A renewed emphasis on early learning standards coincides with the national focus on preschool children’s school readiness and future academic success. Indeed, across the nation, early childhood educators from 46 states have developed early learning standards. Most of these standards have focused primarily on cognitive and language development, while very few have focused on motor development and physical well-being. This is
unfortunate, given that the preschool period is a time of rapid growth for children, making it an ideal time to carry out interventions to enhance motor development and engagement in physical activities.

Motor development is not only a highly valued outcome in and of itself, but it is also valued for its positive impact on other areas of development. Numerous studies have documented the important relationship between motor skill development and more general cognitive functions. For example, active motor performance in young children has been linked to verbal fluency and understanding of spatial, temporal, and sequential concepts (e.g., up/down, first, then). Moreover, participation in motor activities provides opportunities for preschoolers to develop the pre-reading, pre-writing, and pre-math skills considered to be precursors to kindergarten readiness.

While motor skills develop naturally among most typically developing preschoolers, young children with disabilities often experience deficits in this area. Because motor skills are viewed as foundational for many areas of development, limitations in early motor skill development can lead to a broad array of difficulties in other skill areas that are dependent upon these skills. Therefore, it is important that children with disabilities are provided with direct and intentional instruction for motor skill development during the preschool years. One program that may address the need for motor skill development in preschoolers is Young Athletes.

**DESCRIPTION OF THE YOUNG ATHLETES PROGRAM**

Young Athletes (YA) is an innovative motor play program designed to improve young children’s motor skills and to introduce children with intellectual disabilities to the world of sports at an early age. YA came about in 2004 at the request of parents who wanted a sports program younger children with intellectual disabilities could participate in prior to the start of their eligibility for Special Olympics. The program was created by Special Olympics New Jersey in consultation with the University of Medicine and Dentistry of New Jersey to promote the motor, social, and cognitive development in children ages 2½ to 7 through physical activities and play, with an emphasis on sports skill development. In addition, Young Athletes was developed to serve as an introduction for new families to Special Olympics and to encourage and support parents and families.

The YA program was originally designed for implementation by parents, paraprofessionals, teachers, and volunteers in a preschool/school environment, playgroup, or home setting. The original components of YA included an equipment kit and an Activity Guide with suggestions of games to support specific motor skill development in the following areas: foundational skills (visual tracking, motor imitation), walking and running, balance and jumping, trapping and catching, throwing, striking, and kicking.

Recently, YA was expanded into a structured classroom curriculum that includes 24 comprehensive lessons that correspond to the motor skill units introduced in the YA Activity Guide. Each 30-minute lesson includes an Opening Motor Movement Song (four to five minutes), motor games and activities (approximately 20 minutes), and a Closing (Cool Down) Motor Song (four to five minutes). These detailed lessons are sequential and developmentally consistent with Jane Clark’s (1994) conceptual construct on motor development. They include motor activities focused on the same skills targeted in the YA Activity Guide (the foundational skills of visual tracking and motor imitation, walking and running, balance and jumping, trapping and catching, throwing, striking, and kicking), as well as one review week. The program is designed to be implemented three days per week (30 minutes a day) for eight weeks.

Teachers are encouraged to adapt the lessons as needed using the concept of universal design for learning (UDL). UDL provides a wide array of strategies and adaptations to ensure that children with varying abilities and learning styles can fully participate in meaningful ways.2 Because of the increasing numbers of young children with disabilities in inclusive preschool

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*Editor’s note: For more information on UDL, see NASBE’s Policy Update, “Universal Design for Learning,” available at nasbe.org.
classes, there is a need to ensure that new programs have strategies that incorporate the principles of UDL to enable all children access to all learning opportunities, activities, and environments. Indeed, in 2009 the Division of Early Childhood of the Council for Exceptional Children (DEC) and the National Association for the Education of Young Children (NAEYC) issued a Joint Position Statement stressing the use of strategies such as UDL to ensure full access and meaningful inclusive programming. 

Given the importance of family involvement in supporting children’s development, the YA program also includes a home component. This component features a one to two page newsletter sent home to families once a week that provides a description (narrative with picture demonstrations) of the activities presented each week, along with suggestions for how to use the YA activities with family members. In essence, the Home Component is an abbreviated version of the lessons presented by teachers each week.

**Conceptual Framework**

As described above, the YA program is based on a strong conceptual framework, using games to support motor skill development in preschoolers by focusing specifically on foundational skills (visual tracking, motor imitation), walking and running, balance and jumping, trapping and catching, throwing, striking, and kicking. All of the skills addressed in YA correspond directly to those found in the fundamental motor skill period during the preschool years (i.e. locomotion skills, play game manipulative skills, fine motor manipulative skills). These skills are referred to as the “building blocks” of motor development, with motor development scaffolding from one period to the next (see Figure 1).

When provided with opportunities to develop these skills, preschoolers can be observed using their bodies in more complex ways, enabling them to run, hop, jump, catch, throw, and kick balls, all of which require underlying skills such as motor planning, motor coordination, grasp and release, and visual-motor integration. The development of these underlying motor skills is also important for the learning adaptive behaviors that are simultaneously developing, such as the basic coordination, balance, and posture that are needed for fine motor skills such as self-feeding, grasping objects, and writing.

**Evaluation of the Young Athletes Programs**

Recently, a randomized assignment to treatment design was used to
assess the impact of YA on children with a range of disabilities (developmental delays, autism, etc.). The sample included 234 children from two states who were 3-5 years of age. All children attended preschool classes, most of which were in inclusive public school settings.

At the completion of the YA program (eight weeks), children who participated in YA showed statistically and clinically significant mean gains of seven to nine months on the Peabody Developmental Motor Scales (PDMS) compared to mean gains of three to five months in the comparison group. Children participating in YA also showed significantly greater gains on the gross motor subscale of the Vineland II, Teacher Rating Form (VTRF) than the comparison group. A subgroup of children (N=50) were then included in a follow-up study to determine if the observed motor gains could be maintained over time. Five months after completion of the YA program, children who participated in YA maintained motor skill gains on the Locomotion, Object Assembly, and Stationary subscales of the PDMS. Ten months after completion of the program, these children remained approximately four months ahead of the comparison group on the Locomotion and Object Manipulation subscales of the PDMS. In addition, both teachers and parents reported substantial benefits for children such as improvements in specific motor skills, kindergarten readiness skills, and social/play skills.

Conclusions

While motor skills develop naturally with most children without disabilities, this is not the case with young children with disabilities (i.e., children with developmental delays, autism). However, the results of our recent evaluation of the YA program unequivocally demonstrated that children with disabilities' motor development can be jump started, with five-to-seven-month gains in a two-month period of time. Given the motor deficits found in most preschoolers with disabilities, the results clearly point to the need for structured motor intervention that are infused into the daily schedule of preschool classrooms. These converging facts highlight the importance of the Special Olympics Young Athletes program to support motor development for young children with disabilities who are included in early childhood classrooms.

There are several aspects of YA that contribute to its success. For example, teachers indicated that the training they received in the use of YA led to a better understanding of the critical role motor development plays in relation to other areas of development. Teachers also reported better understanding that motor development does not develop naturally for children with intellectual disabilities. In addition, the detailed lessons and accompanying lesson summary cards were viewed as helpful in understanding how to easily implement and adapt the YA program within the ongoing class schedule. Likewise, the home component was viewed as an essential component by teachers, who reported that it supported school/home partnerships by reinforcing motor skills that had been previously introduced at school. Moreover, the weekly suggested activities allowed children to actively engage with their parents and siblings at home.

While the natural context of motor play is within families and the involvement of the family in supporting their child’s development is undisputed, in our recent evaluation, many parents did not fully participate in the home component of YA. A question that remains is how to better support parent involvement in activities that support development. Webster-Stratton and Reid suggest that curricula used in a preschool context include a school-based parent training component to support curriculum use at home. This approach could be applied to programs like YA to increase family involvement in the home component and the reinforcement of motor skill development at home.

Although YA can foster and enhance motor skill development, the need for physical activities is paramount. It is in the context of physical activities that children hone motor skills, especially gross motor skills such as hopping, jumping, balance, and coordination. However, many preschool programs have decreased the amount of time dedicated to physical activity, which is the primary context for motor development. Being physically active is vital to children's success in school, but it is not a reality for children with developmental delays without intentional planning of physical activity during the preschool day. Intentional planning implies that teachers have regularly scheduled physical activities with focused attention on increasing a child’s activity level while using a
Teachers
reported the following:

This is great. Our school district needs an affordable, research-based motor program.

The children have learned to wait their turn.

The children in my class now don’t just wander on the playground; they have purposeful play.

Before YA, C. would never join in play, never let others get close to him. Now he joins in and loves bridges and tunnels.

C. has been incapable of jumping with both feet simultaneously. During week 4, however, not only was he able to jump with both feet simultaneously, but he was jumping over hurdles approximately 6 inches off the ground!

Self-confidence has improved; they now shout out to other kids, ‘Hey, watch me!’

Parents
also reported similar positive remarks:

L. is now a better catcher, thrower and knows how to balance by herself with no support.

M. learned new ways of playing instead of just running around.

Now our child does exercises on his own.

When we went to a new playground, my daughter went and climbed on things. Before YA, she was too scared to do that.

YA showed me different ways to play with my daughter.

Participation in YA helped with social skills.

It influenced my expectations of my child and, his skills are more developed than I realized.
variety of gross motor skills. Using planned activities that correspond to motor skills previously introduced by YA is one way to increase both motor skill development and physical activity level.

In closing, while young children with disabilities are commonly thought of as “at risk” for developing many deficits, the authors recently invoked the sentiments of Frances Horowitz\(^{10}\) to challenge us to rethink the way we view young children with disabilities: “What if we created programs that placed children ‘at promise’ as opposed to responding to them as ‘at-risk’? To view children ‘at promise’ would “… lead us to ask ourselves, ‘What if?’ What if we created early childhood programs from a preventative and proactive stance that maximized children’s potential within their own cultural, familial, and individual frame of reference?”\(^{11}\)

Placing children “at promise” implies that schools can be a part of the solution by being preventative and proactive with the young children entrusted to them. It implies carving out time in the preschool day for intentional planning and consistent scheduling of motor and physical activities. It implies utilizing research-based motor programs that support development and providing teachers and parents with the training to optimize the benefits of such programs. To be preventative and proactive implies finding creative ways to actively engage families in motor play with their child. Such engagement could have a ripple effect, resulting in secondary benefits such as increased family involvement in other areas of children’s development, increased communication with teachers, or a positive influence on relationships between parent and child or between home and school.

In the current reality of today’s education system, there is a rising number of preschool children with disabilities receiving educational services under IDEA\(^{12}\) in inclusive preschool classes. Many of these preschoolers have motor skill deficits and depend on direct instruction and adult support for motor development.\(^{13}\) Given these facts, it becomes clear that motor programs like Young Athletes, coupled with greater family involvement and opportunities for physical activities, need to be viewed as essential in all high quality preschool programs. The promising future of many young children depends on it.

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3DEC/NAEYC, 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, 2009).


