly, others more slowly. How newly learned motor behaviors are used also differs significantly across cultures. Motor play reflects differences in family life and historical tradition; some children play tag, others fly kites, and still others chase sheep or chickens. All of these activities promote the same basic motor abilities.

Application #1 Teachers and caregivers must understand and appreciate cultural differences in motor development. They must recognize that some children will be more rough or active and that others will be quieter or less motorically advanced. Care must be taken not to construe these differences as deficits.

Application #2 Teachers and caregivers can create a multicultural motor curriculum in the classroom by interviewing families about motor activities and games played in the home. This information can be used to integrate traditional games of diverse cultural groups into classroom play activities. Children will gain motor skills as well as cultural understanding when playing such games.
Critical Concept 3

Emerging fine motor abilities lead to the development of preschool children's art. Their drawing evolves from simple scribbles to representational people and full scenes. Research on early childhood programs in Reggio Emilia, Italy, suggests that children can express themselves artistically at a very early age. Children from this community have been found to use art media in very sophisticated ways to represent what they have learned. This is due to the special value placed on art in this culture and the unique teaching methods used.

Application #1 Teachers and caregivers should integrate the arts—including drawing, painting, and sculpture—into all learning activities and projects.

Application #2 More time should be given for the completion of art projects. Children should be encouraged to work on some representational activities for days or even weeks. Making many drafts of a single artwork should be encouraged.

Application #3 Collaborative artistic experiences should be provided. Children should be encouraged to engage in collective representations with peers, parents, and teachers.

Application #4 Panels documenting children's artistic representations should be displayed attractively on classroom walls. Children and parents should be encouraged to study these panels to assess development and learning.

Critical Concept 4

Girls and boys show different patterns of physical growth and motor activity. Some of these differences are related to genetics, others to experience.

Application #1 Teachers and caregivers must understand and appreciate gender diversity in motor play. Differences in activity level, accuracy or strength in movement, and play preference must not be construed as deficits that need to be remediated.

Application #2 Girls and boys must be afforded the same motor play opportunities. All children should be encouraged to be active in the classroom and on the playground. Care must be taken not to unintentionally promote stereotypic play.

Critical Concept 5

Advancements in motor development allow preschoolers to perform self-help skills and family chores. The kinds of family tasks young children will be assigned vary by culture. Children of European or American families are often given simple tasks, such as straightening their own rooms or helping wash dishes. In nonindustrialized countries, they may be asked to garden, herd livestock, and care for younger siblings.

Application #1 Teachers and caregivers can plan classroom activities around caring for oneself and helping family members with chores. Children can be encouraged to reflect on ways they assist their family and friends. Such activities will inspire a desire to contribute to family life and the classroom community.

Application #2 Teachers and caregivers can plan daily chores to be assigned to all children in the classroom. Caring for plants and animals, cleaning up after snack, putting away blocks, or helping a friend with a puzzle will give children a sense of responsibility and belonging.
Critical Concept 6

Some preschoolers have challenging conditions that impair motor activities. Malnutrition can have a devastating effect on development, resulting in physical delays. Poor motor development can be remediated by nutritional and health services and early intervention.

Application #1 Teachers and caregivers must be aware of the characteristics of children who have physically challenging conditions and who suffer from malnutrition. Early identification of exceptionalities is one of the most important responsibilities of professionals working with young children.

Application #2 Teachers can support the motor play of children with special needs. They can adapt classrooms, equipment, and materials so that all children have access to games and activities. They can guide children with physical challenges in exercising small and large muscles.

Critical Concept 7

Early childhood education programs hold promise for ameliorating poor motor development. However, teachers and caregivers need to do more to enhance the quality and frequency of physical activity in school.

Application #1 Teachers must ensure that preschoolers get exercise every day. It is an incorrect assumption that children will get all the exercise they need after school at home or at child care.

Application #2 Many organized games must be redesigned so that all children are moving all the time while playing them. Games in which less competent children are quickly eliminated and have to sit out (e.g., musical chairs) or in which only one child at a time gets to run or play (e.g., duck, duck, goose) can be modified so that all players are exercising at once.

Source: Chapter 10: Preschool Physical and Motor Development