

# Elevate HEALTH

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## Developing Physical Literacy in Community Settings: Two Regions Piloting Progressive Approaches

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President's Council on  
Fitness, Sports & Nutrition

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**As I watch my grandchildren grow, I am struck by their boundless energy. I admire their ability and willingness to play, move, and expand their physical limits.**

I want kids of all abilities and backgrounds to develop a positive relationship with physical activity and movement like my grandchildren have. Instead, in too many communities we seem to be engineering the opportunities for physical activity out of our daily lives.

We have made progress in turning the tide on childhood obesity over the past several years, thanks in part to the efforts by many organizations, large and small, that have developed programs and created

safe places to play that encourage kids to move more. After increasing steadily for decades, the national childhood obesity rate has leveled off and even declined in some cities and states, and in certain age groups. Now we must expand on those opportunities, and create new ones, if we want to continue the momentum and build a culture of health where physical activity is the norm.

One way to ensure continued progress toward a healthy weight for all kids is to make sure that children throughout America are taught **physical literacy**—that is, the **ability, confidence, and desire** to be physically active for life. Physical literacy engages youth in basic movement skills like running, jumping, throwing, and catching that are essential to developing a healthy, confident, and lifelong relationship with physical activity and sports. It focuses on equipping children and teenagers with these skills and helping them develop a positive mindset around movement. For our youngest children, physical literacy means creating positive experiences early in life with physical activity, by teaching them basic motor skills like running or throwing.

Physical literacy programs at the community level are effective methods of developing physically literate individuals and will help all children grow up to be healthy and strong. In this issue of *Elevate Health*, Dan Glynn and Colin Hilton explore various options and interests related to developing physical literacy programs within local community settings. There is great appeal to parents, educators, community developers, and recreation administrators to implement physical literacy in communities to provide children (and adults) with opportunities to be active for life. Glynn and Hilton also provide examples from the Utah Olympic Legacy Foundation and City of Stoughton Parks and Recreation Department of how to implement successful physical literacy programs.

# Developing Physical Literacy in Community Settings: Two Regions Piloting Progressive Approaches



Aspen Institute's Sports & Society Program defined physical literacy as the ability, confidence, and desire to be physically active for life.

## Introduction

“No matter how many sidewalks we build, no matter how many parks we construct, no matter how much we urge people to get involved with physical activity, they simply won't do it unless they have the ability, confidence, and desire to be physically active. That's where physical literacy comes in.”

—U.S. Surgeon General Dr. Vivek H. Murthy  
(June 27, 2015)

Interest in developing *physical literacy* within local community settings is growing. Physical literacy's broad organizational reach, holistic approach, and inclusive nature make the concept appealing to parents, educators, and a growing number of sport and recreation administrators. To some, it is a logical and common sense approach; however, to a large percentage of the population, physical literacy is a difficult concept to achieve because of a variety of factors. Both the Utah Olympic Legacy Foundation and the City of Stoughton Parks and Recreation Department in Wisconsin are shedding light on how to successfully implement physical literacy in real-world applications.

## Physical Literacy Defined

So, what is physical literacy and how can it help communities address the chronic issues of our collective population—a population that seems all too content with its inactivity? The Aspen Institute's Sports & Society Program explored this when it created a 15-member work group consisting of leaders from numerous community sectors to develop a strategic plan for introducing the

concept of physical literacy. With release of its June 2015 report,<sup>1</sup> the following definition of physical literacy was set forth:

*Physical literacy is the ability, confidence, and desire to be physically active for life.*

- **Ability** refers to competency in basic movement skills and an overall fitness level that allows individuals to engage in a variety of games and activities. This outcome is achieved through a mix of informal play and intentional teaching of movement skills,<sup>2</sup> among them running, balancing, hopping, skipping, jumping, dodging, gliding, falling, lifting, swimming, kicking, throwing, and a range of other skills that require general hand-eye coordination.
- **Confidence** is the knowledge that you have the ability to play sports or enjoy other physical activities. It is the result of programs and venues that are inclusive of people with differing abilities. It includes the support and encouragement of parents, guardians, coaches, administrators, teammates, and peers throughout the development process.
- **Desire** is the intrinsic enthusiasm for physical activity, whether in organized or unstructured formats, in traditional or alternative sport. This enthusiasm can be achieved through early positive experiences that are fun and motivate children to do their best.

Figure 1. Transition of Fundamental Movement Skills to Fundamental Sport Skills, inspired by authors of Canadian Sport for Life



To become physically literate, a person must have proficiency in all three elements (ability, confidence, and desire) of this definition from the Aspen Institute. Additionally, communities must provide environments and organizations that allow physical literacy to occur naturally. With rising concerns over reduced activity levels, lack of affordable and accessible sport and recreation opportunities, and the overly competitive focus of youth sport programs, conversations on the national level need local, evidence-based examples of how physical literacy can find success in addressing the general health of our population.

Several countries and numerous organizations are taking similar approaches to define and act upon the concept of physical literacy, producing interesting observations on its benefits.<sup>3</sup> There is common sentiment that positive experiences early in life help children to acquire fundamental movement skills that lead to basic competencies, which are later drawn upon when attempting activities that are more complex. The development of basic movement patterns in young children and the transition to more complex skills among older children are partially dependent upon early experiences, opportunities to engage in new movement experiences, and the quality of early instruction and practice.<sup>4</sup>

### Learning Fundamental Movement Skills and Fundamental Sport Skills

Throwing is one of several fundamental movement skills. A child acquiring this skill will learn to throw many different sized balls with one or both hands, and will learn to throw the ball at different targets, at different speeds—sometimes for accuracy, sometimes for distance. When the child learns to throw a baseball, using a baseball pitching motion and trying to get the ball to pass over home plate, he has moved from a fundamental movement skill to a fundamental sport skill (Figure 1). To achieve higher levels of

physical literacy, children should be encouraged and taught fundamental movement and sport skills in each of the five basic environments: on the ground, in water, on snow, on ice, and in the air. A progression and transfer of core skills into sport participation is possible, as illustrated below, when fundamental movement skills are learned that allow for positive experiences in sport programs.

Physical literacy gives a person the tools to lead a physically active lifestyle. Proficiency in a wide variety of movement skills leads progressively toward improved confidence, happiness, physical and mental health, and overall activity levels. Research shows that without the development of physical literacy, many children and youth withdraw from physical activity and sport and turn to more inactive and/or unhealthy choices during their leisure time.<sup>5</sup>

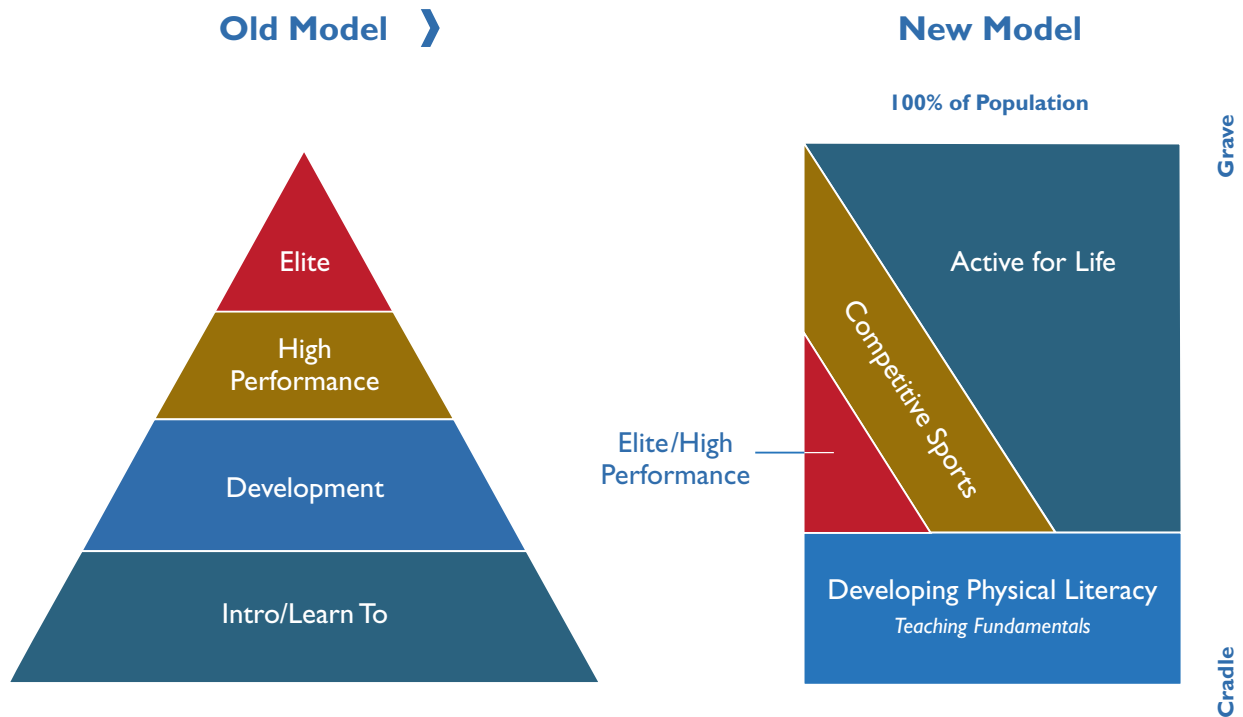
To promote a child's healthy and logical development in sport and physical activity, there are sequential stages of development



outlined in an approach called Long-Term Athlete Development (LTAD).<sup>6</sup> The physical literacy stages of LTAD emphasize learning to move the body and provide an important foundation for continued sport and physical activity. This inclusive approach challenges the more traditional “pyramid” approach of building a large base of sport participants

only to systematically select out all but the high achievers (Figure 2). The critical aspect in a physical literacy-based system is that 100% of the population is encouraged to be physically active with their bodies, thereby setting important long-term healthy lifestyle habits, whether the participant is a high achiever or a recreational enthusiast.

**Figure 2. Inclusive Physical Literacy-Based Sport and Recreation System, inspired by Canadian Sport for Life**



It is critical that children develop the knowledge, skills, and attitudes that give them the very best chance of staying active throughout their lives. When a child has confidence in his or her ability to take part in recreational and sport activities, the probability that he or she will join in is elevated. If he or she enjoys the activity, he or she will likely continue to participate. A child's confidence in movement develops gradually as he or she grows and learns, and the child is constantly comparing his or her own ability level with the ability of the children with whom he or she plays. The confidence of a physically literate child encourages him or her to try new and different activities without fear. This approach encourages lifelong physical activity for athletes of all levels.

**A child's confidence in movement develops gradually as he or she grows and learns. The confidence of a physically literate child encourages him or her to try new and different activities without fear.**



Despite the compelling data underscoring the critical need for physical literacy, children are more sedentary than ever before. Recent reports indicate that children average approximately two hours of screen time per day.



## The Need for Physical Literacy

Evidence shows the paramount need for a physical literacy movement in the United States to motivate lifelong physical activity pursuits. Rising obesity levels are likely contributing to the current plateau in life expectancy for Americans.<sup>7</sup> Common knowledge suggests that diet and physical activity are key factors for maintaining a healthy weight. Physical activity also helps children grow stronger bones, develop stronger muscles, increase lung capacity, and improve cognitive function.<sup>8</sup> That said, only a quarter of American youth and a fifth of American adults meet or exceed the recommended amount of daily physical activity.<sup>9</sup> Moreover, studies show that self-reported data on physical activity tends toward an overestimation of actual physical activity levels.<sup>10</sup>

Beyond the physical benefits, physical activity also plays an important role in mental health, reducing depression, relieving stress, and improving academic performance. Physical activity increases alertness and concentration,<sup>11</sup> suggesting a strong link between physical activity and academic achievement. Studies show that children who are physically active on a regular basis perform better academically.<sup>12</sup> Another important benefit is that increasing the skill level and success of recreational pursuits builds self-confidence and esteem.<sup>13</sup>

Despite the compelling data underscoring the critical need for physical literacy, children are more sedentary than ever before. Recent reports indicate that children average approximately two hours of screen time per day.<sup>14</sup> A shift from unstructured free play to results-driven organized activities is also causing a counterintuitive decline in the number of children playing sports into adolescence, with an estimated 70 percent of children dropping out of sport by age 13.

The first supervised playground in America was the Boston Sand Garden, built in 1885. The unstructured free play created there and in other parks around the country proved an essential cornerstone of child development for decades, assisting in both physical and cognitive development.<sup>15</sup> However, the era of unstructured free play is essentially over. Park attendance has been stagnant or declining, while participation in structured programming has been steady or increasing.<sup>16</sup> Parents now feel pressure to have high-achieving children, which leads their children to participate in structured activities that show immediate results.<sup>17</sup> Parents' overscheduling of children is a contributing factor.<sup>18</sup> Additionally, a structured activity model brings with it an economic cost, which can be a barrier to participation. The group least likely to participate in youth sports is low-income urban children. Girls across all socioeconomic groups are also less likely to

participate in sports, compared to boys.<sup>19</sup> The result is a less physically literate population, which is evident in the higher rate of musculoskeletal injuries in Army recruits. Approximately 25 percent of male and 50 percent of female Army recruits sustain a musculoskeletal injury during basic combat training.<sup>20</sup> Compared to males, female athletes are 3.5 times more likely to suffer non-contact ACL injuries, which are caused by poor movement patterns.<sup>21</sup>

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## Taking Action on a Common Sense Approach

To sport and recreational organizations, such as the Utah Olympic Legacy Foundation (UOLF) and the City of Stoughton Parks and Recreation Department, an inclusive and health-focused approach to local programming is both necessary and powerful. Measures of success for these organizations relate to similar core mission goals of increased program participation rates, community benefits, and improvement of the overall health of their local populations.



## Active Stoughton for Life

The City of Stoughton is a suburban community located in the Madison, Wisconsin, metropolitan area. In 2010, the Stoughton Parks and Recreation Department, which serves a population of 19,427, was facing many of the same issues as other agencies across the country. Adult recreational league participation was decreasing, private organizations were driving competition in the youth sports market, obesity rates were high, there was an absence of unstructured free play by children in the community, and there was decreased funding for parks and recreation.

Something had to change in order for Stoughton to achieve its central objective—to keep youth physically active for the duration of their lives. After researching various methods to engage the broader Stoughton population, the city focused on a solution based on the concept of physical literacy and developed through LTAD (developed by Canadian Sport for Life). However, to incorporate LTAD and physical literacy into Stoughton programming, widespread changes needed to occur.

Consequently, the city piloted a physical literacy-enriched sport program during the fall of 2011 focusing on youth basketball classes. The pilot revealed that marketing and messaging, coaching education, programming, and lesson plans were all critical. Coaches were unfamiliar with teaching fundamental movement skills, while parents struggled to digest the new focus on

fundamental movement versus traditional sport-specific skills. As the Stoughton Parks and Recreation Department started planning for spring and summer programs, they created a health initiative based on LTAD aimed to engage the broader community in the effort.

## Methods

**Messaging:** Named *Active Stoughton for Life*, the initial campaign encompassed a dedicated website section, redesigned seasonal activity guides, and messaging in the city's newsletter targeting the physical literacy philosophy and its importance in developing an active lifestyle. The city rewrote activity guide descriptions to include language on developing fundamental movement skills and integrated LTAD stages into each program's title.

**Coaching Education:** Better coaching education was developed, including both classroom and on-field instruction. A typical one-hour administrative meeting was transformed into a two-day session to train coaches on LTAD, physical literacy, and best practices; on-field instruction included lesson planning, activity demonstrations, and how to teach fundamental movement skills. Initial setbacks of the new approach included some coaches' initial difficulty following the LTAD design, and parents' continued questioning of why the number of games and sport-specific skills were scaled back. To foster greater awareness of LTAD and physical literacy, handouts were distributed to parents at the start of every program.

**Programming:** Stoughton Parks and Recreation programming was completely restructured to incorporate LTAD principles and physical literacy. The traditional game-based structure was scaled back to a more balanced practice-to-game ratio. More station-based practices were implemented, allowing more personal instruction and alleviating the stress from performing in front of a larger audience. Small side games such as three-on-three basketball were used to increase repetitions that build skills. Programs incorporated more age-appropriate



equipment such as different-sized basketballs for different age groups. Fundamental movement skills specific to each particular sport were taught; for example, proper overhand throwing motions were taught instead of focusing on pitching-specific skills in baseball. Warm-ups evolved from static to dynamic and included movement preparation. Dynamic warm-ups get the body ready for physical activity, while movement preparation both readies the body for physical activity and helps to develop



physical literacy. These reprogrammed practices created more engagement and physical activity for Stoughton youth.

### Results

Over recent years, the Stoughton Area School District has experienced a decrease in overall school enrollment; however, minority student populations and the number of economically disadvantaged students have been on the rise. Members of both of these groups are less likely to participate in sports. Despite these conditions, *Active Stoughton for Life* participation has remained consistent since its inception. Furthermore, participant retention has found phenomenal success, with 98 percent of participants in Stoughton physical literacy programs continuing to play sports.

With *Active Stoughton for Life's* proven success, Stoughton Parks and Recreation has now broadened the range of sport offerings that emphasize physical literacy over competition and sport-specific skills. New programs include age-appropriate golf, youth volleyball, track and field, multi-sport programs, youth open gyms, parkour, and circus games. Many of these programs yield important partnerships with community high school coaches, with a goal of keeping children engaged well into adolescence.

### Olympic-Inspired Actions in Kearns, Utah

The Utah Olympic Legacy Foundation's focus is to create broad use of its 2002 Olympic legacy venues and to support high quality, affordable community programs. Too many examples exist in the world where Olympic venues are not used following Olympic and Paralympic Games; in many cases, multimillion dollar facilities serve as crumbling reminders of efforts focused solely on a three-week competition. Efforts have been very different in Utah. Thanks to thoughtful community leadership, a legacy plan was created years before the actual 2002 games, which has been growing ever since.

Conscious efforts continue in Utah to promote a "living legacy" of active people and inclusive community uses of Olympic and Paralympic facilities. In addition to national team athlete training, the Utah Olympic Legacy Foundation focuses on programs and activities for all ages and all ability levels. In Kearns, Utah, the Utah Olympic Oval is an example of how an Olympic venue can also serve as a vibrant community recreation center, with annual visitations exceeding 700,000 uses per year. Efforts that began in 2007 continue to focus on improved program curriculum and



boosting overall participation rates, especially in youth introductory programs.

While initial efforts focused on the meaningful progression of winter sport instruction, a broader need was identified to create fun and engaging environments outside the traditional ice surfaces at the Olympic Oval. A FUNdamentals Zone was created with low balance obstacles, hula hoops, agility challenges, and objects that inspired kids to simply move their bodies. With guidance from Canadian Sport for Life experts on physical literacy principles, a program philosophy was put into motion shifting focus to the teaching of fundamental and sport-specific movement skills.

Local community organizations were also engaged in the effort. Local schools, recreation centers, preschool operators, and sport clubs engaged in exciting dialogue about the benefits of aligning efforts. Through encouraged collaboration, actions were taken based on the framework and principles of LTAD and physical literacy. Quality instructors were hired and provided valuable coaching education resources. Program curriculum for multiple sports was overhauled with focused attention on age-appropriate skill development. Multi-sport program sampling was encouraged. Programming and play environments

**Children who are less skilled play less, have fewer opportunities to refine and develop their skills, and fall farther behind their skilled peers. Many stop trying, and withdraw from physical activities that would help them become more fit and develop their skills.**

Fundamental movement skills are the basic building blocks for the development of physical literacy. While many children develop physical skills on their own, there are many who do not.



became more fun and increasingly accessible, with low fees and hours that fit demanding parent schedules. The focus on competition was consciously reduced, ensuring that participants had similar playing times. The best coaches rotated between age groups, with an emphasis on introductory programs.

Through these changes, the Utah Olympic Legacy Foundation learned that:

- Fundamental movement skills are the basic building blocks for the development of physical literacy. While it is true that many children develop physical skills on their own, there are many who do not; and for those, the consequences can be severe.
- Children who are physically skilled enjoy vigorous healthy play while the less skilled are often left out. This creates a vicious cycle. Those with skills play and through that play further develop their fitness and skill.<sup>22</sup>
- In contrast, those who are less skilled play less, have fewer opportunities to refine and develop their skills, and fall farther behind their skilled peers. Eventually, many of the less-skilled children stop trying, and withdraw from physical activities that would help them become more fit and develop their skills.
- The Legacy Foundation then made efforts to ensure that less-skilled participants received assistance to improve their skills to a level that allowed continued progression.

Through efforts to introduce Learn to Skate programs in the Kearns community, the Utah Olympic Legacy Foundation stumbled upon glaring voids in the community. Utah Olympic Oval staff heard of students in a nearby elementary school whose physical education class consisted of walking the hallways and being kept out of the gym, because that is where the kids “get too crazy.” Further investigation uncovered that the teachers were trying their best, but were simply ill-equipped with the knowledge or resources to engage the students in meaningful physical activity.

At no cost to the school, the Utah Olympic Oval now provides energetic and resourceful instructors to lead the students in their scheduled physical education classes. This program provided the school with quality physical education opportunities and, in turn, allowed the Utah Olympic Oval to introduce ice sports to a growing population of Kearns and Salt Lake area residents. Programs have grown to include a local charter school.

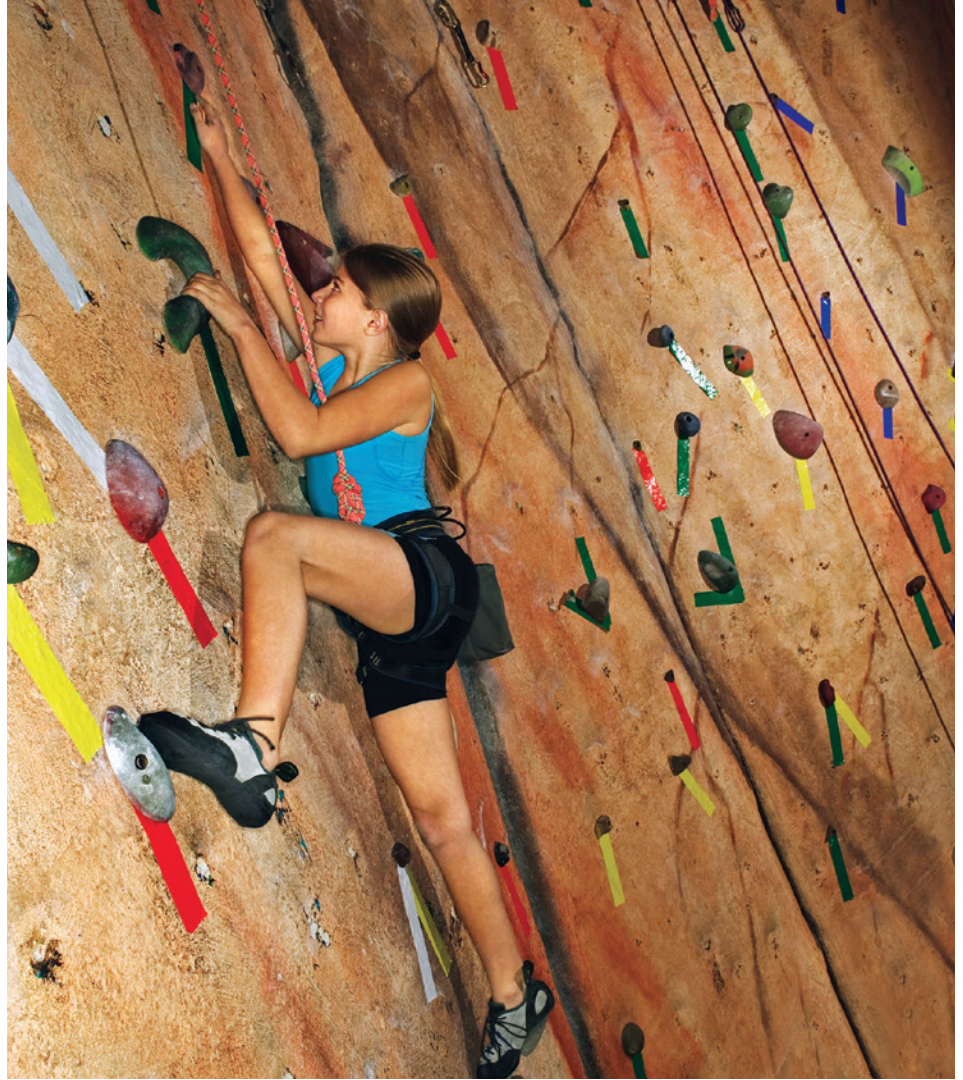
In another example of smart program adjustments, 2002 Olympic speed skating gold medalist and Oval Sport Director Derek Parra transformed the environment of a cold and sometimes uninviting five-acre interior space into an invigorating atmosphere of music, life, and energy. Adding a disco ball and evening DJs, Derek took action to simulate the fun environment he experienced

as a youth at his local roller rink. Today, that same energy is alive and well in evening public skate sessions and group outings for all ages who come to the Olympic venue to have fun while possibly learning a new on-ice activity.

Furthermore, local skating clubs participate in overnight “camping experiences” in the building, using headlamps and their adrenaline to navigate the ice surfaces in the dark. Unorthodox activities mixed in with some skill development are being created in a way that keeps kids wanting more. The Utah Olympic Legacy Foundation is confident that the long-term impacts of these efforts will translate into behaviors and motivations to remain active in some form of physical activity for life.

Physical literacy applications can be expanded to existing programs and constantly improved. As an example, in the FUNdamentals Zone where skills of agility, balance, and coordination are taught, not only is the participant being engaged, but their siblings and parents are as well. Each child is encouraged to bring their sibling or parent into the off-ice activity space to join in the fun. Family engagement makes the participant’s experience even more rewarding, motivating them to play longer and progress to later programs. Incremental program adjustments like these are encouraged, allowing coaches the flexibility to adapt their approach to mesh with the various backgrounds and interests of the participants.

**The Utah Olympic Legacy Foundation’s FUNdamentals Zone utilizes low balance obstacles, hula hoops, agility challenges, and objects that inspire kids to simply move their bodies.**



### Results and Lessons Learned

While the Utah Olympic Legacy Foundation adopted physical literacy principles in all Olympic legacy venue communities in Utah, the Kearns Olympic Oval truly symbolizes the benefits of conscious actions toward a community-minded approach. Today, the building is four times busier in its overall activity levels than just after 2002. Learn to Skate participation alone increased from just over 400 uses per year, to now over 1,500 each year. With this basic introductory program being the prerequisite for every other on-ice “Learn to” program, including Learn to Play Hockey, Learn to Speed Skate, and Learn to Curl, a surging ripple effect has occurred in these next-level program activities. For those not interested in a specific sport program, public skate and running track offerings allow residents in the region a low-cost, inviting atmosphere to recreate with friends and family.

Through these efforts, the Utah Olympic Legacy Foundation improves community engagement, promotes healthy active lifestyles, and provides a place where the community can create great memories and patterns of activity that will be meaningful for both the short and long term.

Challenges still exist, including a lack of time and resources to expand the physical literacy approach to areas not immediately near these unique Olympic facilities. However, with growing interest to reshape and maintain active participation, next-step efforts are moving forward. Spearheaded by the Salt Lake County mayor, and with support of over 20 community-based organizations including the Utah Olympic Legacy Foundation, a multi-sector approach to improving the overall health of Kearns is now underway. Efforts will continue to integrate the evidence-based and nationally supported philosophy of physical literacy with local implementation steps.

## Conclusion

Ultimately, the responsibility for developing a physically literate child rests with parents, guardians, and the motivations of the child. Just as parents ensure that their child is provided with learning opportunities that result in their ability to read, write, and do math, parents must also ensure that their child develops physical literacy.

Parents and caregivers play a vital role in exposing their children to these activities during the critical physical literacy years. However, in communities with limited recreational opportunities, and for parents with limited financial resources, this may be difficult to achieve. Therefore, various community stakeholders, schools, local parks and recreation programs, activity centers such as Boys & Girls Clubs, YMCAs, sport clubs, and many others, play a crucial role in developing physical literacy. Creative and impactful efforts can occur, especially when the community shares a common vocabulary, alignment of interests, and proactive champions to effect positive changes.

In the City of Stoughton and Kearns Township, there is optimism and energy. Through initial applications of physical literacy principles, these communities have successfully increased opportunities for active, healthy lifestyles. While these efforts may seem logical, these two communities realized the need for a focused commitment along with a willingness to approach past methods in a slightly new way. The momentums in Stoughton and Kearns serve as inspiring examples of how physical literacy can truly be a tool and a universal language to effect positive change.



## Scientific Summary

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Physical literacy is a developing key concept in helping communities, educators, and parents teach their children to be active for life. The Aspen Institute's Sports and Society Program has worked to provide the definition: "Physical literacy is the ability, confidence, and desire to be physically active for life." Ability is described as engagement of physical activity or sport through informal play and teaching from parents, coaches, or educators. Confidence is described as an individual's proficiency in the sport they play. Encouragement from parents and surrounding community members allows the child to be self-assured in how to engage in the physical activity and sport. Desire is defined as the excitement the individual has to participate in the sport.

Learning fundamental movement skills is important in helping children transition into long-term athletes. This approach helps the child develop a stronger foundation of knowledge and enhanced skills in sports and physical activity. Physical literacy coupled

with the Long Term Athlete Development model helps people commit to lifelong healthy lifestyle habits, whether the participant is a high achiever or recreational enthusiast.

It is imperative that children develop the knowledge, skills, and attitudes that give them the very best chance of staying active throughout their lives. Physical activity has many benefits for the body, mind, and spirit. It helps children grow stronger bones, develop stronger muscles, increase lung capacity, and improve cognitive function. Physical activity plays an important role in mental health, reducing depression, relieving stress, and improving academic performance (increasing alertness and concentration). Studies show that children who are physically active on a regular basis perform better academically. The child's spirit is enhanced as physical activity builds self-confidence and esteem. Physical literacy gives a person the tools to lead a physically active lifestyle.

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Proficiency in a wide variety of movement skills leads progressively toward improved confidence, happiness, physical and mental health, and overall activity levels.

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