

CHildren in Action: Motor Program for Preschoolers (CHAMPPS)

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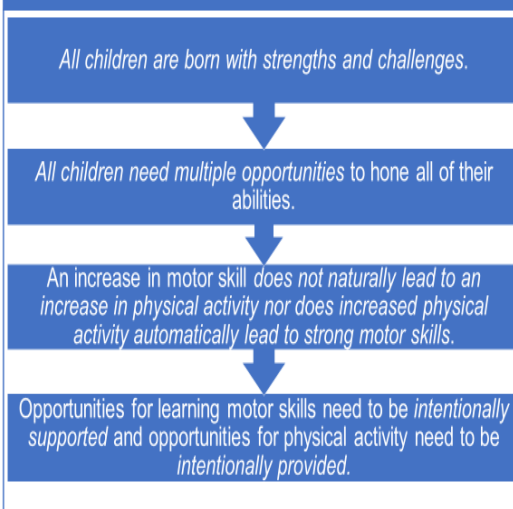
Current Preschool Landscape

Preschool motor experiences (recess, music/motor movement) often do not address the need for **intentional** strategies to support **motor skill development** and **physical activity level** in **all** children. Many preschoolers with disabilities have motor deficits and are educated in inclusive preschools.

Motor Play Supports School Readiness Skills



Motor Development and Physical Activity



CHAMPPS

A **class-wide preschool** motor program with lessons embedded with **universal design for learning** strategies, **music videos** and **large motor activities** to support children **with diverse abilities**.

- Addresses the **fundamental motor skills**: walk, run, balance, jump, catch, throw, strike & kick
- Increases **physical activity level**
- Reinforces **school readiness skills**: language, social, pre-academics, approaches to learning

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Unit Components



Sample Data

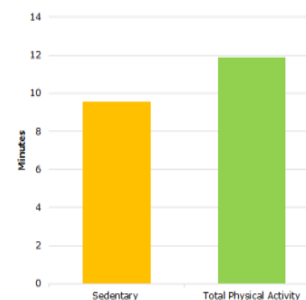
80 children: 33 with disabilities (behavior, communication, intellect)

Teacher Observations

Domain	Improvements Noted
Motor	Throw, catch, balance, kick, throw, visual tracking, grasp/release
Social	Social interactions, turn taking
Language	Positional words, vocabulary, language
Approach to Learning	Follow routine/directions, attention, participation, motivation, leadership
Pre-Academics	Letters, numbers, colors, animals, habitats, weather, seasons

Accelerometers

Unit 7: Kicking



Lesson Time
21 minutes

Physical Activity
12 minutes

Met Benchmark
(NASPE, AAP)
57% Physical Activity

CHAMPPS Observer Impression Scale (CHOIS)



References

- Brown, W. (2016). *Physical activity and young children with developmental delays* in S. Odom, B. Reichow, B. Boyd & E. Barton's Handbook on Early Childhood Special Education.
- Brown, W., Pfeiffer, K., McIver, K., Dowda, M., Addy, C., & Pate, R. (2009). Social and environmental factors associated with preschoolers' nonsedentary physical activity. *Child Development, 80*(1), 45-58.
- Burdette, H. L., & Whitaker, R. C. (2005). Resurrecting free play in young children: Looking beyond fitness and fatness to attention, affiliation, and affect. *Archives of Pediatrics and Adolescent Medicine, 159*, 46-50.
- Center on Education Policy (2008). *Instructional time in elementary schools: A closer look at changes for specific subjects*. Washington, DC: Author.
- Clark, J.E. (2005). From the beginning: A developmental perspective on movement and mobility. *Quest, 57*(1), 37-45.
- DEC/NAEYC. (2009). *Early childhood inclusion: A joint position statement of the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC)*. Chapel Hill: The University of North Carolina, FPG Child Development Institute.
- Elkind, D. (2007). *The power of play: How spontaneous, imaginative activities lead to happier, healthier children*. Cambridge, MA: Da Capo Press.
- Fantuzzo, J., Sekino, Y., & Cohen, H. L. (2004). An examination of the contributions of interactive peer play to salient classroom competencies for urban Head Start children. *Psychology in the Schools, 41*(3), 323-336. doi:10.1002/pits.10162
- Favazza, P.C., & Siperstein, G.N., (2016). Motor skills interventions for young children with disabilities. in B. Reichow, B. Boyd, E. Barton, and S. Odom (Eds.) *Handbook on Early Childhood Special Education*. In Press.
- Fedewa, A. L., & Ahn, S. (2011). The effects of physical activity and physical fitness on children's achievement and cognitive outcomes: a meta-analysis. *Research Quarterly for Exercise and Sport, 82*(3), 521-535.
- Horn, E.M., Palmer, S.B., Butrea, G.D., Lieber, J. (2016). Six steps to inclusive preschool curriculum: A UDL-based framework for children's school success. Brookes Publishing: Baltimore.
- Jones, R., Riethmuller, A., Hesketh, K., Trezise, J., Batterham, M., & Okley, A. (2011). Promoting FMS development and physical activity in early childhood settings: A cluster randomized controlled trial. *Pediatric Exercise Science, 23*, 600-615.
- Logan, S., Robinson, L., Wilson, A., & Lucas, W. (2011). Getting the fundamentals of movement: a meta-analysis of the effectiveness of motor skill intervention in children. *Child: Care, Health and Development, 38*(3), 305-315.
- MacDonald, M., Lord, C., & Ulrich, D. (2013). The relationship of motor skills and adaptive behavior skills in young children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 7*(11), 1383-1390.
- National Association for Sport and Physical Education. *Active start: A Statement of Physical Activity Guidelines for Children Birth to Five Years*. 2nd ed; 2002.
- NASPE (2010). <http://www.shapeamerica.org/advocacy/positionstatements/pe/>
- NASPE (2013). <http://www.shapeamerica.org/standards/pe/> to accreditation: Self-study validation accreditation. Washington, DC: Author.
- National Association for the Education of Young Children (NAEYC). (2003). *Early Childhood Curriculum, Assessment, and Program Evaluation: Building an Effective, Accountable System in Programs for Children Birth through Age 8*. Position Statement.
- National Center for Physical Development and Outdoor Play (2010). *From playpen to playground: The importance of physical play for the motor development of young children*. Head Start National Center for Physical Development and Outdoor Play.
- Oja, L., & Jorimae, T. (2002). Physical activity, motor ability, and school readiness of 6-yr.-old children. *Perceptual and Motor skills, 95*(2), 407-415.
- Piek, J. P., Dawson, L., Smith, L. M., & Gasson, N. (2008). The role of early fine and gross motor development on later motor and cognitive ability. *Human Movement Science, 27*(5), 668-681.
- Provost, B., Lopez, B., & Heimerl, S. (2007). A comparison of motor delays in young children: Autism spectrum disorder, developmental delay, and developmental concerns. *Journal of Autism & Developmental Disorders, 37*(2), 321-328.
- Riethmuller, A., Jones, R., & Okely, A. (2009). Efficacy of interventions to improve motor development in young children: A systematic review. *Pediatrics, 124*(4), 782-792.
- Trawick-Smith, J. (2010). *From playpen to playground: The importance of physical play for the motor development of young children*. Reston, VA: Head Start Body Start National Center for Physical Development and Outdoor Play.
- Tucker, P. (2008). The physical activity levels of preschool-aged children: A systematic review. *Early Childhood Research Quarterly, 23*(4), 547-558.
- Venetsanou, F., & Kambas, A. (2010). Environmental factors affecting preschoolers' motor development. *Early Childhood Education Journal, 37* (3), 319-327.
- Wassenberg, R., Feron, F., Kessels, A., Hendriksen, J., Kalff, A., Kroes, M., & Vles, J. (2005). Relation between cognitive and motor performance in 5-to 6-year-old children: Results from a large scale cross sectional study. *Child Development, 76* (5), 1092-1103.
- Westendorp, M., Hartman, E., Houwen, S., Smith, J., & Visscher, C. (2011). The relationship between gross motor skills and academic achievement in children with learning disabilities. *Research in Developmental Disabilities, 32*(6), 2773-2779.