

Physical Literacy: A Global Environmental Scan





Robert Wood Johnson
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Introduction

In 2014, the Aspen Institute's Sports & Society Program, through its Project Play initiative and with the support of the Robert Wood Johnson Foundation, began to develop a cross-sector physical literacy plan for the United States. Step one was tasking the University of Florida Sport Policy and Research Collaborative (now known as the Sports and Physical Activity Research Collaborative) to conduct the first-ever global environmental scan to learn more about the promotion and implementation of physical literacy in other countries. In conducting the scan, methods used to collect data included an analysis of peer-reviewed publications, policy documents, national physical literacy websites, and primary assessment data; interviewing Dr. Margaret Whitehead, founder of the modern movement around physical literacy; and gathering information from experts in other nations through electronic communication. Ten nations were selected for analysis based on a review of the literature and advice from physical literacy experts. Three nations—Canada, Wales, and England—were selected for a deeper analysis given their especially active and developed physical literacy initiatives. The Sports & Society Program and the authors of this report hope the scan helps leaders from across the world design physical literacy programs in their countries, catalyzing and sharpening efforts in this important, emerging space.

OVERVIEW OF SELECTED COUNTRIES

After consulting global leaders in physical literacy and reviewing the literature, ten countries were selected for analysis. These countries either explicitly recognize physical literacy or implicitly incorporate components (affective, cognitive, physical—see definitions on page 24) of physical literacy into their policies and programs. The countries included for analysis in this report are, in order of appearance, Canada, Wales, England, Australia, New Zealand, Northern Ireland, Scotland, Netherlands, Venezuela, United States. Some countries define physical literacy solely in terms of developing fundamental movement skills, while the majority of countries selected for analysis took a more holistic view of physical literacy that included affective, cognitive, and physical components. All except Venezuela are among the wealthiest 21 countries in the world, as ranked by the International Monetary Fund. Venezuela, which supports physical literacy through community-based programs without expressly recognizing physical literacy, is the only low-to-middle income country (LMIC) in this analysis.

INITIAL FINDINGS FROM THIS SCAN ARE AS FOLLOWS:

- *Each country or group has developed its own definition of physical literacy.* Dr. Margaret Whitehead, visiting professor at the University of Bedfordshire and president of the International Physical Literacy Association (IPLA), said that a globally embraced definition is desirable, but recognizes that other nations and groups have felt the need to tailor definitions to reflect their own culture and systems. “If alternative definitions are used, they must identify the core long-term goal of physical

literacy as being lifelong participation,” she said, “and they must make reference to the affective (motivation, confidence, valuing/responsibility), the physical (effective interaction in different contexts), and the cognitive (knowledge and understanding).”¹

- *The countries with the most established initiatives (England, Wales, and Canada) all deliver physical literacy programs primarily through sport and educational systems.* Each of them work with national sport governing bodies and schools to introduce children to these concepts, through physical education, community sports, and active play. The programs all include the affective, cognitive, and physical components of physical literacy, and all have an assessment component. From a macro-level perspective, the organizations that deliver this programming all receive funding and support from a nationally recognized body, either a federal agency focused on sports (e.g., Sport England, Sport Canada, and Sport Wales) or other government department. England and Wales utilize national lottery funds to support physical literacy initiatives, while Canada primarily uses government and private (corporate) funding. All supplement funding for physical literacy initiatives with private donations or corporate sponsorships.
- *The countries with the most established initiatives all have strong, effective messaging strategies.* Canada has a well-developed online presence with resources for parents and coaches, workshops, videos, and blogs. Canada also employs social media as part of its messaging campaign. The International Physical Literacy Association, based in Europe and led by Whitehead, also has an effective messaging and communication arm.
- *Promotion of physical literacy efforts to policymakers often occurs in the context of rising health care costs.* Other rationales include the need to improve the physical health and mental well-being of the populace and reverse long-term health conditions created by unhealthy lifestyle choices. Whitehead suggests the approach that “money promoting physical literacy will be money well spent. The investment will be preventative in relation to poor health and at the same time create a robust work force.”²
- *Physical literacy initiatives aimed at lower-income and underserved populations are often provided through government-funded programs.* One example is the government of the United Kingdom, which launched the program Sure Start and funded centers in most of the boroughs where lower-income children received opportunities to engage in physical-literacy-based activities. However, sustained government funding for programs reaching these and other underserved populations is a major challenge.
- *Developing grassroots support for physical literacy is key to the creation and implementation of physical-literacy-based programs.* The countries that have achieved the most success have all found this to be the case. “You need to create an ‘army’ of people committed to fostering physical literacy, who will spread the word and guide others to implement appropriate practice,” Whitehead said. “These people will lead by example. They will come from all constituencies.”³ She said that formally training people in how to teach physical literacy is essential.
- *Assessment tools to measure the outcomes of physical literacy are relatively new.* No multi-year longitudinal studies have been conducted to determine, for example, a correlation between participation in physical-literacy-based programs and positive health outcomes. However, there is evidence to suggest, through preliminary findings in Canada, that children value physical literacy and perceive it as important in their lives.

The following sections offer a synopsis of information relevant to physical literacy for the selected countries. Specifically, this report documents:

- 1) the current status of physical literacy in each country,
- 2) how each country defines physical literacy,
- 3) which organizations are taking leadership roles,
- 4) the sector and venues where physical literacy is present,
- 5) sample program(s) incorporating physical literacy,
- 6) key resources for follow-up,
- 7) messaging and communication strategies around physical literacy,
- 8) evidence of inclusion of underserved groups,
- 9) assessments where available,
- 10) leadership by sport organizations, and
- 11) success stories, where applicable.

A Deeper Dive:

Canada, Wales, and England:

Countries with the most developed physical literary initiatives

Canada



STATUS: Physical literacy is an established initiative in Canada based on a modified long-term athlete development (LTAD) model. Canada's LTAD plan provides a framework for each Canadian National Sport Organization (NSO) to implement physical literacy through the creation of physical activity programs for individuals across the lifespan. In Canada, physical literacy is considered to be the foundation for both elite sport and a healthy nation. It is Canada's goal that every child be physically literate by age 12. Each of the NSO's LTAD sport-specific models provides a plan for the development of high-performance athletes as well as individuals who wish to participate for recreation and for the health benefits. Each NSO provides a designated Sport Canada program officer with updates and copies of LTAD products to allow Sport Canada to assess the NSO's progress on issues that include advanced physical literacy. An assessment of progress is tied to funding. Canada also recognizes the importance of physical education in schools to enhance and develop physical literacy for Canadian children and youth (physical education is required in most provinces until Grade 9 [age 14]).⁴

DEFINITION: "Physical Literacy is moving with competence and confidence in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person."⁵

LEADERSHIP: Canadian Sport for Life (CS4L) and Physical and Health Education (PHE) Canada both promote physical literacy at the grassroots level across various sectors (e.g., education, sport, recreation, public health). PHE Canada has developed resources for physical educators and parents to help them better understand physical literacy and why it is important. CS4L has developed resources that, in addition to reaching educators and parents, also educate coaches and recreation leaders on the concept of physical literacy. Both CS4L and PHE have also taken the lead in connecting physical educators to the LTAD model.⁶

FUNDING: Via tax revenues, the Canadian government funds Sport Canada as a branch of the Department of Canadian Heritage (and Ministry of Sport).⁷ Sport Canada funds CS4L, which in turn has physical literacy programs and initiatives. CS4L also supports physical-literacy-based initiatives through private funding. Examples of government-funded programs include: 1) the Becoming a CS4L Community project, one of 129 projects funded by the Ontario government, 2) physical literacy initiatives in Fort Providence schools, funded by the Northwest Territories government and Sport Canada, 3) the My Personal Best Program that provides physical literacy assessment, and 4) the delivery of fundamental motor-skill training to 30 Aboriginal leaders through the government of Nova Scotia. Examples of private funding include: 1) funding from the McConnell Family Foundation, which provided support for CS4L implementation in nine communities, 2) funding from the Ontario Trillium Foundation, which supported the creation of a resource called *Becoming a Canadian Sport for Life Community 2.0* and funded the distribution of over 2,000 copies, 3) \$2 million over three years from the Royal Bank of Canada to support physical literacy programs in more than 90 communities across Canada, and 4) funding from ViaSport and six British Columbia school districts to fund physical literacy mentors in 33 schools.

SECTOR AND VENUE: Physical literacy is taught and developed through physical education, organized sport, and active play. It is provided in schools, sport venues, and community recreation settings and delivered/practiced in a holistic manner (includes affective, cognitive, and physical components).

SAMPLE PROGRAM:

- ✦ Passport for Life is an important physical literacy program in Canada that supports the awareness, assessment, development, and advancement of physical literacy among students and teachers. The four components of physical literacy that the Passport assesses are Active Participation, Living Skills, Fitness Skills, and Movement Skills.⁸

KEY RESOURCES:

- ✦ Canadian Sport for Life: This website is geared toward helping educators, coaches, and recreation leaders better understand physical literacy.⁹
- ✦ Physical and Health Education and An Introduction to Physical Literacy: These websites provide resources for educators and parents to help them better understand the concept of physical literacy and why it is important.¹⁰

MESSAGING: Canada has a well-developed online presence with resources for parents and coaches that include workshops, videos, and blogs. It is estimated that 25,000 parents seek information about physical literacy every month on www.activeforlife.ca. Active for Life is a national movement about physical literacy and social enterprise founded by B2ten, a private business group that supports Canadian athletes. Active for Life targets parents who want to raise active and successful kids, and its messaging provides expert advice, inspirational tips, and activity ideas that can help children get the recommended daily amount of physical activity. Canada also employs social media as part of its messaging campaign. Messaging to decision-makers is primarily focused on rising health care costs and the benefits of a healthy nation.

INCLUSION: PHE Canada has *FMS: Active Start and FUNdamental Stages for Children with a Physical Disability*. Designed for teachers and coaches of youth who have a physical disability (congenital or acquired disability) and who are in the Active Start and FUNdamentals Stages of the long-term athlete development (LTAD) model, the document is intended to assist in teaching motor skills. It includes theory, tips, and activities and lists specific adaptations suitable for children with mobility aids, mobility limitations, visual impairments, and hearing impairments, and for those who are in wheelchairs. All of the skills it teaches address the three major LTAD categories: stability skills, object-manipulation skills, and locomotor skills.¹¹ Additionally, over 70 delegates from communities across eight provinces launched the Aboriginal LTAD to include Aboriginal children in physical literacy initiatives.

ASSESSMENT: In 2013, PHE Canada launched Passport for Life (an education-based physical literacy assessment) in 500-plus schools and launched the Physical Literacy Assessment for Youth (PLAY). Recent findings from the PLAY Self survey instrument revealed that Ontario students, aged 6 to 13 years, rank physical literacy as a top priority and one that is very important to them both at school and in social settings.¹²

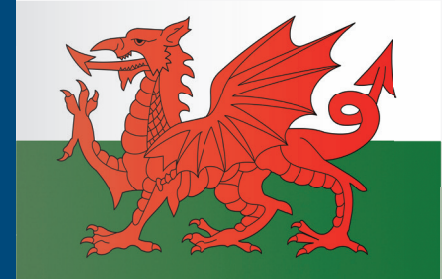
SPORTS TEAMS/NSOS: Each NSO in Canada has a sport-specific model that provides a plan for both the development of high-performance athletes and for individuals who wish to participate for the health benefits associated with sport, active play, and physical activity. CS4L has worked with 29 na-

tional sport organizations directly. Additionally, the *Ideal NSO* resource guide was created to guide the advancement of LTAD nationally.¹³ The *Ideal NSO* guides NSOs that are seeking funding to advance physical literacy. Further, some NSOs have revolutionized ways to develop athletes through programs like Sail Canada's CanSail program and Tennis Canada's Progressive Tennis model.

SUCCESS STORIES:

- ✦ In 2013, new child care accreditation standards were signed into policy for child-care facilities in Alberta. These new standards include guidelines on physical activity and sedentary behavior.
- ✦ The Edmonton Sport Council created a Physical Literacy and You (PLAY) group. PLAY groups have emerged across Alberta and are supported by the Association for Reformed Political Action.
- ✦ The Pacific Institute for Sport Excellence provides physical literacy programs to approximately 700 children each week.

Wales



STATUS: The government of Wales deems physical literacy to be as important as numeracy and literacy, and a recent task force recommended that physical education (PE) should be a core subject in the school curriculum.¹⁴ Notably, in 2008, the Welsh Assembly Government implemented a holistic play-based learning continuum for children with the intention of developing physical literacy. Recognizing the importance of reaching young children, the program for 3- to 7-year-olds is called the Foundation Phase.¹⁵

DEFINITION: Physical literacy in Wales is defined as “a disposition acquired by human individuals encompassing the motivation, confidence, physical competence, knowledge and understanding that establishes purposeful physical pursuits as an integral part of their lifestyle.”¹⁶ Additionally, Sport Wales has a vision for sport in Wales in which every child is hooked on sport for life, based on the belief that early positive experiences will create a physically literate and active nation.¹⁷

LEADERSHIP AND FUNDING: The government of Wales has funded and supported Sport Wales through the Department of Natural Resources and the Deputy Ministry of Culture and Sport. Sport Wales supports physical-literacy-based programs in physical education and school sport settings. The Welsh government is separate from the British government, which retains responsibility for UK-wide areas such as tax, defense, foreign policy, and benefits.

SECTOR AND VENUE: Physical literacy is taught and developed through physical education, organized sport, and active play, provided in school settings, and practiced/delivered in a holistic manner (includes affective, cognitive, and physical components).

SAMPLE PROGRAMS:

- The Foundation Phase in the Wales school curriculum emphasizes informal learning experiences through play and the outdoors and advocates for an experiential, play-based approach to learning involving both direction from teachers and self-directed activities for children.¹⁸
- The PE and School Sport (PESS) Initiative, funded by the Welsh government, was established in partnership with Sport Wales to address PE and sport in the school setting (both during and after hours) and to promote physical literacy. PESS, an element of the Active Young People program delivered by Sport Wales, complements extracurricular activities in schools such as Dragon Multi-Skills and Sport in primary schools,¹⁹ 5x60 in secondary schools,²⁰ and the Welsh Network of Healthy Schools Schemes. Additionally, PESS supports the delivery of programs that ensure all children and young people are able to access a range of sporting opportunities.²¹

KEY RESOURCES:

- *Physical Literacy – an all-Wales approach to increasing levels of physical activity for children and young people*: The authoring working group recommends that the government adopt a national physical literacy framework and that physical education become a core subject. The group's goal is to make visionary and transformational recommendations that would help Wales be a world-leading nation in sport and physical activity.²²
- *A Vision for Sport in Wales* (unpublished): provides a vision for sport in Wales with a goal of getting all children “hooked on sport for life.” This vision is supported by clearly defined priorities.²³

MESSAGING: Sport Wales has created a video, circulated on the Internet, that helps explain physical literacy from a child's point of view.²⁴

INCLUSION: See success stories below

ASSESSMENT: Sport Wales administers the School Sport Survey, a perpetually ongoing national survey of young people's sports participation. When completed, the survey will be the largest assessment in Europe. Schools and local sports teams use the data to shape the types of programs they offer. The survey results will provide for types of activity, participation numbers, levels of enjoyment, and the extent to which the programs voice or shape the delivery of PE and sport within school. Sport Wales is also measuring, “amongst other things, pupils' intentions to stay active, their PE and physical activity experience, their vitality, and how, through the intervention with PE teachers (which explores their self-awareness, styles of delivery, etc.), they are (positively) affecting the motivational climate and quality experience for pupils within a PE setting.”²⁵

Additionally, data from the report for Dragon Multi-Skills and Sport (a program that incorporates physical literacy) suggest that the Dragon program was very successful; however, boys participated in the program more frequently than girls did, and participation by children with disabilities was rather infrequent. Neath Port Talbot, Flintshire, and Cardiff were the exceptions, featuring higher participation rates among girls than boys, and higher number of participants with disabilities. Further research is needed to better understand how to increase participation by underserved groups.

SPORTS TEAMS/NSOS: Sport Wales trains coaches in long-term athletic development (LTAD) so that they are equipped to emphasize physical literacy in their teaching and coaching activities.

SUCCESS STORIES:

- Ysgol Dewi Sant, a high school in St. Davids, remodeled its sports facilities and introduced a new approach to its physical education and school sport system. The school opened a multi-use sports hall and fitness center and has begun offering diverse options during physical education classes and after-school programming. Notably, they have taken advantage of their proximity to natural resources to offer coasteering,²⁶ surfing, kayaking, and surf-lifesaving. Additionally, Ysgol Dewi Sant collaborates with the local primary schools and offers programming for the local community.²⁷
- In 2012, Sport Wales granted over £9,000 to Street Football Wales (SFW), “a social inclusion project partnership between Gwalia and other statutory and voluntary sector partners.”²⁸ The grant allowed for the development of a core group of coaches who could then grow football-playing opportunities for homeless and socially excluded people in the SFW East and West Leagues.

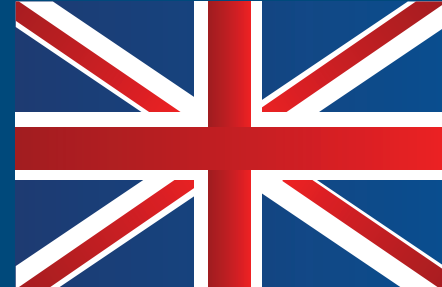
SFW's hope was that its efforts would boost the confidence and self-esteem of those who took part. The program, which predominately reaches homeless and other socially excluded people who are 16 and older, started in Swansea in 2004. Since then, it has grown to provide weekly sessions across Wales, including Caernarfon, Flint, Conwy, Wrexham, Carmarthen, Llandovery, Swansea, Newport, and Cardiff. According to the project's leader, Keri Harris, SFW engages

“those furthest away from mainstream sports provision. Some activity was going on already, particularly in the West around Swansea, but this project was put in place to develop more opportunities and ensure future sustainability and engagement through a workforce development programme. The grant helped fund a new league structure in South East Wales, additional teams in the existing league structures, opportunities for those from [black and minority ethnic] communities, and a trained workforce to support activity and offer additional opportunities for other underserved groups. The SFW participants are now actively involved within their communities ...”²⁹

In addition to weekly training sessions, there are forums for mental health organizations and services for refugees and asylum seekers, among others.

“By being involved in community services in this way, the coaches have had a positive impact on service users' physical well-being and ability to make healthier lifestyle choices Participants have also developed exit routes for some players to enter mainstream sport and have a positive impact in communities as coaches, sports leaders, and first aiders. It has also helped build their CVs; improve their skills, experience, qualifications and provide potential future employers with a checkable history and reference; and move them closer to employability and social inclusion. The reality is that many of the players would find it difficult to engage in mainstream football training and volunteer programmes and require these opportunities in a safe and friendly environment.”³⁰

England



Also see text of interview with Dr. Whitehead in the appendix

STATUS: Physical literacy is an established initiative in England. It was founded and developed by Dr. Margaret Whitehead, visiting professor at the University of Bedfordshire and president of the International Physical Literacy Association. In the school context, developing physical literacy is the foundation of PE and school sport.

DEFINITION: “Physical Literacy can be described as the motivation, confidence, physical competence, knowledge and understanding that provides children with the movement foundation for lifelong participation in physical activity. Enabling them to be physically literate supports their development as competent, confident, and healthy movers.”³¹ In the school context, developing physical literacy is the foundation of PE and school sport. Physical literacy is not perceived as a program, rather it is a desired and intentional outcome of any structured PE and school sport provision which is achieved more readily if learners encounter a range of age- and stage-appropriate opportunities.³²

LEADERSHIP: The Primary School Physical Literacy Framework was developed by the Youth Sport Trust (YST) in partnership with Sport England (SE), County Sport Partnership Network (CSPn), Association of Physical Education (afPE), sports coach UK (scUK), and national governing bodies of sport (NGBs).

FUNDING: The government of England funds Sport England (with taxpayer and national lottery funding) through the Department of Culture, Media, and Sport. Sport England supports physical-literacy-based initiatives. Corporate sponsorships supplement government-funded initiatives.

SECTOR AND VENUE: Physical literacy is taught and developed through physical education, organized sport, and active play; provided in school settings; and practiced/delivered in a holistic manner (includes affective, cognitive, and physical components).

SAMPLE PROGRAMS:

- ✦ TOP Sportsability is a program of the Youth Sport Trust, in partnership with the NGBs. Its mission is “to provide physical activity and sport options for young people with high support needs; to create a vehicle for the inclusion of disabled and non-disabled young people together; and to provide a basic introduction to a wide range of sports and activities in support of the School Games programme.”³³
- ✦ Change4Life Sports Clubs leverage the momentum of the Olympic and Paralympic Games to engage less active youth in primary and secondary schools in physical activity and school sport.³⁴
- ✦ Fit for Girls, an initiative of Active Girls, is a collaborative effort between the Youth Sport Trust and sportscotland. The program trains educators and promotes physical activity for girls. It is funded by the Scottish Government and is available to secondary schools. Fit for Girls’ main goal is to create sustainable change in schools and to provide girls with the foundation to be active for life.³⁵

- ✦ **Lead Your Generation: An Inclusive Future** is a leadership program that emphasizes inclusion. To carry out the legacy of 2012, Lead Your Generation matched young people with opportunities to volunteer at major sporting events. The program integrates people with and without disabilities and takes place in eight cities across the UK.³⁶

KEY RESOURCES:

- ✦ *Primary School Physical Literacy Framework*: Designed to support those working in primary schools, the framework helps educators structure their physical education and school sport programs to ensure the programs develop physical literacy in all participants.³⁷

MESSAGING: The International Physical Literacy Association is an active advocate of, and voice for, physical literacy in the UK and globally. The All Party Parliamentary Group on Primary Care and Public Health recognized the importance of physical literacy in the context of public health and health costs. The group's co-chair explained their motivation for the work, saying, "[Our] adults and our children are increasingly choosing to live sedentary lives, we are facing a tsunami of premature deaths in England. And, with the news that our children are now being diagnosed with long-term conditions as a consequence of unhealthy lifestyle choices, there is an urgent need to improve people's physical literacy."³⁸

INCLUSION: TOP Sportsability is a physical-literacy-inspired, inclusive activities program developed by the Youth Sport Trust (YST) in partnership with the National Governing Bodies of Sport. The program was designed to meet the individual needs of boys and girls with physical and intellectual disabilities. The program can be used by schools to help engage young people with disabilities in physical education and school sport, and to support their first steps into school games activities.³⁹

ASSESSMENT: Findings from a TOP-funded study found that children enjoyed physical education, sports, exercising, and having fun, and that they described physical education as energy-giving. Parents responded that they perceived physical education to play an educational role, while their role as parents was to enable practice and extension. Respondents cited the need to use the expertise of coaches to support physical education teachers. Parents were adamant about the importance of competition and that their children must experience it in order to learn about life; children said they enjoyed winning, but that losing did not matter. Personal achievement, whether self or peer referenced, appeared to be motivating and important. Further, the importance of play time and the opportunities it provides for physical activity, practicing skills, and engaging in games was raised throughout the parents' focus-group session.⁴⁰

SPORTS TEAMS/NSOS: There are approximately 12 national governing bodies that include physical literacy or some reference to physical literacy in their training courses.⁴¹

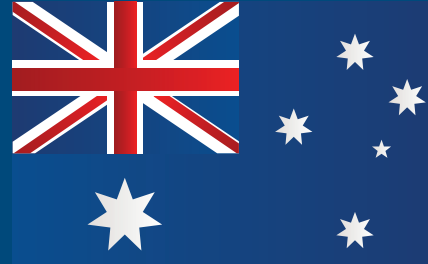
SUCCESS STORIES:

- ✦ Bupa Start to Move provides PE teachers of 4- to 7-year-olds with the techniques needed to teach fundamental movement skills to create competent, confident movers.⁴²
- ✦ The government of the United Kingdom started a program called Sure Start and funded centers in most of the boroughs where lower-income children receive opportunities to engage in physical-literacy-based activities. Whitehead said Sure Start is "providing the welcoming setting which is the best answer. It is really a whole lifestyle support mechanism."⁴³

- ✦ As part of Change4Life, Braunstone Community Primary School, a school in a low-income area with an above-average number of students with learning disabilities, began offering after-school programs. Change4Life gave the school's program leader the necessary resources and support to start the club. The students involved have since demonstrated improved confidence and desire to continue to be engaged with sports.⁴⁴

Other countries with physical literacy initiatives:
**Australia, New Zealand, Northern Ireland, Scotland,
Netherlands, Venezuela, United States**

Australia



STATUS: The first Australia-wide curriculum for Health and Physical Education (HPE) was scheduled to be released to Australia's states and territories and their respective education systems in 2014. Although the HPE documents do not make explicit reference to physical literacy, there are strong alignments between particular interpretations of physical literacy and aspects of the HPE curriculum. At this time, however, the concept of health literacy has been adopted at the exclusion of physical literacy. As such, the University of Canberra is pioneering explicit efforts around physical literacy.⁴⁵

DEFINITION: "Physical literacy is a concept capturing the ability to move effectively; the desire to move; the perceptual abilities that support effective movement; the confidence and assurance to attempt movement challenges; and the subsequent ability to interact effectively with their environment and other people."⁴⁶

LEADERSHIP: The University of Canberra, Centre of Excellence in Physical Literacy and Active Youth: This center's physical literacy project and research group aim to improve the physical literacy of Australian children through primary school PE and sport, and community linkages.⁴⁷

SECTOR AND VENUE: Physical literacy is taught and developed through physical education and practiced/delivered through the teaching of fundamental movement skills.

SAMPLE PROGRAM: Scattered programs exist, but there does not appear to be a consistent program for developing children's physical literacy throughout preschool and primary school in preparation for physical activity across the lifespan.

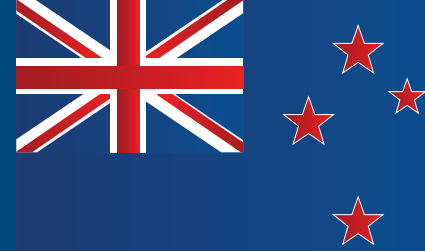
KEY RESOURCE:

- *Getting Australia Moving: Establishing a Physically Literate and Active Nation:* This publication provides a synopsis of global physical literacy initiatives and lays out a model for physical literacy in Australia.⁴⁸

INCLUSION: No programs found for underserved populations specific to physical literacy.

ASSESSMENT: None specific to physical literacy.

MESSAGING: The University of Canberra provides information on and research about physical literacy through university materials and an online presence. Academic leaders there also have a published game plan for Australia to embrace physical literacy.⁴⁹



New Zealand

STATUS: Physical literacy is a government initiative in New Zealand, acknowledged by Athletics New Zealand, with a focus on fundamental movement skills. Athletics New Zealand's website states: "Through the improvement of physical literacy (fundamental skills such as running, jumping, and throwing), the LTAD model will help develop a lifelong involvement of New Zealanders in physical activity and sport participation as well as producing future athletes."⁵⁰ Planning is underway for the development of the new 2015-2020 Community Sport Strategy that will include a review of all Sport New Zealand's community investment priorities, including the *Active Communities* program. Pending the results of the new strategy development, any decisions regarding future directions are on hold.

DEFINITION: Physical literacy is defined as "fundamental skills such as running, jumping and throwing," and it is a component of LTAD.⁵¹

LEADERSHIP AND FUNDING: The government of New Zealand funds Sport New Zealand through the Ministry of Education. Sport New Zealand supports national sport and recreation organizations, regional sport trusts, and local authorities, some of which have physical-literacy-based concepts incorporated into their programs. With funding from the Ministry of Education and regional sports trusts, KiwiSport implements sports initiatives for school-aged students that incorporate elements of physical literacy through the teaching of fundamental movement skills.

SECTOR AND VENUE: Physical literacy is taught and developed through physical education and organized sport, provided primarily in schools, and practiced/delivered to teach fundamental movement skills.

SAMPLE PROGRAM(S):

- KiwiSport Program provides resources for parents around activities that develop the basic movement skills used in sport and other physical activities.⁵²

KEY RESOURCES:

- *Developing Fundamental Movement Skills:* Introduced by Sport New Zealand in 2012 as a resource for teachers, coaches, parents, children, and others who want to support the development of fundamental movement skills in children aged 5 to 12 years in a fun and purposeful way.⁵³ It does not directly speak to physical literacy, however, the concept is acknowledged by Athletics New Zealand (New Zealand's NGB for track and field).

INCLUSION, ASSESSMENT, AND MESSAGING: Difficult to assess given that physical literacy is not fully developed and incorporated into the institutions of New Zealand sports and education.

Northern Ireland



STATUS: Physical literacy is described by the long-term athlete development model, which focuses on developmental stages and windows of opportunity for learning key skills. This model explicitly focuses on developing athletes and sportspeople, and maintains that primary schools are the most important setting for the delivery of physical literacy, since they offer a constant and reliable opportunity to reach every child. In recognition, Northern Irish schools have physical development and movement components in the curriculum. Physical literacy has been endorsed by governing bodies in Northern Ireland through the alignment of their policies and programs. The strategy, as provided in the document, *Sport Matters: The Northern Ireland Strategy for Sport and Physical Recreation 2009-2019*,⁵⁴ and endorsed by the Department of Health, Social Services and Public Safety and the Department of Social Development, supports the development of physical literacy through coaching. The intent is to provide additional opportunities for children and young people to be active and develop the movement competence or fundamental movement skills associated with physical literacy.⁵⁵

DEFINITION: Physical literacy in Northern Ireland is defined as “the ability to use body management, locomotor and object control skills in a competent manner, with the capacity to apply them confidently, through play and practice, in settings which may lead to sustained involvement in sport and physical recreation.”⁵⁶

LEADERSHIP: Sport Northern Ireland (SNI), with support from the government of Northern Ireland and Department of Health, Social Services and Public Safety, and the Department of Social Development.

FUNDING: Sport Northern Ireland has been funded by the Sports Council of Northern Ireland. SNI and lottery funding (in addition to funding through private sector sponsorships and partnerships) was pooled to deliver a program called Sport in Our Community, a physical activity and physical-literacy-based program.

SECTOR AND VENUE: Physical literacy is taught and developed through physical education and organized sport, provided in schools, and practiced to teach fundamental movement skills.⁵⁷

KEY RESOURCES:

- *Sport Matters: A Culture of Lifelong Enjoyment and Success in Sport: The Northern Ireland Strategy for Sport and Physical Recreation 2009-2019:* This resource provides a strategy for sport that makes reference to physical literacy, includes information relevant to inclusion, and plays an important role in messaging.⁵⁸

Scotland



STATUS: Physical literacy is an initiative in Scotland under the Better Movers and Thinkers Program (BMT). BMT is designed to develop physical literacy with a focus on movement skills and cognitive tasks, with the intention to give children the ability to move and think in an integrated way. Physical education specialists are trained through the BMT Program. Additionally, the program identifies Cluster Champions, adults who are responsible for incorporating BMT methodologies and content into their schools' physical education programs.⁵⁹ Scotland also uses the Primary School Physical Literacy Framework (see England on page 11).

DEFINITION: "Physical Literacy can be described as the motivation, confidence, physical competence, knowledge and understanding that provides children with the movement foundation for lifelong participation in physical activity. Enabling them to be physically literate supports their development as competent, confident, and healthy movers."⁶⁰

LEADERSHIP: Education Scotland, Sport Scotland

FUNDING: Government

SECTOR AND VENUE: Physical literacy is taught and developed through physical education, supported in schools, and practiced/delivered in a holistic manner (includes affective, cognitive, and physical components).

SAMPLE PROGRAM: Better Movers and Thinkers (BMT) Program (2015 implementation date).

KEY RESOURCES:

- *Primary School Physical Literacy Framework:* This is a framework designed to support those working in primary schools to consider how best to structure their physical education and school sport programs to ensure maximum opportunity is provided to develop the physical literacy of all their students.⁶¹

INCLUSION AND MESSAGING: Elements are similar to those in other UK countries.

Netherlands

STATUS: Physical literacy is synonymous with fundamental movement skills. It is used by the national sport federation and various sport associations to increase sport participation and find athletic talent. The first three stages of the LTAD model (Active Start, FUNdamentals and Learning to Train) target children ages 6 to 12 and are treated together as physical literacy. The Dutch Sport Federation uses the term “physical alphabet” to describe the FUNdamentals stage. The term “physical alphabet” is used to describe the development of fundamental movement skills such as kicking, jumping, skating, and hitting. In the Netherlands, physical literacy is not explicitly used as a framework for physical education.⁶²

LEADERSHIP AND FUNDING: The government funds the Dutch Sport Federation (NOC*NSF), which supports programs focusing on the development of fundamental movement skills, one component of physical literacy.⁶³

SECTOR AND VENUE: Physical literacy is taught and developed through organized sport, provided in the school setting, and practiced/delivered to teach sport-specific skills.

KEY RESOURCE:

- *Sport Agenda 2016:* Notably, the agenda aims to increase participation in sport and to keep participants engaged over the long term.⁶⁴

DEFINITION: No explicit definition exists in the Netherlands, however, they do use physical literacy to refer to the development of fundamental movement skills. Physical literacy is sometimes accompanied by the concept of “physical alphabet,” a term used by the Dutch Sport Federation to describe the FUNdamentals stage of the LTAD model and, more generally, the development of fundamental movement skills such as kicking, jumping, skating, and hitting.⁶⁵

SPORT TEAMS, NSOS: Physical literacy is taught and developed through programs run by the Dutch Sport Federation (NOC*NSF) and various sport associations. It is a concept most used in the context of the policies of the national sport federation (NOC*NSF) and different sport associations. Those governing sports such as swimming, volleyball, and track and field use physical literacy in plans that engage children in their sport. In these plans, physical literacy is used interchangeably with fundamental movement skills within the LTAD model. The idea is that children with an extensive movement repertoire will be more skillful in their sport and will drop out of sports at lower rates.

Venezuela



STATUS: Though the term physical literacy (*alfabetización física* in Spanish) has not been used or discussed in the national literature in Venezuela, or in the national education system, there are objectives and a vision that align with the concept of physical literacy.⁶⁶

LEADERSHIP AND FUNDING: The government funds and supports the Ministry of People's Power for Sports, which in turn supports Mission Barrio (see below).

SECTOR AND VENUE: Physical literacy is taught and developed through organized sport and active play, in community park settings, and practiced/delivered in a holistic manner that includes affective, cognitive, and physical components.

SAMPLE PROGRAM: Barrio Adentro Deportivo (sport within the suburb), later changed to Mission Barrio Adentro Deportivo, is a Venezuelan national social welfare program designed to benefit underserved communities and those who historically have had less access to sport activity and health services. The program seeks to provide public sports training, among other things, to poor and marginalized communities in Venezuela. There are five fundamental aspects of this program: a) physical activity for adults, people with different abilities, and pregnant women; b) mentoring in technical aspects to schools in Venezuela; c) training sport monitors; d) physical recreation for all; and e) development of mass participation in sport. Mission has spread into Venezuela's 24 states and the capital district, offering the following programs: a) grandparents circle; b) dance aerobics; c) physical culture; d) "laboral gymnastics;" e) gymnastics for kids; f) physical reparation for pregnant women; g) chess practice; and h) sport talent schools. The program is inclusive with a vision that aligns with the basic tenets of physical literacy.

United States



Physical literacy is an evolving concept within the United States. Researchers have found the first reference to the term in an 1884 document, in which it was used by a member of the Army Corps of Engineers. Academics later adopted the term, leading to the concept being used more widely beginning in the second quarter of the 20th century. The frequency with which physical literacy appeared in publications ebbed and flowed before going virtually dormant in the early 1970s.⁶⁷

More recently, a small but growing number of organizations have come to understand physical literacy as an important ideal with regard to increasing physical activity among Americans and improving population health. In its 2012 report, *Lots to Lose: How America's Health and Obesity Crisis Threatens America's Future*,⁶⁸ the Bipartisan Policy Center recommended that the United States embrace physical literacy. Then in 2013, at the launch of the Aspen Institute's Project Play, Dean Kriellaars, a leader from the Canadian Sport 4 Life movement, introduced physical literacy as a promising concept worth considering, leading to the formation of a working group, the commissioning of this global scan, and the publication of a forthcoming white paper that will propose a cross-sector model for how to develop physical literacy in all children in the United States. The sectors identified as well-positioned to play key roles in advancing physical literacy, and in reaping the benefits of doing so, are: community recreation organizations, health care and medical providers, public health agencies and foundations, media and technology, education, fitness organizations, business, national sport organizations, parents/guardians, and government. To start the process, the Sports & Society Program, in its January 2015 report *Sport for All, Play for Life: A Playbook to Get Every Kid in the Game*, defined physical literacy as the "ability, confidence, and desire to be physically active for life."

Another early adopter is SHAPE America, the largest organization of professionals involved in school-based health, which supports physical literacy as part of the *National Standards and Grade-Level Outcomes for K-12 Physical Education*.⁶⁹ The overarching goal, as set forth by SHAPE America's National Association for Sport and Physical Education, is "to develop physically literate individuals who have the knowledge, skills and confidence to enjoy a lifetime of healthful physical activity."⁷⁰ Additionally, the Utah Sport for Life program has promoted physical literacy through the development of a US4L model concept based on LTAD/CS4L. It has also introduced the concept of LTAD into its sports programs and has shared this fundamental sport philosophy with others in Utah.

Among national sport organizations, USA Hockey introduced the American Development Model (ADM) to provide a defined systematic (building-block) approach to developing the athletic potential of children starting from the earliest stages of participation, thus increasing the athlete's skill, enjoyment, and proficiency. The US Olympic Committee (USOC) has embraced ADM with an initiative designed to unify national governing bodies and community sport programs with the goal of keeping Americans active in sport throughout life. The model combines sport, play, education, and health through a five-stage pathway based on a child's physical, mental, and emotional capacities. In 2014, the

USOC committed to engaging all 48 of its affiliated NGBs to endorse the ADM. Consistent with a model proposed by the Aspen Institute's Project Play, physical literacy by age 12 is a chief goal.

Physical literacy programs are starting to be introduced by some communities. Stoughton, Wisconsin, for example, promotes physical literacy through youth sport programming.⁷¹ The Stoughton Parks and Recreation Department has physical-literacy-based programs for children ages 0 through 6 that it calls Active Start and programs for ages 6 through 9 termed FUNdamentals. The department's website hosts a video that describes physical literacy.

Appendix

Viewpoints of Dr. Margaret Whitehead

In an effort to inform the working group, we interviewed by e-mail Dr. Margaret Whitehead, visiting professor at the University of Bedfordshire and president of the International Physical Literacy Association (IPLA). Interview questions were sourced from the Aspen Institute's Physical Literacy Working Group. Questions are provided below with edited responses.

How should we define physical literacy?

Dr. Margaret Whitehead: In short, physical literacy can be described as a disposition that capitalizes on the human-embodied capability, wherein the individual has the motivation, confidence, physical competence, knowledge, and understanding to value and take responsibility for engagement in physical activity for life.

This is the short and simple definition. What is significant is the reference to:

- ✦ The affective (motivation, confidence, valuing/responsibility)
- ✦ The physical (to be understood not as isolated skills but effective interaction in different contexts)
- ✦ The cognitive (knowledge and understanding)
- ✦ The fundamental goal of physical literacy being lifelong participation.

On account of our holistic nature, individuals making progress on their individual/unique physical literacy journey demonstrate the following attributes/symptomatic behaviors:

- ✦ The motivation and confidence to capitalize on innate movement/physical potential to make a significant contribution to the quality of life. Physical literacy is an inclusive concept. All humans exhibit this potential, however, its specific expression depends on individual endowment in relation to all capabilities, significantly movement potential, and is particular to cultural and environmental contexts.
- ✦ Movement with poise, economy, and confidence in a wide variety of physically challenging situations.
- ✦ Sensitive perception in “reading” all aspects of the physical environment, anticipating movement needs or possibilities, and responding appropriately to these, with intelligence and imagination.
- ✦ A well-established sense of self as embodied in the world which, alongside an articulate interaction with the environment, engenders positive self-esteem and self-confidence.
- ✦ Sensitivity to and awareness of embodied capability leading to fluent self-expression through non-verbal communication and to perceptive and empathetic interaction with others.
- ✦ The ability to identify and articulate the essential qualities that influence the effectiveness of movement performance.

- An understanding of the principles of holistic health, with respect to fundamental features such as a rich and balanced lifestyle, exercise, sleep, and nutrition.
- A life pattern, that, as appropriate, demonstrates the valuing of and commitment to, participation in physical activity.

What is the purpose of physical literacy?

The purpose of physical literacy is to enable people to have positive, meaningful experiences in their involvement in a wide range of physical activities, with the outcome that they are motivated and confident to value and take responsibility for their own physical activity throughout life.

What is the significance of motivation in developing physical literacy?

What I feel is lacking at the moment, significantly lacking, among many people is the motivation and confidence to continue with physical activity. They feel as if they are not being successful, they will never succeed. As a result they have no confidence. These people tend to have been in situations in which they have received little or no encouragement, their efforts have not been acknowledged, and no value has been given to their progress. It is really important that motivation, in relation to physical activity, is nurtured at all ages, from birth onwards. Motivation is absolutely fundamental in promoting lifelong participation.

Is physical literacy a one-size-fits-all approach?

No. I am absolutely passionate that we have to help people to realize that everyone is different and that they are all on their own individual physical literacy journey. Everyone can make progress—disabled people, people from all different cultures, women, etc. Judgments should not be made in comparison with others. Judgments should be made against personal previous achievements. They should come away thinking, ‘I can do it.’ Through these positive experiences, they grow in self-confidence and self-esteem and are eager to come back. It is absolutely critical that people have meaningful experiences and that each person is valued for the progress they have made as individuals.

Is physical literacy a globally recognized concept—and is there global momentum?

The concept is being used worldwide. Very many countries are using the concept of physical literacy. At the moment the situation is one in which a range of parties worldwide have adopted the goals and principles of physical literacy and are now looking into the implications of adopting the concept in their curriculum planning. We are definitely on the way, which is good news.

What do we need to do to advance physical literacy in the United States and other nations?

You need to create an ‘army’ of people committed to fostering physical literacy, who will spread the word and guide others to implement appropriate practice. These people will lead by example. They will come from all constituencies, e.g., early years settings, the coaching world, schools, leisure centers, old peoples’ homes, etc. They will understand the concept of physical literacy and be able to justify its potential and value. This will include being able to articulate the value of being physically active throughout life, for example the beneficial outcomes such as physical health, emotional health, social health—in other words, holistic health. Secondly, we need to set up longitudinal studies both to demonstrate the effectiveness

of the physical literacy approach to promote lifelong participation and to have the evidence that particular teaching approaches are effective in enabling all to make progress on their journey. This will involve developing a method of charting individual progress across all elements of the concept (affective, physical, cognitive, and involvement in physical activity beyond school). These steps are urgently needed as, at the moment, many in the adult population have lost all interest and motivation to take part in physical activity. This is being reflected in the attitudes of young people. We have to break into the cycle.

Why is the education system in the United Kingdom taking the lead on physical literacy?

Currently in the UK, it is those in education who have adopted the concept, partly because my roots are in education and partly because I had to fulfill the publisher's requirement that my book should be directed to a particular constituency. However, colleagues in the coaching community are joining us. It is important to make clear, however, that support for physical literacy needs to be spread across all constituencies who are in a position to promote physical activity throughout life. Teachers of PE are not the only people who can promote physical literacy. However, they have a significant role to play in that they are the only people with the expertise to promote physical literacy who will have contact with every young person. They have the experience to provide sympathetic and knowledgeable guidance and to manage differentiated teaching that caters for all. They have the capacity to sow the seed of meaningful, self-fulfilling, self-affirming involvement in physical activity that hopefully will last a lifetime. We need well-trained teachers in all phases of education.

What strategies work best for promoting and implementing physical-literacy-based programs?

At root we have to persuade those in authority that:

- Involvement in physical activity has significant benefits for holistic health. This includes physical health, emotional health, and social health, as well as illness prevention and the resources to recover from illness.
- Involvement in physical activity can enhance life by offering a wide range of experiences that are enjoyable and enriching, giving purpose to life and the chance to be active alongside others.
- The way to promote lifelong participation is to ensure that participants have meaningful and worthwhile experiences that will give them the motivation and confidence to make physical activity a regular part of their lives.
- Money promoting physical literacy will be money well spent. The investment will be preventative in relation to poor health and at the same time create a robust work force.

What strategies have you and/or others used to put physical literacy on the same page as literacy and numeracy?

Write papers, give presentations, and engage with as many people as possible to argue for the value of lifelong physical activity and hence the benefits of promoting physical literacy. Prior to the creation of IPLA it fell to me to sell the concept. A stance I have taken, on occasion, is to advocate a liberal curriculum that acknowledges that we, as humans, are comprised of numerous dimensions—e.g., the emotional, the cognitive, the aesthetic, the physical—and that for a balanced curriculum and a balanced individual, all dimensions should be addressed.

Is physical literacy an inclusive concept?

Absolutely, yes. There is no doubt that everyone can make progress on their physical literacy journey notwithstanding their endowment. Everyone can make progress, whether it is tying a shoelace or catching a ball for the first time or running faster/jumping higher. Everyone's progress should be celebrated. People I know who have worked in the field of special needs tell me of the difference it makes for young (and older) people with disabilities to be helped to master simple movement challenges and to have their progress acknowledged. Experiences such as these can make a real difference and impact across a variety of areas if developed. Enhanced physical activity can benefit all.

What groups have you been successful in incorporating into the physical literacy 'army'?

Teachers of physical education in schools—primary, secondary, and special—and those working with preschool youngsters. We also have a group of committed coaches who are spreading the word. One initiative refers to 'coaching the whole child' and finding out from each child or each individual what their aspirations are in relation to physical activity. We are also beginning to work with people from the leisure industry and people caring for the elderly.

How did you reach out to coaches and what specifically are you asking of them?

There are people in education who either have contacts from the coaching fraternity or who are, themselves, involved in coaching. It would also be true to say that a number of governing bodies (GB) picked up physical literacy early on. GBs run training courses for coaching and some have incorporated physical literacy in their syllabi. This has, in part, been a way to help coaches work effectively in schools, where they are frequently asked to contribute inside and outside curriculum time. There is a longstanding problem of coaches being activity centered and focusing on the elite. Consideration of physical literacy is invaluable to ensure that coaches appreciate that they are teaching the young people, not the activity.

How can we get more lower-income children involved in physical-literacy-inspired programs?

About six years ago, the UK government established a program called Sure Start. This provided funding for most of the boroughs to set up centers where lower-income parents could bring their preschool children most days a week. In most cases these programs involved opportunities for a range of physical activity, generally of a free-play variety but on occasions with some guidance. In very many cases these centers were highly successful. However, funding has run out and the centers have not been maintained by all boroughs. This is very unfortunate and is a lost opportunity to develop parenting skills, promote child development, and give these children opportunities to be physically active.

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