



## **Review of Physical Literacy Programmes Delivered through Governing Bodies**

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## **The research team**

The University of Ulster's (Ulster) Sport and Exercise Sciences Research Institute responded to an invitation from Sport Northern Ireland (SNI) to submit a tender to conduct a review of Physical Literacy (PL) programmes delivered through Governing Bodies (GB's) of Sport within Northern Ireland. On the success of this tender the research team conducted a review across NI to assess GB's delivery of PL at grassroots level. The content of this report illustrates the findings from the research.

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## 1 Executive summary

The NI Strategy for Sport and Physical Recreation 2009-2019 establishes the importance of Physical Literacy (PL), which it defines as:- *"the ability to use body management, locomotor and object control skills in a competent manner, with the capacity to apply them with confidence in settings which may lead to sustained involvement in sport and physical recreation"*. The Strategy consolidates its view of the importance of PL by articulating it in financial terms with the current investment on activities aimed at developing PL as an estimated £78m. This is expressed within the Strategy's Vision of promoting "a culture of lifelong enjoyment and success in sport".

The aim of this report was to establish the current picture within NI taking into consideration structures, policy and practical implementation for the delivery of PL. The objectives of the research were to identify areas of good practice, gaps, potential areas of improvement at both policy and implementation levels. The objectives were also to highlight the extent to which GBs have incorporated LISPAs into their participant and coaching development model/strategies, and how LISPAs translate into the actual development of children's PL in club and community settings.

The research occurred in 4 phases, with thirty one GBs who are currently funded by SNI taking part. Phase 1 consisted of an online survey of leaders within each GB, Phase 2 a follow up focus group with the same leaders of the Governing Bodies (GB's). During Phase 3 interviews with coaches were conducted to assess what types of delivery was taking place and phase 4 consisted of a desk based review of PL in other countries.

There was an 83.87% response rate (26 from 31) to the online survey. 87.5% (21) of respondents indicated their sport had a participant development model and 76.2% viewed this model as having an influence on participants and coaches experiences. 23.8% indicated they were not sure if a model had an influence on delivery of PL. 69.9% (16) of the respondents indicated the LTAD as the model being implemented, 13% (3) LISPAs model, and 17.4% (4) indicated other, 3 respondents did not respond to this question.

A variety of methods were used across the GBs to disseminate information about the LISPAs/LTAD models. Coaching awards were the main area where information regarding LISPAs/LTAD is being delivered at present (66.7%,12). Coaching seminars (66.1%, 11), training workshops (50%, 9) and leaflets (33.3%, 6) were other modes of delivering.

GBs identified limited understanding across all organisational levels of PL. Only 2 GBs (9.1%) rated their organisations as having excellent understanding at policy and delivery of PL. 1 GB (4.5%) detailed excellent understanding at implementing and training of coaches. This compared to 36.4% (8) rating their organisations as having a limited understanding at policy level, 22.7% (5) implementation and training of coaches and 31.8% (7) in the delivery of PL. 66.7% (14) indicated that they felt there were barriers to the implementation of PL, 19% (4) indicated no and 14.3% (3) were unsure.

From phase 2 of the research, participants when probed about the definition of PL were aware of how fundamental movement skills links to health and long term participation in physical activity and development through sport. However the

understanding of fundamental movements was greater than the understanding of the term PL.

An emerging theme from the focus groups was quantifying the developmental change in children as a result of the delivery of fundamentals. The GAA and IFA representatives briefly described how they have assessed children's fundamental movements skills. Others in the group viewed assessment of skills as a positive step forward.

The provision of courses on fundamental movement skills was perceived to be a positive addition to the individual coach's development. The main addition to their skill set as a coach was in learning to differentiate between children's capabilities and be in a position to adopt a skill session to the child's requirements.

It was clear from the desk based research case studies from Australia, Canada and NI that physical education programmes are an integral component of the total school experience for students and provide the best opportunities to develop physically literate children who are able to make healthy and active choices now and throughout their lifespan. It was the view that physical education curricula, when delivered fully, guides educators in teaching fundamental movement skills to children in a sequential progression.

Collectively GBs of sport are using PL but more specifically an understanding of fundamentals to enhance the experiences of young people to be involved in sport. Embedding PL core principles, beliefs and values of all involved were viewed as paramount. The challenge for some GBs was the need for a clear definition of what PL means from individuals working at policy through to grassroots level.

The findings of this research support suggestions from previous reports, that the development of PL is a key issue for integration in PE in primary schools with the role of the GB being to enhance children's learning within the educational setting. The positive impact and influence of DENI coaches within the GAA and IFA have been identified as examples of good practice.

## **2 Background to the research**

### **The wider context**

A significant proportion of the adult population in developed countries is physically inactive. Such inactivity has been linked to rising obesity levels and to a range of other morbidities including diabetes, cardiovascular disease and some cancers. It is now widely recognised that one of the key barriers to activity for teenagers and adults is a perception that they are 'not the sporty type' or do not possess the physical skills required to participate in the range of physical activities on offer. PL developed in childhood may have the potential to increase the degree to which individuals will undertake regular health-enhancing physical activity throughout their lifespan. The work of Istvan Balyi suggests that there is a number of "windows of opportunity" to develop key aspects of physical competence during childhood and, that, if these "windows" are missed, then the opportunity to develop these capacities is lost forever. Several schemes report to increase children's PL at an appropriate age, thus capitalising upon one or more of these "windows of opportunity".

## **Physical literacy, lifelong physical activity and sport**

The NI Strategy for Sport and Physical Recreation 2009-2019 establishes the importance of Physical Literacy (PL), which it defines as:-

*"the ability to use body management, locomotor and object control skills in a competent manner, with the capacity to apply them with confidence in settings which may lead to sustained involvement in sport and physical recreation".*

The Strategy consolidates its view of the importance of PL by articulating it in financial terms with the current investment on activities aimed at developing PL as an estimated £78m. This is expressed within the Strategy's Vision of promoting "a culture of lifelong enjoyment and success in sport".

Strong evidence exists to suggest that the nature of children's early experiences of sport is crucial to the development of high levels of expertise. It is reasonable to believe that the quality of experiences, impact on the sports careers of all young people, regardless of ability, with the acquisition of physical competencies not being the only important factor. The 5 -12 year age range is the 'skill hungry years', this has been highlighted in The Game Plan Strategy and reiterated in the UK Action Plan for coaching. The LTAD and LISPA models illustrate the importance of the Active Start and Fundamental stage of development for all young people to assist with laying down the foundations for a continued lifelong participation in sport or physical activity.

### **Provision of programmes**

Within Northern Ireland there have been programmes developed by coaches to run in schools and within the community club setting but presently there is no research evidence base to say how effective this has been in developing children's PL. The focus on the development of PL relates to the opportunities and provision of quality programmes to ensure equitable involvement in sporting opportunities. Therefore GBs of sport present an effective vehicle for developing children's PL through sustained participation in their grassroots programmes. Presently there are over 100 recognized sporting activities in Northern Ireland, which through 85 Sport Northern Ireland-recognized GBs provide opportunities for children and young people to participate in sport and physical recreation at local, regional, national and international levels. Of these GBs SNI currently fund 33.

Since 2006, Sport Northern Ireland (SNI) and others have worked to evolve the LTAD model to incorporate more inclusive principles that acknowledge the nature of sports participation for most people from a recreational rather than high performance perspective – LISPA (Lifelong Involvement in Sport and Physical Activity). Within the strategy there are key elements which are important to the development of sport:

- Opportunities – quality, quantity and accessibility
- Organisations – collective ownership of a range of organisations (public, private and community/voluntary) to develop and deliver increased opportunities
- Workforce - The importance of a qualified, competent and available workforce (paid and voluntary)
- Places – The development of improved quality, quantity and accessibility of places

GBs have been advised to incorporate the LTAD/LISPA model into their organizations to assist with the development of their sport but at present an understanding of the theory into the practical setting is not clearly understood, specifically in relation to PL. The key questions that need to be asked are:

- Have GBs taken into consideration the development of the LTAD/LISPA model into their participant and coaching development strategies, and
- How has this been implemented in the delivery of grass roots participation programmes aimed at developing PL in the club/community setting with a specific remit relating to their coach education.

### **Fundamental Movement Phase**

The Fundamental movement phase specifically promotes the idea of deliberate play as the appropriate environment in which to develop Agility, Balance, and Coordination (A,B,C's) under the term multi-skill. Presently this is in a transitional stage in sport, according to the scientific models. It is important therefore through research to assess added value these present structures have on sports coaching.

The biggest challenge is the shift in attitude for all involved in physical activity promotion through movement to understand the need to develop PL. To assist this transition there is a need to develop the coaching style from one that is directive in skill/drill like activities to one that is more creative – guiding and empowering all participants. It is clear that very significant weight is attached to PL by NI policy-makers; this is translated in the investment of resources in the area now and in the future (DENI and Active Community Coaches). Thus it is important that the research is used to produce evidence determining the potential success in implementation of the PL programmes to ensure continued involvement in lifelong physical activity, taking into account the relatively early stage of some PL programmes. Fundamentals of movement do not generally appear naturally but are developed through appropriate opportunities and environments for learning and attainment – acquiring PL via deliberate play opportunities (Cote and Hay 2002). The bases of the current research is to evaluate how effective and efficient the present programmes within GBs are in relation to developing the core competencies that are required for the development of fundamentals within sport.

### **Aims of the research**

To review the GB's policy structures, implementation, impact and effectiveness of structured programmes designed to develop PL in children in NI and compare these structures to global best practice. The findings will highlight gaps and areas of best practice in NI which can be shared and used to shape future policy and resources in the area of PL.

The project will also highlight opinions of stakeholders and make recommendations identifying strengths and weaknesses (in terms of operations, developments, implementation, monitoring and evaluating and establishing potential partnerships) of current PL delivery, highlighting the opportunities to maximize effectiveness in future policy developments.

### **3 Methods**

The study was comprised of four phases. The first phase was an on line survey of the 31 GB's funded by SNI. The second phase included 3 focus group discussions. Those involved in the focus groups were from various levels within the GB's, such as policy leader, coach development officer and practitioner. The third phase was from a practitioner view point with interviews being conducted. The final phase of the study included a desk based research exercise, wherein best practice case studies from other countries were compared to current practice in NI.

#### **Participants and Data Collection**

Phase 1-An online questionnaire was developed and e—mailed to the 31 GB's. Key personnel were targeted to answer the questionnaire as outline above (See appendix 1). There was an 83.87% (26) return rate to the online survey.

Phase 2-Consisted of 3 Focus groups. The content for the focus groups were developed from the findings from Phase 1 (See appendix 2). 15 personnel from policy, coaching development and practitioners from key GB's selected from Phase 1 of the study were invited to attend the focus groups.

Phase 3-Interviews were conducted using a semi-structured interview schedule. The structure of questions for this phase of the study were developed and shaped from Phase 1 and 2 of the study. 24 interview took place at a time and place convenient to the coach(s) (See appendix 3).

Phase 4-A desk based review of best practice was undertaken to gain a better understanding of what is currently happening within this area from a worldwide prospective. This desk based research included web based search within Australia, Europe, Canada and USA. Identification of three case study examples of best practice outlining why these have been successful were highlighted.

## 4 Findings

### Phase 1 –Online Survey

Question		% response	Number
<b>Gender</b>	Male	61.5	16
	Female	38.5	10
<b>Currently coaching</b>	Yes	80.8	21
	No	19.2	5
<b>Current role</b>	Development officer – participation	29.4	5
	Chairperson	11.8	2
	Development officer – club	5.9	1
	Secretary	17.6	3
	Talent ID and Development Officer	5.9	1
	Coaching Development	29.4	5
	Other		13
	Did not respond		9
<b>Sport</b>	Team	26.9	7
	Individual	15.4	4
	Both	57.7	15
<b>Participation within sport</b>	Males	0	0
	Females	3.8	1
	Both	96.2	25

**Table 1: Demographic information of those responding to the online survey**

As phase 1 was exploring PL at the policy level it was important to recognise what positions in the GB those answering the questionnaire had, and to determine their involvement practically within coaching. Of those who responded 80.8% (22) were currently involved in coaching. Many had dual roles within their sport. 76.9% (20) were also involved in their GB for more than 1 year. 69.2% (18) of those completing the questionnaire were employed by their GBs. This professionalism to volunteer/amateur status will be further developed in the results section. 19.2% (5) of the sample indicated they were NI GB's, 57.7% (15) all Ireland and 23.1% (6) indicating they were UK based GB's.

### Coaching at Grassroots

Table 2 below details the number of coaches that are currently delivering at grassroots level in a paid and voluntary capacity. Of the returned questionnaires 80.77% (21) of GBs indicated they have volunteer coaches delivering within grassroots programmes compared to a 65.38% (17 out of 26) detailing they had paid coaches involved within their grassroots programmes.



<b>Numbers</b>	<b>% Volunteer (respondents)</b>	<b>Numbers</b>	<b>% Paid (respondents)</b>
1 - 10	38.1 (8)	1	35.3 (6)
11 - 20	14.3 (3)	2 - 5	23.5 (4)
21 - 30	14.3 (3)	5 - 10	5.9 (1)
31 - 50	9.5 (2)	10 - 15	5.9 (1)
>50	23.8 (5)	>15	29.4 (5)

**Table 2 – Number of coaches (%) involved in the delivery of PL coaching from a volunteer to paid capacity**

### **Participant Development Model**

87.5% (21) of respondents indicated their sport had a participant development model, 76.2% viewed this model as having a positive influence on participants and coaches experiences, 8% indicated they were not sure if this had an influence. 12.5% (3) who detailed their GBs have not been engaged in a participant model highlighted this to be due to a player pathway being currently under review and a view that this was a new area and one they should explore.

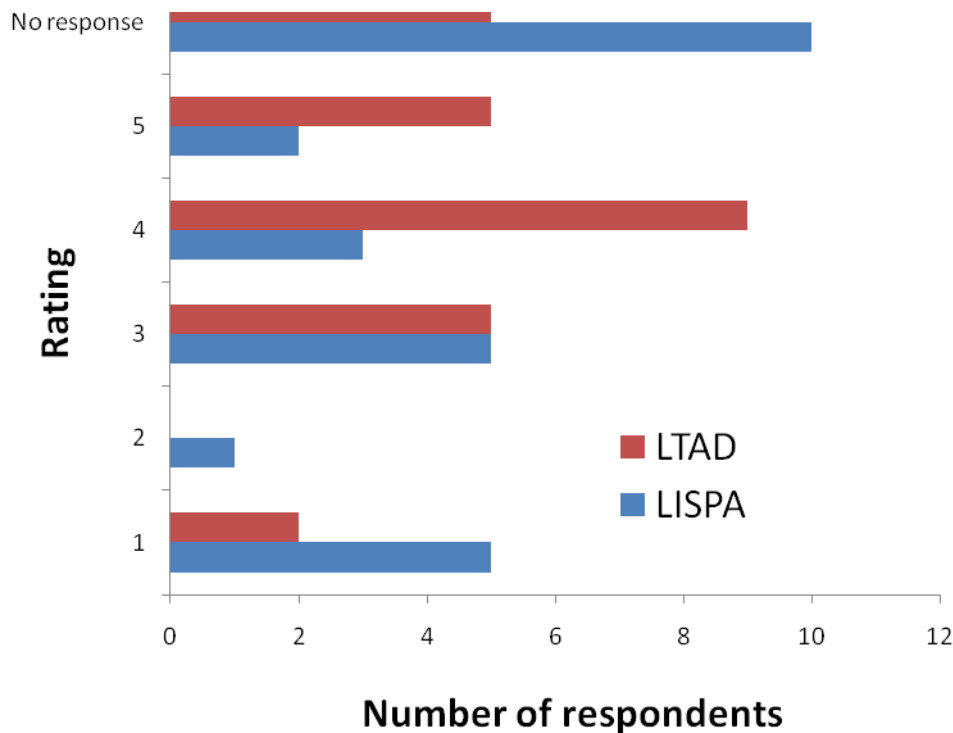
### **LTAD / LISPA Model and training received**

When questioned what specific development model their GB used, the LTAD was viewed as the preferred model/framework. 69.9% (16) indicated LTAD, 13% (3) LISPA, 17.4% (4) indicated other and 3 respondents did not give a response to this question.

60.9% (14) indicated they had received training with the remaining 39.1% (9) indicating they had not, 3 respondents did not respond to this question.

When asked what training did they receive 42.3% (11) responded. The variety and level of training received is varied and was dependent upon who has delivered this training. In house (54.5% / 6 respondents) and SNI training (45.5% / 5 respondents) followed by scUK training (36.4% / 4 respondents) played a key part in educating respondents. ISC, District Councils and Sports Partnerships did not play a key role in the delivery of education at this level. UK Athletics, The British Canoe Union, Mountaineering Federation, British Orienteering and the University of Ulster were highlighted as organisations that had assisted in training. 90.9% (20) indicated that they would attend future PL training events.

## Understanding of the LISPA and LTAD models/frameworks



**Figure 1: Understanding of LISPA and LTAD models/frameworks (1 – no understanding to 5 –full understanding)**

It is evident from the figure above that there is limited understanding of the LISPA model. Only 31.3% (5) of respondents had an understanding of the LISPA model (rating 4 or 5) compared to 66.7% (14) for LTAD. However all respondents did not answer this question – 16 out of the 26 responses detailed information relating to LISPA (61.54%) compared to 21 out of 26 responses for LTAD (80.77%).

Question 26 asked the respondents how these models have assisted in developing their sport. There were 20 responses to this question with the respondents indicating the models have had an impact on developments in competition, training sessions, coach education and other areas. From the responses the models have had the most impact within their coach education with 75% (15) of respondents indicating this as the case, 55% (11) training sessions and 50% (10) competition. Other areas which respondents have indicated as benefitting from this model included; squad programmes, recreational sport, elite development, older people and their programme development.

In terms of the impact these models have on the development of the GBs, 69.6% (16) indicated that it was an important element, 26.1% (6) were uncertain and 4.3% (1) indicated no they did not think LISPA or LTAD was a driving force for developments in their sport. 3 respondents did not complete this question.

## Understanding of the LISPA/LTAD model/framework

Within this section of the questionnaire an understanding of other partners involved in the delivery of grassroots was investigated. The first question asked the respondents to state if they felt the Governing Body, Club, Coach tutor, Coach, Participant and Parent needed to understand the models outlined. 3 GBs are of the view that all involved in their sport need to have an understanding of the models for the development of their sport. Table 3 illustrates the response from the 23 completed answers :

	Yes	No	Not Sure	No response
<b>GB</b>	21			2
<b>Club</b>	20	1	2	
<b>Coach Tutor</b>	21		1	1
<b>Coach</b>	22		1	
<b>Participant</b>	19	1	2	1
<b>Parent</b>	19		3	1

**Table 3 : Response relating to key people involved in sport having an understanding of the models**

## Dissemination of Information

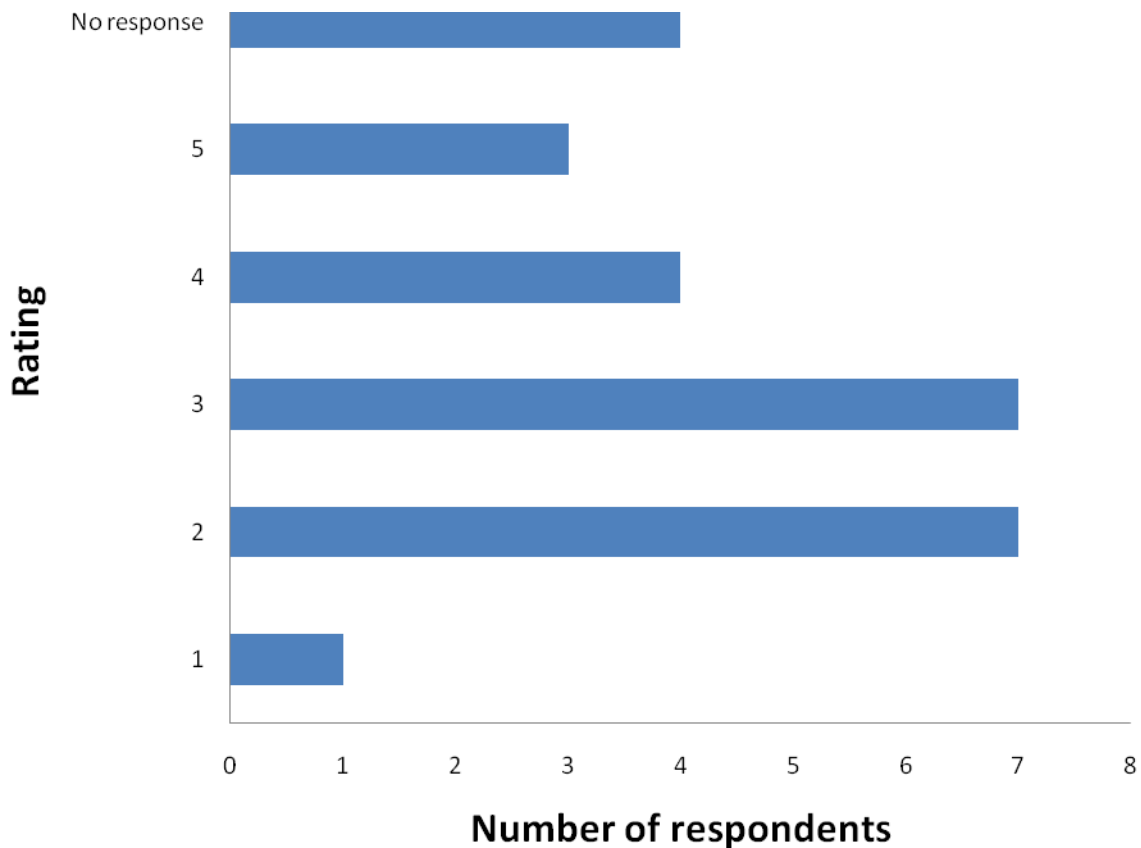
There are a variety of methods utilised across the GBs in disseminating the information about the specified models. Coaching awards are the main area where information with 66.7% (12) of respondents detailing this as a method of dissemination. Coaching seminars, training workshops and leaflets (66.1% (11), 50% (9) and 33.3% (6) respectively) were mentioned. The other modes highlighted in the questionnaire are utilised but not as extensively as the four modes detailed.

A further question asked what types of resources were available to coaches. 16 participants out of the 26 responded to this question (61.54%). Education and mentoring are the most prominent (43.8% (7)) followed by resource packs (31.3% (5)), books and equipment. Other areas suggested by respondents include, a talent development coach, a list of courses and references from external providers or flyers handed out as part of their coach education pack.

## Delivery of Movement Fundamentals to children

The initial question in this section asked what specific aspects the respondents felt had a key role to play in the the delivery of fundamentals within their Governing Body. Coach education (100%), continuous professional development (87%), resources (69.5%), guidance/mentoring (81.8%) and examples of template session plans were highlighted (55%).

Participants were asked to rate how successful they perceived the delivery of fundamentals was at present within their sport (See figure 2)



**Figure 2 : Illustrates the respondents view on the current success of delivery of fundamentals (1 – not successful ; 5 – extremely successful) leading to PL within their sport.**

Of the respondents who answered this question (22) 31.8% (7) viewed themselves as successful or extremely successful in the delivery of fundamentals, however 68.2% (15) were not. 65.2% (15) indicated they would like further guidance in delivery, 21.7% (5) indicated they were not sure if they required assistance and 13% (3) detailed they did not require assistance.

**Multi-skill opportunities for the development of their sport and what is being delivered presently.**

Respondents were asked whether they viewed the multi-skill experience as an opportunity to develop their sport? 23 respondents answered this question. 82.6% (19) responded yes and the remaining 17.4% (4) indicated they were not sure.

When asked what is currently being delivered within their sport a wide range of activities were highlighted (See Table 6)

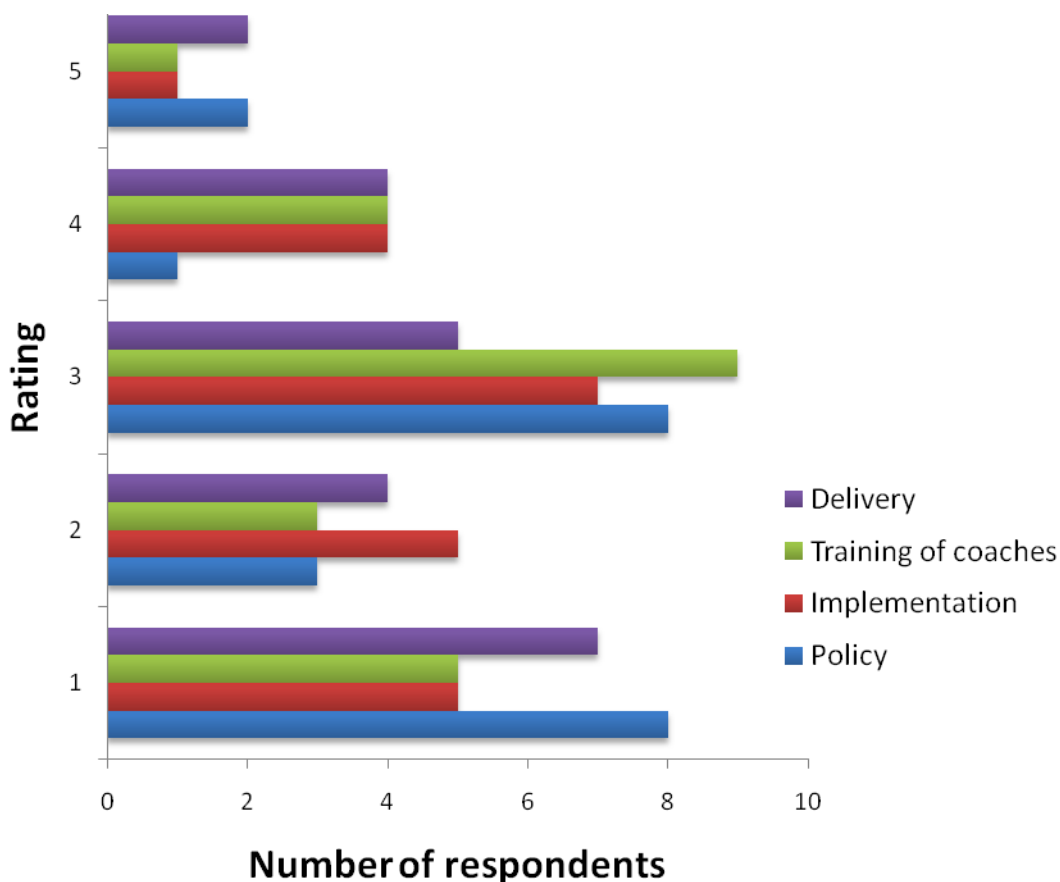
	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>Responses</b>
<b>Multi skill activity</b>	58.3% (7)	25% (3)	16.7% (2)	12
<b>Fundamentals of Movement</b>	84.6% (11)	7.7% (1)	7.7% (1)	13
<b>Fundamental sports skills</b>	81.3% (13)	12.5% (2)	6.3% (1)	16
<b>Mix of above</b>	76.9% (10)	15.4% (2)	7.7% (1)	13

**Table 6 : Outline the responses to what type of activities are being delivered within each GB**

Following on from what is being delivered during the fundamental stage, the question was asked was their specific guidance to what coaches should be delivering at specific development stages. 21 participants responded to this question – 52.4% (11) indicated yes, 38.1% (8) no and 9.5% (2) were not sure. Of those who stated yes – 81.8% gave an example of how they had delivered. These included, the delivery of a fundamentals workshops, resources available for coaches and through current UKCC coaching course materials.

### **GB’s understanding of Physical Literacy**

Participants were asked to rate from 1 – 5 (limited understanding – excellent understanding), their organisations current understanding of PL through policy, implementation, training of coaches and delivery. Figure 3 illustrates the findings for 22 respondents.



**Figure 3: Illustrates the current understanding of PL/fundamentals at various levels within their organisation (1 – limited understanding ; 5 – excellent understanding)**

From Figure 3 GBs clearly identify limited understanding across all organisational levels in relation to PL. Only 2 GBs (9.1%) rate their organisations as having excellent understanding at policy and delivery and 1 GB (4.5%) detailing excellent understanding at implementation and training of coaches. This compared to 36.4% (8) rating their organisations as having a limited understanding at policy level, 22.7% (5) implementation and training of coaches and 31.8% (7) in relation to delivery.

Barriers to implementation of PL was a key question within the questionnaire. 21 respondents commented on whether they viewed there to be barriers within this area. 66.7% (14) indicated yes they felt there were barriers, 19% (4) indicated no and 14.3% (3) were unsure.

Of those respondents who indicated yes, some of the barriers were detailed as:

- Physical resources and funding restrictions
- Lack of understanding of PL
- Resistance to change
- Expense of producing new resources and providing coach education

- Lack of knowledge, lack of guidance, lack of perceived links between PL and development within the sport
- The impact PL may have on programmes and coaching structures
- Lack of paid staff to deliver on a more permanent bases

Despite these barriers respondents (22) suggested that they wanted to be supported and guided further in PL with 81.8% (18) indicating yes and only 9.1% (2) respectively indicating no or not sure of needing support in this area.

## **Phase 2 – Focus Group findings with leading members of the Governing Bodies**

15 participants attended one of three focus groups held at SNI premises at the House of Sport.

Attendees represented the following sports: canoeing, GAA, motorcycling, climbing, orienteering, squash, karting, rugby, sailing, hockey, soccer netball and basketball.

The themes for the focus group included- Knowledge and Understanding of Physical Literacy, the influence of policy and the current dissemination and support that is required to deliver PL. A summary of the group responses are outlined with supporting quotes.

### **Knowledge, Understanding of PL and Policy**

#### *Definitions of Physical literacy, Fundamental Movement Skills and links to development*

On the whole participants were aware of the definition of PL, how it links with fundamental movement skills, health and long term participation in physical activity and development through sport. Two participants were unaware of the term but were aware of what was meant by fundamental movement skills. Several participants suggested that the term may not be well understood by some of their volunteer coaches, because of its all encompassing nature.

Quotes:

- "It's the natural movement of the body...it includes the ABC's, it's not just about movement it's also lifelong involvement that sets you up for sport in life"
- "The term PL can be vague at times but we focus on movement skills"
- "It's about being comfortable in your body, it's the movement literacy that children get to decide to go further and make choices"
- "PL and fundamental movement skills are the same, non sport specific activities"

*What developmental framework/model do you use? Can you describe the model? Has the model been implemented?*

Two frameworks were mentioned as being adopted, these included the LTAD and LISPA model with the majority of participants suggesting the LTAD model. Participants were able to describe the LTAD model, this description was further facilitated when presented to participants on a presentation slide.

10 participants reported being aware of the LISPA model, however when presented to participants fewer were aware of the specific details. Some participants integrated the model into their sports more than others. There was little consistency when discussing the integration of the model, some had integrated the model completely into grassroots

delivery in school settings, while others were in the process of doing this and some had not. All viewed the models as good frameworks to adopt.

Quotes:

- "Based on the LTAD model we developed an FMS booklet for young age groups and for teachers, more recently the LISPA model has been used"
- "LTAD played a big part in the development of our sport, in terms of participation we follow the model, in terms of high performance, we do not apply this"
- "We have a model, but it sits on the shelf and is not used"
- "we don't do generic skills at a young age so ABC's are not covered"
- "we have not explored the LISPA model as an alternative, but would like to know more about it"
- "sometimes what people buy into is not usually what takes place on the ground"
- "LTAD is what we want to do, but remedial training is required"

*Could you give us an example of where implementation of fundamentals has worked for your GB?*

- "Six to Six nations"
- "Fun to Fame"
- "In teaching orienteering"
- "Coaching development"

### **Dissemination, delivery and further support**

*Do you focus on fundamentals of movement or your sport specific skills? Is this the case across your organisation (probe volunteer v paid)*

There was a mixed response to this question. The following sports suggested that Fundamental movement skills (ABC's) are delivered:- rugby, GAA, soccer, canoeing. Other participants suggested that there was a blended type of delivery where fundamentals and sports skills were taught together.

It was the view of some participants that if they did not provide the sport specific skills to children this resulted in questioning from parents as to why their child was participating in generic skills rather than playing the sport. It was suggested that delivery was down to the specific personnel within the clubs, for example in basketball two clubs in particular were highlighted to deliver the fundamentals.

In other clubs however fundamentals are covered (catching, running, throwing) although not using fundamental terms. The club setting and the school setting were also raised as potential differentiators in the delivery of fundamental movement skills or sports skills. It was suggested that fundamental movement skills were delivered in a school setting while sports skills were developed in a club setting. The GAA suggested that fundamentals were delivered in both club and school settings.

Further exploration across all participants revealed that voluntary and paid coaches may differ in their delivery of either fundamental movement skills or sport specific skills.



Quotes:

- "we warm up using the fundamentals then we focus on sport skills"
- "its down to the coaches on the ground"
- "its down to the personnel in the clubs"
- "Grassroots are focusing on sport specific skills, there is a clear difference between grassroots and primary school programme delivery, although we expect the enthusiasm and interest at school will help children make a decision to come to our clubs"
- "we develop fundamentals, then sports skills"

*Workforce at present – what training do you offer – who delivers the training, what type of training is preferred; is training delivered within your sport or centralised - Is training offered to those coaches who are paid, volunteers or both?*

The type, opportunities and duration of training were different across all the GB's. Opportunities for training ranged from an extensive tailored fundamental movement skills programmes for all coaches in a given sport to no training for coaches in fundamentals. On the whole GB's provided or received training either by the GB or by SNI.

It was recognised that volunteers do not have the same amount of time to develop skills in the delivery of fundamentals compared to paid coaches. Participants mentioned the use of resources that could be shared on the delivery of fundamentals, but it was recognised that the uptake of the resource would be determined by the individual sport.

A range of training has been received from different providers (see quotes below). The amount of training and scheduling of training for volunteer coaches was raised as an area that required further exploration.

Quotes:

- "external training"
- "training from SportNI"
- "In house training, CPD training for staff"
- "training tends to filter down through various coaches"
- "it's difficult to get coaches to think about doing more"

When asked *"What would further facilitate the delivery of fundamentals (PL)?"* in your sport, the following suggestions were provided:

- "seminar training for coaches would be useful"
- "funding- there just isn't the people on the ground"
- "funding to explore where within our GB the expertise lies"
- "a session on linking theory and practice—this is a real challenge"
- "training on how to integrate fundamentals into each sport"
- "clear sign posting to other resources"
- "training on how to change attitudes of existing coaches to include fundamentals"
- "specialist sport specific sessions, but also sessions where we can get to see what other sports are doing"
- "there is a need for a directory of existing courses for coaches"
- "to know that the courses are going to be long term to think of coach development"

- "courses need to be flexible, they should credit volunteer hours, they should link with the National Qualifications Framework"
- "link in with Universities to accredit courses"
- "distance learning as well as practical"
- "courses need to be marketed"
- "there is a need for a leader in long term coach development"

#### *Other observations and conclusions from the focus groups*

There was a differentiation between sports, as some participants felt their sports were not as advanced as others in the provision of fundamentals. As a result, during the group discussion some participants were learning about what has been achieved in other sports, an exchange of information and ideas was taking place. This process would suggest that a training /information sharing session with the members of the focus groups may enhance creativity in the delivery of PL.

An emerging theme from all was quantifying the developmental change in children as a result of the delivery of fundamentals. The GAA and IFA representatives briefly described how they have assessed change in children's fundamental movements skills - this process could be further explored in future work. Others in the group viewed assessment of fundamental movement skills as a positive step forward.

### **Phase 3 – Focus Group/Interviews and online questionnaire findings with coaches delivering at grassroot level**

24 participants attended either a focus group session, individual interview or completed some on line questions. The original aim was to have individual interviews, this was not possible due to the time constraints placed on coaches during delivery. Attendees represented paid and volunteer coaches from the following sports: GAA, rugby, soccer, cricket, squash and netball

The themes for the focus group/interviews and online questionnaire were similar to those used in phase 1 and 2, these included- Knowledge and Understanding of Physical Literacy and the influence of policy, current dissemination, delivery of PL and further support required to deliver PL.

#### **Knowledge and Understanding**

##### *Definitions of Physical Literacy, definitions of fundamental movements and the role of fundamentals to development within your sport*

The coaches on the whole were aware of the term fundamental movement skills and their importance for the development of the individual child in their own sports. The term physical literacy was not known to all the coaches across the various sports. However, whether the coach was paid or was a volunteer determined this view. That is, paid coaches were familiar with the term physical literacy having an influence on long term participation in sport and physical activity while volunteer coaches were aware that PL included elements of fundamental movement skills. The link to health and long term participation were not as well understood.

Quotes:

- "PL is similar to academic literacy, although it's about movement and health benefits to the child"
- "PL is the breakdown of agility coordination and balance"
- "PL is competence in performing motor skills"
- "fundamentals include games that encourage understanding and the importance of making decisions"
- "PL links into self esteem and wellbeing"

The provision of courses on fundamental movement skills was perceived to be a positive addition to the individual coach's development. The main addition was in learning to differentiate between children's capabilities and be in a position to adopt a skill session to the child's requirements. Training also allowed coaches to focus on the ABC's to break movements down into smaller parts and provide instruction on developing skills. The development of fundamentals at the beginning of a session or throughout a session provided an opportunity to include creative fun elements for children.

Quotes :

- "As a result of coaching I get less frustrated, I now have additional ideas to deliver on"
- "you learn to differentiate between children's capabilities"
- "the in service training has been vital to delivery"
- "training provides you with a whole bag of tricks when coaching"
- "you can see through your delivery that you are responsible for developing the child and you can have an influence on things like a child's balance"
- "emphasising fundamentals brings a whole structure to coaching"

*Are you aware of the frameworks/models for development of sport (LISPA/LTAD)? What development framework does your sport use – how does this fit in with your sports aims and objectives?*

All the paid coaches were aware of the LTAD model, the volunteer coaches were less aware of the LTAD model. The LISPA model was known by the paid coaches, however on inspection of both models the specifics of the LTAD model was better known than the LISPA model.

Questions emerged regarding the pathways that can be followed in both models, this led to the suggestion that further coach development programmes could include the models. The models were considered to have a positive effect on why the development of fundamental movements are important. However some coaches felt that in a club setting the focus should be on coaching the sport rather than generic movement skills. The warm up at the beginning of each session was suggested as a period of time when fundamentals could be developed.

*When asked could you provide an example of where the implementation of fundamentals has worked for you?*

Examples were wide ranging, see the quotes below:-

- "children as young as 4-5 are stopping and asking questions regarding spatial awareness and making decisions"

- "the teachers are getting ideas from my delivery"
- "in breaking an incorrect skill down then building it up again"
- "enjoyment as a variable for children"
- "it provides the foundation and basics that the children then bring to the clubs"

*What specific competencies are important for you delivering at grassroots?*

Again these examples were wide ranging, see the quotes below:-

- "communication skills to key stage 1 children"
- "Patience"
- "Training in what if situations"
- "observational skills"
- "group management skills"
- "Be able to plan and match age groups"
- "Awareness of special educational needs"
- "Be able to improvise and use available equipment"

### **Dissemination, Delivery and further support**

*Do you focus on fundamentals of movement or sport specific skills Is this the case across those delivering at grassroots*

The responses tended to differ depending on whether delivery was occurring in schools or clubs. In schools fundamental movements were mainly focused upon, however in clubs sport specific skills were developed. Coaches from each sport suggested that there was a progression from general movement skills early on in a session to more complex skills, and that a combination of ABC's and sport specific skills were delivered.

Quotes :

- "both sport and FMS are delivered"
- "there is a progression in the session between fundamental skills and [name of sport provided] skills"

*Workforce at present – what training are you offered – who delivers this training, is training delivered within your sport or centralised - is this offered to coaches who are paid, volunteers or both*

The availability of training across GB's was diverse. Some offered mainly in house training while others attended external courses or courses run by SNI.

Quotes :

- "in service training mainly, this has been invaluable"
- "external courses"
- "gymnastics and dance courses"
- "seeing ideas for delivery from other sports"

*When asked what would further facilitate the delivery of fundamentals (PL) – probe for each sport?*

Quotes :

- “Ideas from other sports- what and how do they deliver”
- “courses with online resources”
- “courses have to be within the GB’s and sport specific”
- “going into the school setting and watching a coach deliver”
- “peer mentoring”
- “being aware of what training teachers receive”
- “being aware of the curriculum for children”
- “sport specific events to share information and training”

#### **Phase 4 – Physical Literacy Global Case Studies -What are other countries doing?**

Three case studies from Australia, Canada and Northern Ireland are presented as examples of best practice for the development and delivery of PL/fundamentals. The case study from NI is presented below, the case studies from Australia and Canada can be viewed in appendix 4.

##### **Northern Ireland Case Study: Gaelic Athletic Association (GAA)**

This specific case study was developed through discussion with key personnel within the association.

##### **Why did the GAA decide to develop a resource pack aimed at improving physical literacy in children?**

Up until approximately 2004 the GAA had been developing their players based on the different stages of Bayli’s widely used LTAD model. However on reflection, and based on several leading GAA representatives extensive practical experience of teaching and coaching young children, it was felt that a stage prior to Balyi’s Fundamentals stage was needed – Active Start. It was also recognised that parents could be doing more to help their children develop their physical literacy skills from an early age.

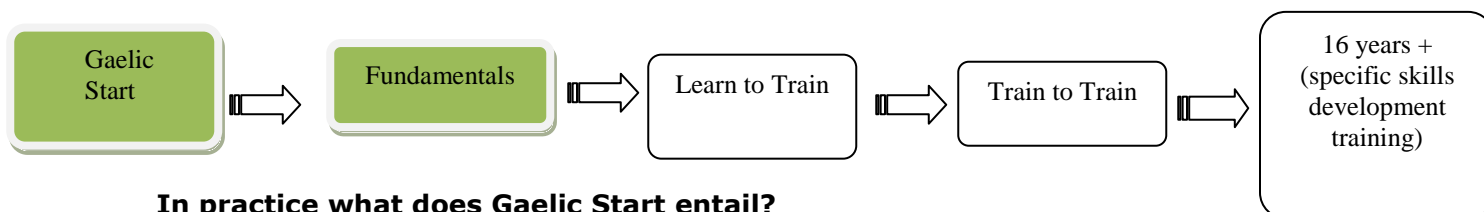
##### **What resource did the GAA produce to help develop physical literacy in children?**

The GAA developed the ‘Gaelic Start’ pack which is delivered in both the school and club settings. In schools Gaelic Start is delivered as an integral part of the PE curriculum in predominantly Roman Catholic primary schools in Northern Ireland. The Department of Education have welcomed the involvement of the GAA into these schools as they have the coaching expertise to assist their teachers in developing the fundamental movement skills of primary school aged children. This partnership approach between the schools, the GAA and the Education Boards has proved very successful in delivering on physical literacy gains in young children.

GAA coaches work with teachers in primary schools to deliver lessons focussed on physical literacy through the Gaelic Start programme. Lesson plans are also supported by a DVD that teachers can access. Progressive and sequential stages have been

established which children can work through based on their current ability level. In order for Gaelic Start to be a success the GAA have recognised the importance of interlinking research, theory and practical experience.

### **Where does the GAA feel physical literacy resources should be directed within their long term player pathway?**



### **In practice what does Gaelic Start entail?**

#### **Schools**

- Gaelic Start programmes are currently being run in 6 counties with 2/3 coaches per county (presently a network of 32 coaches exists) delivering the programme.
- The vast majority of schools that the GAA access are Roman Catholic primary schools, some special schools and predominantly larger schools with sports halls.
- The county coaching officers (Gaelic managers) carry out a needs analysis in their areas and inform the GAA of what the needs of the local schools and communities are in terms of Gaelic football provision.
- Approximately 340 schools per year are involved, 500/600 teachers receive in-service training and 18-20,000 children participate in the programme.
- A session lasts approximately 40 minutes (maximum) with coaches conducting 6 to 7 sessions per day.
- Teachers have made an agreement with the coach and the principal of their school to be involved in each session and receive in-service training from the coaches as to how to continue developing physical literacy (via the different Gaelic Start stages) for the children entering the school in the years to come once the coach has left.
- Teachers receive a blank lesson at the start of the year and are asked by the coach to record key learning points as the coach takes the first session. Progressively over the year the teacher is encouraged to take more aspects of the session until they are fully independent of the coach.
- Instead of lessons being designed for 'P1', 'P2', 'P3', 'P4' they are titled in 'stages' instead so that children can progress through the stage that is appropriate to them as an individual at any particular time.

#### **Club setting**

- The club will ask the Gaelic manager in their county for the 'Winter' Gaelic Start programme. Two coaches will then go out with the equipment once the club has signed a contract that they will advertise the programme, get as many parents to be involved as possible and that the club will agree to pay for the equipment necessary to develop physical literacy skills once the coaches have left.
- On the first night of the programme the parents are only in attendance, no children attend as the coaches are training the parents how to deliver the Gaelic Start programme.

## **How is 'Gaelic Start' monitored and evaluated?**

There are 2 bench marking forms which are completed:

1. Each individual child is assessed (by their teacher/coach) on their current skill set on a scale of 1-10.
2. Each child is then assessed in terms of the quality of the movements which they produce (some coaches use video footage to analyse this). Discussions are currently underway to develop a modelling system whereby coaches can see and understand what exactly each skill carried out proficiently should look like in practice.

Quarterly reports are also compiled by the GAA for submission to the Department of Education which provide details regarding the number of teachers that have received in-service training by the GAA coaches, any benchmarking results and any community work which is being carried out in particular areas.

### **Key points:**

- Fundamental movement skills which promote physical literacy are delivered sequentially, progressively and in a challenging way within the Gaelic Start programme.
- Coaches are present in a school for a year and are assessed based on their ability to make their session cross curricular and how successfully they integrate the teacher into the sessions.
- Every child is involved and different abilities are catered for.
- Teachers have a baseline lesson blueprint to work from once the coaches eventually leave the school.
- In-service training of teachers over the period of a year is hoped to promote longevity of the programme once the coaches leave.
- Teachers must fully engage with the delivery and understand the importance of physical literacy.
- Accessing classes earlier is essential so that physical literacy skills can be progressively developed as soon as the child enters P1.
- There is believed to be the capacity for learning to be shared between different sports in terms of current and future practices to develop physical literacy.
- Development of programmes must come from the top, down. Good leadership is essential to help drive a physical literacy programme such as Gaelic Start forward.

## **5 Discussion**

The findings from this research provides for the first time in Northern Ireland, information on what is currently being delivered across sports at grassroots level. This is encouraging as it gives those involved in coach education and development within the GB's and SNI a starting point to gage what assistance is required for further development at varying levels in and between GB's of sport. These findings will endeavour to assist SNI in ensuring a greater standardisation in the dissemination of guidance to ensure all GB's have a better understanding of what and how PL/fundamentals can and could be delivered within their sport to enhance participation of all involved.

## **Understanding LTAD/LISPA/Participant Development Model/Frameworks**

The LTAD model (69.9 %, 16) is the development framework for many GB's of sport. There is an understanding of what this model means for the development of their sport from policy, implementation, and dissemination to delivery level. The degree of understanding and implementation does however vary dependent upon the training, experience and ethos within the GB. The fact 87.5% (21) of the GBs have a participant development model is encouraging for the development of sport in NI, however how this development model is being practically applied within the sport varied. This finding was most apparent from research phases 2 and 3 when participants were asked about the LTAD and LISPA model. The response from the majority of respondents on what these models were and what they meant to them to enhance their sport was not clearly identified. Therefore it is not possible to determine whether the participant development model adopted is having an impact on the development of their sport at grassroots level. The clarity and understanding of the impact these models/frameworks could have on the development of individual sports is an area for further enquiry. Positively though, 60.9% (14) of respondents indicated they had received training underpinning the LTAD/LISPA model while 39.1% (9) indicated receiving no training. With the amount of respondents at the policy end indicating they had received training from discussion with coaches it was evident that in some sports this had not filtered through to effect delivery.

## **Programme Development and Delivery**

The positive impact and influence of DENI coaches within the GAA and IFA have been clearly identified as examples of good practice which were drawn out in phase 2 and 3 of this report and further supplemented in the development of a case study for the GAA as an example of good practice in phase 4. The ability of qualified coaches to impart their knowledge and skills to the children, teachers and others involved at grassroots is an important positive point to highlight. The quality and qualifications of those paid employees illustrates there is a need to have some form of standards/criteria for those delivering at grassroots level within sport who may not presently have paid employees delivering at grassroots level.

It is clear from all phases of the research that there is not a clear development of fundamentals within the majority of GB's due to the lack of knowledge and understanding across the sport with regards the impact this phase of development has upon the children's development. This view is supported by the variety of activities being delivered in different sports, this ranged from fundamental movement skills, fundamentals of movement to sport specific skills. However, some of the programmes developed by GB's included activities not usually associated with their sport to ensure the fundamental movement skills are being developed. The case study developed from the discussion with key personnel within the GAA highlights the importance of programme development, delivery and resource development to assist all who engage in coaching at grassroots level.



## **Standardisation**

There was evidence of clear standards, rationale and structures within some programmes, however ensuring these are appropriate across all the workforce be that paid or volunteer coaches is not so clearly identified. There is a clear identification from phase 1 of the study that those at the policy level feel that all those involved in their sport should have an understanding of PL and engage in educational opportunities to enhance their sport.

The development of coaching qualifications and the professionalisation of coaching to assist with standardising across all sports was perceived as a positive step forward. Developments within some sports have been ongoing since 2000 and others are recently making efforts to make changes. It was suggested however, with the present economic climate and the pressures of volunteering in sport, professionalising and asking more of individuals is proving to be problematic. It was recommended that there is a need to ensure what is offered is open for all, transparent, easily accessible and non time intensive for coaches.

Phase 2 and 3 illustrate the need to ensure that there is a coordinated approach to the development and delivery of any educational programmes, be that seminars, workshops, leaflets, pamphlets, conferences or website so the message is clear and the same for all sports. Furthermore an area that does need to be established is whether specific programmes delivering fundamentals increase the ability of individuals taking part. A longitudinal tracking approach of impact of the programmes in developing core competencies at a young age was recommended.

From a comparison of the case studies from across the world (Phase 4) there is some evidence that the GAA are an example of good practice for delivering PL. The GAA have demonstrated through the development of resources and training for all involved in their sport mechanisms for the delivery of PL. Furthermore the engagement and mentoring of teachers within the DENI delivered programme is suggested to ensure sustainability of the GAA programmes. However, similar to the point made above, there is a requirement to evaluate the long term effects of the delivery of their programme on children's development and teachers engagement with the GAA programme.

## **Terminology – Physical Literacy and Fundamentals**

There is a view that there should be an embedding of PL core principles, beliefs and values into the thinking of all involved in the delivery of sport at grassroots level. This may be a challenge as there is not a clear definition or understanding of what PL means for individuals working at policy through to grassroots level. Therefore it is proposed that a standard definition of what PL means to the development of sport and or physical activity should be disseminated to coaches. To achieve a degree of understanding and indeed recognition that PL or fundamentals of movement have a role to play in enhancing ability of young people.

## 6 Conclusions

The findings from this report have highlighted the significant amount of work that has been achieved by GBs in NI to develop PL and fundamental movement skills in children through structured, professionally driven and evaluated movement skills programmes. Efforts by some GBs to develop PL were evidently further along than other GBs, this also tended to be reliant on the views of the GBs leading person (Phase 1 and 2 of the research) and delivery by paid or volunteer coaches. Inconsistencies were apparent to what is being delivered across the GBs of sport again dependent upon coaches being volunteers and paid coaches. It was evident that paid coaches working within the area of PL within GB's of sport be that DENI employed coaches within Gaelic or Association Football or Active Community coaches with a sports specific remit to multi-skill to fundamentals have a better understanding of their role and requirements for delivery adopting either the LTAD or LISPA models, this was viewed to be a result of structured formal training programmes they had received. This view highlights the need for further training and support and sharing of information across GBs, with training being provided whether the coach is paid or a volunteer.

## 7 Recommendations for the future

Much of the emphasis on the development of PL has been on the importance in laying appropriate foundations for lifelong involvement in sport or physical activity. It was the view of the participants across all phases of the research that this will only occur if there is continued formal and informal coaching development to ensure knowledge, attitudes, skills and understanding of PL continues.

### General areas for development

- The term 'Physical Literacy' was not clearly understood across all GB's at both policy and delivery level. The term needs to be explained and be more user friendly, that is it has to be understood by parents, volunteers, paid coaches and policy makers.
- Support from parents and significant others is perceived to be vital to ensure development of PL. Therefore there is a need for an educational drive to ensure all involved have a clear understanding of what is being delivered and how it will impact on the development of the child.
- Appropriate training in the integration of PL and fundamental movement skills into their sport requires further development and dissemination, so that it is available to both paid and volunteer coaches.
- A joint up approach was recommended for a wide range of key stakeholders in education, and in sport and health when determining the design and evaluation of existing and future PL programmes.
- Further monitoring and evaluation that reflects a longitudinal or tracking approach to children receiving PL programmes should be considered. The research should assess movement skills, physical activity, children's self esteem and wellbeing. Further research could be based in schools include observations of paid and volunteer coaches, and teachers to determine whether the theory is linked with what occurs in a practical setting.

- Programmes should be structured, and include educational and/or resources that can fit the needs of all sports. Some already exist in NI so reviewing what is currently being delivered could be a first step to achieving structured programmes across sports.
- Consideration should be given to developing co-ordinated structures which ensure that all children have equal access to the range of PL-related programmes currently available. This should include opportunities to monitor and evaluate children's participation and progress in PL and beyond.

## **8 References**

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DCAL (2009); Northern Ireland Strategy for Sport and Physical Recreation, Sport Matters, 2009-2019.

## **Technical appendices**

**Appendix 1 – On line questionnaire**

**Appendix 2 – Focus group questions**

**Appendix 3 – Phase 3 questions**

**Appendix 4 – Case Studies**

### Appendix 1 – On line questionnaire

Please tick your Sport :	Archery	Association Football	Athletics
	Badminton	Basketball	Bowls
	Boxing	Canoeing	Cricket
	Cycling	Equestrian	Gaelic Games
	Gymnastics	Hockey	Judo
	Motor Sports	Mountaineering	Netball
	Orienteering	Rowing	Rugby
	Sailing	Shooting	Squash
	Swimming	Table Tennis	Taekwondo
	Triathlon	Volleyball	Wrestling
	Other : Please Specify		
What is your current position within your sport :	Development Officer - Participation	Development Officer - Club	Policy Position
	Chairperson	Secretary	Coaching Development Officer
	Games Development Officer	Talent Identification and Development Officer	Other : Please specify
How long have you been in this current role :	> 1 year	1 – 3 years	< 3 years
Have you been involved in another sport prior to your current position :	Yes : Please indicate		No
Within your GB what is your current affiliation :	Northern Ireland	All Ireland	UK
Is your Sport :	Team		Individual
What gender are the participants within your sport :	Male	Female	Both
Participants involved in your sport :	Junior	Senior	Both
Your current position within your sport – is this in an employed or voluntary capacity :	Employed	Voluntary	

Who is the key contact involved in overseeing the delivery of grassroots within your sport :	Name :				
	E-mail :				
	Tel No. :				
Please will you provide the contact details for some of your coaches delivering at grassroots who may be contacted :	Name :				
	E-mail :				
	Tel No. :				
	Name :				
	E-mail :				
	Tel No. :				
	Name :				
	E-mail :				
	Tel No. :				
	Name :				
	E-mail :				
	Tel No. :				
How many coaches do you have delivering programmes at grassroots (paid) :	1	2 - 5	5 - 10	10 - 15	>15
How many coaches do you have delivering programmes at grassroots (voluntary) :					

**Participant Model/Pathway**

1. Within your Governing Body – do you presently have a participant development model or pathway which you follow.

YES  NO

If yes, please go to question 2.

If no, please answer question 3.

2. In your view has this participant model had an influence on the participants and coaches experiences ?

YES  NO  NOT SURE

3. Why has your Governing Body presently not been engaged with the development of a participant model/pathway and would they be willing to engage in the development of this model/pathway ?

**LISPA / LTAD**

4. Which model does your sport currently draw its developments from :

LISPA (Lifelong involvement in sport and physical activity)

LTAD (Long term athlete development)

Other

5. Have you received any training on the LISPA or LTAD model ?

YES  NO

If Yes – please tell us what training you have received :



6. If training was available would you attend ?

YES  NO

7. Please rate your current understanding of the LISPA and LTAD models (1 – limited understanding ; 5 – full understanding) :

	1	2	3	4	5
LISPA					
LTAD					

8. In what specific areas has either the LISPA or LTAD model assisted the developments within your sport (please tick) ?

Competition	
Training	
Coach Education	
Other (please specify)	

9. How is your Governing Body using either model to develop your sport ?

10. Do you think LISPA or LTAD is an important driver for developments within your Governing Body specifically at grass roots?

YES

NO

NOT SURE

11. Do you think the outlined people have or need to have an understanding of the LISPA or LTAD model to assist with the development of your sport ?

(a) Policy level

GB	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	NOT SURE	<input type="checkbox"/>
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CLUB	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	NOT SURE	<input type="checkbox"/>
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(b) Practitioner level

Coach tutor	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	NOT SURE	<input type="checkbox"/>
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Coach	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	NOT SURE	<input type="checkbox"/>
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Participant	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	NOT SURE	<input type="checkbox"/>
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Parent	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>	NOT SURE	<input type="checkbox"/>
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**Dissemination and Delivery**

12. How is your Governing Body ensuring all involved within your sport understands the core principles of the LISPA or LTAD model ?

Seminars	
Coaching Seminars	
Training Workshops	
Part of Level 1 Awards	
Leaflets	
Posters	

DVD's	
External Speakers	
Other	

13. What type of resources are available to coaches ?

Educational	
Books	
Equipment	
Mentoring	
Mileage	
Other	

14. Please rate the importance from 1-5 (1 not important to 5 very important) the following in assisting with the delivery of fundamentals within your sport :

	1	2	3	4	5
Coach Education					
Continuous Professional Development					
Resources					
Guidance (Mentoring)					
Template Session Plans					
Other (please specify)					

15. How successful is the current delivery of fundamentals leading to Physical Literacy within your sport (1 – not successful ; 5 –extremely successful) ?

1	2	3	4	5
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16. In terms of what is currently being delivered within your sport at the fundamentals stage is this delivery reflected as :

	YES	NO	NOT SURE
Multi-skill activities			
Fundamentals of Movement (A,B, C's)			
Fundamentals of your sports skills			
Mix of the above			
Other (please specify)			

17. Does your Governing Body provide specific guidance as to what coaches should be delivering at specific development stages?

YES  NO

If No – would you like them to :

YES  NO

18. Do you perceive multi skills (Physical Literacy) as an opportunity to assist with the development of your sport?

YES  NO

**Present Position**

19. Are there gaps within your organization in relation to understanding Physical Literacy in relation to :

	YES	NO	NOT SURE
Policy			
Implementation			
Training			
Delivery			

20. Do you feel there are current barriers to the implementation of Physical Literacy within your organization? If so what are they ?

21. Would your organization like to be supported/guided further in the developments within Physical Literacy ?

YES  NO  NOT SURE

*Any other comments:*

## **Appendix 2**

**Focus Group – Friday 26<sup>th</sup> January, Thursday 3<sup>rd</sup> and Friday 4<sup>th</sup> February 2011**

### **General Introductions with the group**

#### **Knowledge, Understanding and Policy**

1. Definitions of PL
2. Definitions of Fundamentals
3. Role of fundamentals (PL) to development
4. What development framework do you use – how does this fit in your sports aims and objectives (PROBE - policy, implementation, FIT FOR PURPOSE)?
5. Ask about models – describe the models (main components) ; figures – what are the priority areas for you as NGB
6. Could you give us an example of where implementation of fundamentals has worked for your GB?

#### **Dissemination, Delivery and further support**

1. Do you focus on fundamentals of movement or your sport ; skill based or A, B, C's. Is this the case across your organisation (probe volunteer v paid)
2. Workforce (volunteer and paid) at present – what training do you offer – who delivers, what is preferred – best mechanism ; training within your sport or centralised - is this offered to paid or volunteer or both – reasons/barriers ?
3. What would further facilitate the delivery of fundamentals (PL) – probe for each sport?

Closing the Focus group with thank you for taking part and are there any other points you would like us to consider that were not covered in the discussion.

## **Appendix 3**

### **General Introductions with the group**

1. Volunteer or paid
2. Role as a grassroots coach – goals and priorities

### **Knowledge and Understanding**

7. Definitions of PL
8. Definitions of Fundamentals
9. Role of fundamentals (PL) to development within your coaching
10. Are you aware of the frameworks for sport (LISPA/LTAD)?
11. What development framework does your sport use – how does this fit in your sports aims and objectives (PROBE - policy, implementation, FIT FOR PURPOSE)?
12. Ask about models – describe the models (main components) ; figures – what are the priority areas for you as a grassroots coach
13. Could you give us an example of where implementation of fundamentals has worked for you?
14. What specific competencies are important for you delivering at grassroots

### **Dissemination, Delivery and further support**

4. Do you focus on fundamentals of movement or your sport ; skill based or A, B, C's. Is this the case across those delivering at grassroots (probe volunteer v paid)
5. Workforce (volunteer and paid) at present – what training are you offered – who delivers, what is preferred – best mechanism ; training within your sport or centralised - is this offered to paid or volunteer or both – reasons/barriers ?
6. What would further facilitate the delivery of fundamentals (PL) – probe for each sport (Mentors)?

Closing the interview with thank you for taking part and are there any other points would like us to consider that were not covered in the interview.

## Appendix 4 - Case studies

### Physical Literacy Global Case Studies -What are other countries doing?

**Definitions:** Academic and operational differences in terminology exist in this topic area with ‘physical literacy’ and ‘fundamental movement skills’ (FMS) being used interchangeably to describe commonly developed skills promoted in childhood and subsequently refined into sports specific skills within different sporting contexts. These skills include locomotive (e.g. running and hopping), manipulative or object control (e.g. catching and throwing) and stability (e.g. balancing and twisting) skills. The promotion and development of FMS appears in the literature throughout the world as a mechanism to enhance physical literacy in children.

**Rationale:** The rationale for promoting the development of physical literacy in childhood relies on the existence of evidence on the current or future benefits associated with their acquisition in terms of potential health benefits in children and adolescents. Benefits have been evidenced in a range of examples of good practice from around the world. These benefits are wide-ranging in terms of psychological, physiological and behavioural outcomes that can impact public health.<sup>1</sup> Those who lack physical literacy are likely to experience frustration and difficulty in learning more advanced skills, reducing their enjoyment of sports and other activities. In addition, those who are deficient in terms of physical literacy are more likely to experience the consequences of "public failure" or ridicule from peers<sup>2</sup> encouraging them to avoid participation in organised sports and possibly reducing the likelihood of the development of a physically active lifestyle<sup>3</sup> Establishing and promoting physical literacy in children is believed to contribute to long term participation in sport and recreation activities.

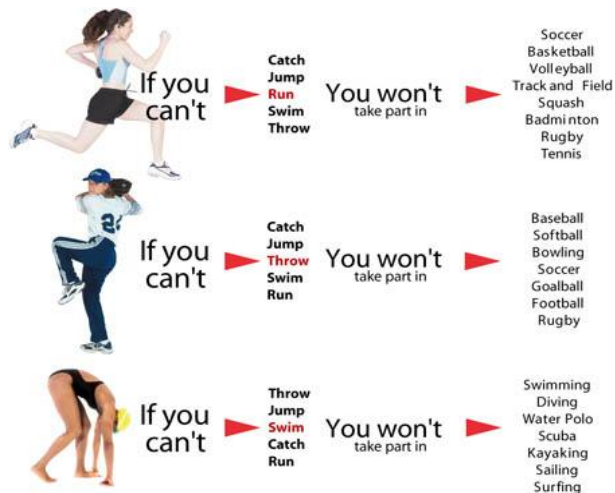
**When?** Literature from around the world suggests that ideally FMS should be promoted and developed between 0-9 years of age. See the table below for some suggested **consequences of missing a fundamental skill**.

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<sup>1</sup> Lubans, D.R., Morgan, P., Cliff, D., Barnett, L. & Okely, A. (2010) Fundamental Movement Skills in Children and Adolescents: Review of Associated Health Benefits. *Sports Medicine*, 40, 12, p. 1019-1035

<sup>2</sup> Rose, B., Larkin, D. & Berger, B. (1994) Perceptions of social support in children of low, moderate and high levels of coordination. *The ACHPER Healthy Lifestyles Journal* 4, p. 18-21.

<sup>3</sup> Booth, M. L., Okely, T., McLellan, L., Phongsavan, P., Macaskill, P., Patterson, J., Wright, J., & Holland, B. (1999) Mastery of Fundamental Motor Skills among New South Wales School Students: Prevalence and Sociodemographic Distribution. *Journal of Science and Medicine in Sport*, 2, p. 93-105.



## Australia

### Where is physical literacy promoted and developed?

The development of FMS is carried out through a combination of school based physical education, as well as other structured activity programs run out of school hours. A detailed discussion of programs run out of school hours can be found at:

[http://www.dhs.vic.gov.au/\\_\\_data/assets/pdf\\_file/0005/275846/ActiveAfteSchoolPhysicalActivityPrograms.pdf](http://www.dhs.vic.gov.au/__data/assets/pdf_file/0005/275846/ActiveAfteSchoolPhysicalActivityPrograms.pdf)

### What is the size and distribution of the problem in Australia?

Table 1: Percentage of children at poor level of mastery of fundamental movement skills, NSW <b>Skill</b>	<b>% at poor level</b>	
	<b>Boys</b>	<b>Girls</b>
Static balance	26.3	22.9
Sprint run	52.7	67.0
Vertical jump	67.0	61.0
Kick	66.4	54.9
Hop	46.1	80.2
	36.9	74.6
Catch	62.2	56.8
	55.0	51.8
Overhand throw	48.8	66.0
	42.6	45.8
Side gallop	37.4	77.3
	48.9	32.3



Source: *Move It, Groove It - Physical Activity in Primary Schools' Summary Report, 2003*(NSW Department of Health, 2003)

### **Who are the partners needed to develop FMS and consequently physical literacy?**

- Schools – in particular the physical education departments. Junior primary school and preschool teachers
- Providers of the Active After-school Communities Program or other out of school hours structured physical activity program providers
- Sporting clubs offering junior programs

### **Resources for Implementation**

- **NSW Department of Education and Training** provides a planning guide for programming and teaching fundamental movement skills.  
[http://www.curriculumsupport.education.nsw.gov.au/primary/pdhpe/assets/pdf/fms\\_005.pdf](http://www.curriculumsupport.education.nsw.gov.au/primary/pdhpe/assets/pdf/fms_005.pdf)
- **WHO Collaborating Centre for Obesity Prevention Romp and Chomp Program** assists with promoting healthy eating, active play and drinks messages for early childhood staff with supportive policies in early childhood services, training for staff, education resources and social marketing messages. For a full set of resources visit:  
<http://www.deakin.edu.au/hmnbs/who-obesity/research/ssop/romp-chomp.php>
- Early childhood services and primary schools can participate in the **free Kids - 'Go for your life' Award Program** and establish environments, policies and practices that support children's healthy eating and physical activity. Find out more at  
[http://www.goforyourlife.vic.gov.au/hav/articles.nsf/pracpages/Kids\\_Go\\_for\\_your\\_life?open](http://www.goforyourlife.vic.gov.au/hav/articles.nsf/pracpages/Kids_Go_for_your_life?open)
- **The Australian Council for Health, Physical Education and Recreation (ACHPER)** , Physical, Health and Sports Education (PHASE) Professional Learning Programs  
<http://www.achper.vic.edu.au/>
- **Government of South Australia Eat Well Be Active, Ready to Go Ideas for Fundamental Movement Skills.** <http://www.dete.sa.gov.au/wallaradistrict/files/links/EDITEDresource.pdf> (early childhood)
- **Walkley, J., Armstrong, D. Clohesy, P. (1998).** Fundamental Motor Skills: An Activities Resource for Classroom Teachers. Department of Education, Melbourne.
- **NSW Department of Health (2003) 'Move It, Groove It - Physical Activity in Primary Schools' Summary Report.**  
[http://www.health.nsw.gov.au/pubs/2003/pdf/move\\_groove.pdf](http://www.health.nsw.gov.au/pubs/2003/pdf/move_groove.pdf)
- **NSW Schools Physical Activity and Nutrition Survey 2004 (SPANS) – Fundamental Movement Skills**  
[http://www.health.nsw.gov.au/pubs/2006/spans/9\\_fundamental\\_movement.pdf](http://www.health.nsw.gov.au/pubs/2006/spans/9_fundamental_movement.pdf)
- **Rethinking the teaching of games and sports.** This link will provide you with current research on the teaching of games and sports and outline processes for teachers to start rethinking how they teach games and sport in PE, challenging the notion of games being only for those with natural sporting ability.  
[http://www.curriculumsupport.education.nsw.gov.au/secondary/pdhpe/pdhpe7\\_10/physical\\_activity/index.htm](http://www.curriculumsupport.education.nsw.gov.au/secondary/pdhpe/pdhpe7_10/physical_activity/index.htm)

## **Evaluation Tools**

Methods for measurement of impacts such as levels of physical activity and the methods for conducting assessment of fine motor skills are described at [http://www.dhs.vic.gov.au/\\_\\_data/assets/pdf\\_file/0011/275861/PhysicalActivity.pdf](http://www.dhs.vic.gov.au/__data/assets/pdf_file/0011/275861/PhysicalActivity.pdf)

## **Case Study Example: ‘Move it Groove It’ (MIGI)<sup>4</sup> in rural Australia**

### **Partners involved**

‘Move It, Groove It’ (MIGI) was a collaborative effort between the Northern Rivers Area Health Service (NRAHS) Health Promotion Unit (HPU), Southern Cross University (SCU), and three NSW districts of the Department of Education and Training (DET).

### **Project objectives**

As a research and demonstration project MIGI’s broad goal was to develop a generalisable model to enhance knowledge, understanding and practices in order to increase physical activity levels in primary school children. It sought to provide new evidence, instruments and intervention methods in the field of child physical activity. In particular, MIGI aimed to increase physical activity levels of children both during PE lessons and in the playground during break times, and also to improve child mastery of FMSs.

### **Five strategies:**

1. A ‘buddy program’ in which pre-service teachers, trained to improve fundamental movement skills and physical activity levels in schools, were paired with teachers in each of the intervention schools. This enabled two way exchange, with pre-service teachers providing new knowledge, and classroom teachers providing teaching skills and experience.
2. Professional development for classroom teachers in areas of their choice relevant to physical activity promotion in schools.
3. Establishment of school project teams to address physical activity issues within the school.
4. A website with information, lesson plans and resources related to physical activity in schools.
5. A small amount of funding for equipment purchase.

**The following recommendations reflect specific findings from MIGI.**

### **Fundamental movement skills**

- ✓ **Concentrating on improving FMS mastery may be a better goal for schools than attempting to increase physical activity within PE lessons.** In the long run, with the ultimate goal of improved adult health, mastery of FMS’s may have a greater impact on children’s ability, desire and motivation to participate in lifelong physical activity than an extra few minutes per week spent in physical activity as children.
- ✓ That mastery levels of primary aged children in performance of **FMS be used to benchmark and track FMS mastery** of all primary school children throughout their primary years.
- ✓ That **all teachers who teach PE be trained to teach FMS mastery**, that their reliability be regularly reassessed and that wherever possible, the same person who tests a child initially should do so at any subsequent follow-up.

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<sup>4</sup> [http://www.health.nsw.gov.au/pubs/2003/pdf/move\\_groove\\_flyer.pdf](http://www.health.nsw.gov.au/pubs/2003/pdf/move_groove_flyer.pdf)

- ✓ **Physical education lessons**
- ✓ That **PE lessons be scheduled in the morning** as children were more active earlier in the day.
- ✓ That **daily fitness lessons of 20 minutes be scheduled** as this will achieve a greater change in terms of minutes per week in physical activity than improving the physical activity level within the lesson.

### **Playground**

- ✓ That girls' engagement in physical activity be promoted as their physical activity levels were consistently lower in all break types and all school sizes. Interventions could include policy and **environmental strategies** (e.g. allocated playground areas) as well as strategies designed to address the school's culture in regard to participation in physical activity.
- ✓ That the **numbers of balls in the playground be increased** as this will increase activity levels.
- ✓ That **recess breaks are made longer** even if lunch breaks are shortened

# Canada

## What does 'physical literacy' mean here?

Individuals who are physically literate move with competence in a wide variety of physical activities that benefit the development of the whole person.

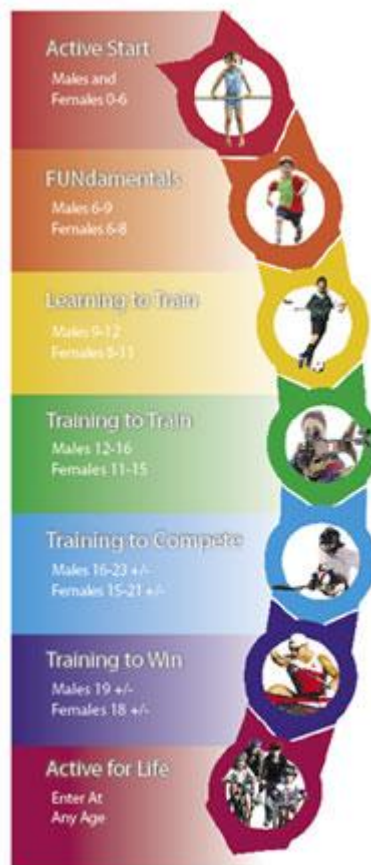
The Canadian Sport For Life framework defines physical literacy as: "...the development of fundamental movement skills and fundamental sport skills that permit a child to move confidently and with control, in a wide range of physical activity, rhythmic (dance) and sport situations. Physical literacy also includes the ability to "read" what is going on around them in an activity setting and react appropriately to those events" (Higgs et al., 2008, p. 5).

For full physical literacy children should learn FMS and fundamental sport skills in each of the four basic environments:

- **On the ground** – as the basis for most games, sports, dance and physical activities
- **In the water** – as the basis for all aquatic activities
- **On snow and ice** – as the basis for all winter sliding activities
- **In the air** – basis for gymnastics, diving and other aerial activities

Physical literacy gives children the tools they need to take part in physical activity and sport, both for healthy life-long enjoyment and for sporting success; and is a key component of Canada's Long-Term Athlete Development (LTAD) program.

**Canadian Sport for Life** documents the LTAD model adopted by Sport Canada and the Canadian Sport System ([www.ltad.ca](http://www.ltad.ca)). Each National Sport Organization (NSO) responsible for a specific sport is developing its unique LTAD model based on Canadian Sport for Life, and through its Provincial and Territorial counterparts is implementing the model across the country. Physical literacy is developed during the first three stages of Canada's LTAD model, meaning the time from birth to the start of adolescence: from birth to approximately age 11 for girls and to age 12 for boys. In addition to the material in Canadian Sport for Life, which applies to everyone, there is additional information in their document **No Accidental Champions** that applies to Canadians with a disability.



**Who is responsible for promoting physical literacy?**

	Where?	Physical Literacy	Who?
LTAD Stage	Schools Sport clubs Community recreation Sport programs Home	Learn to Train Girls 8-11, Boys 9-12	Parents/Guardians Coaches Teachers Recreation leaders Youth leaders
	Schools Sport clubs Community recreation Sport programs Home	FUNDamental Girls 6-8, Boys 6-9	Parents/Guardians Coaches Teachers Recreation leaders Youth leaders
	Home Pre-schools Day care Sport programs Community recreation	Active Start Girls and Boys 0-6	Parents/Guardians Day care providers Pre-school teachers Kindergarten teachers

“Teaching [FMS to promote and develop physical literacy] needs to occur in a wide range of settings” Ultimately the responsibility for developing a physically literate child rests with parents and guardians. Just as parents and guardians ensure their children are in learning situations that result in them having the ability to read, write and do mathematics, they must also ensure their children develop physical literacy.”

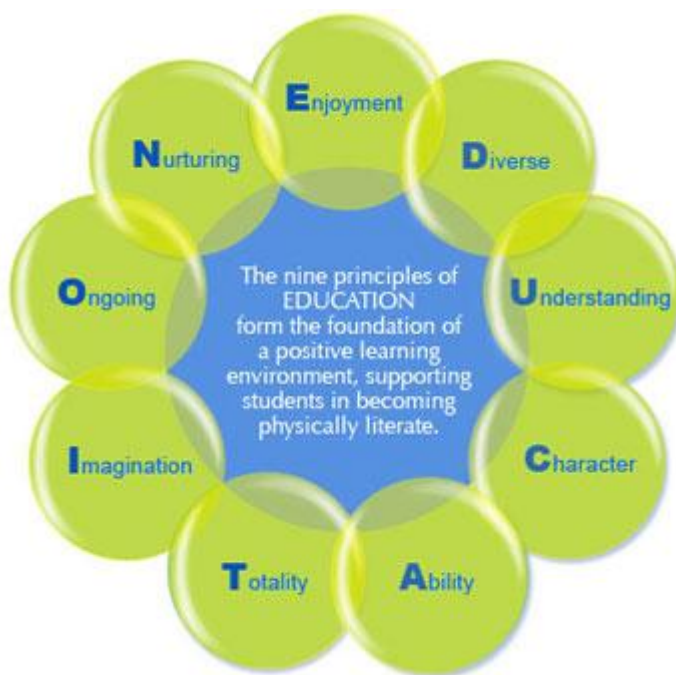
**Where is it promoted and developed?**

**Schools:** Physical Health Education Canada (PHE Canada) state that quality physical education programs are believed to offer the best opportunity to foster the development of physical literacy for all children and young people.

Physical education programs are an integral component of the total school experience for students and provide the best opportunities to develop physically literate students who are able to make healthy and active choices now and throughout their lifespan. Physical education curricula, when delivered fully, guides educators in teaching fundamental movement skills to children in a sequential progression.

Although each province in Canada has its own unique physical education curriculum, there are many common principles that are consistent with fostering physical literacy through a quality physical education program. These principles are consistent with PHE Canada’s [Quality Daily Physical Education \(QDPE\)](#) program and are rooted in previous evidence-based research. QDPE is a well-planned school program of compulsory physical education provided for a minimum of 30 minutes each day to all students (kindergarten to grade 12) throughout the school year. QDPE is recognised by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as a world class programme.

The 9 principles of education form the foundation of a positive learning environment supporting students in becoming physically literate. To develop each of these components educational strategies are offered via podcasts and activity ideas that can help teachers foster the development of physically literate students. These resources are all supported by academic research in the area of physical literacy.



## Resources

The **Fundamental Movement Skills (FMS) series** created by PHE Canada with financial assistance from Sport Canada, aids in teaching fundamental movement and sport skills in an effective, fun and interactive manner through the use of both print handbooks and an online video collection. The series designed to enable the development of physical literacy as a solid foundation for supporting long-term sport and physical activity participation within the QDPE programme.

### FMS Active Start and FUNdamentals<sup>5</sup>

**Fundamental Movement Skills I:** Active Start & FUNdamentals has been designed as a resource for teachers of children in Kindergarten to Grade 3 (5-9 years old), and for coaches of young athletes who are in the Active Start and FUNdamentals stages of the Long-Term Athlete Development (LTAD) program.

This resource includes:

- a description and characteristics of the mature movement pattern for the 12 fundamental motor skills;

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<sup>5</sup> There also similar resource packs adapted for children with a physical disability and children with developmental and/or behavioural disabilities which teachers can use in schools as part of the QDPE programme.

- still photographs of all 12 fundamental motor skills
- specific tips to help the teacher/coach develop these motor skills in their students/athletes;
- a variety of activities that utilize the motor skills
- a checklist for assessment of the motor skills

This resource also provides the theory and practice to teach fundamental motor and sport skills in an effective, fun and interactive manner. All the skills taught in the book address the three major skill categories within the LTAD Model: stability skills, object manipulation skills, and locomotor skills.

### **Monitoring and Evaluation**

**Physical Literacy Checklist:** An important component of a Quality Daily Physical Education (QDPE) program is assessing the program and evaluating how well it is supporting the development of physical literacy. The "Educating for Physical Literacy Checklist" is a general assessment tool which can help to facilitate instructional improvement for the development of physical literacy in students. It is not intended to be used in the evaluation or judgment of teaching competence and must be adapted to the setting, outcomes, and the personal styles of teachers and coaches. Some of its intended uses include self or peer assessment based on observations for constructive feedback, reflection, and professional development.

**The checklist is structured around four critical components of effective teaching which collectively house 24 research-based criteria for best-practice teaching in physical education – planning, environment, instruction and professionalism.** These criteria should serve as a generally useful means to help physical educators assess their planning, instructional capabilities, professionalism, and ability to nurture an effective learning environment for the development of physical literacy in physical education students.

**Support Tools:** PHE Canada has developed many useful support tools and resources to aid physical education teachers, generalist teachers, coaches and parents in the development of physical literacy and overall health.

- **Fundamental Movement Skills** Handbooks & Online Videos
- **PlaySport** - an educational website with all kinds of great activities designed to teach kids games by playing games [www.playsport.net](http://www.playsport.net)
- **SportFit** - a free, easy-to-use interactive program that encourages children and youth to discover sports [www.sportfitcanada.com](http://www.sportfitcanada.com)
- **At My Best™** - is a **Free** comprehensive curriculum-supported toolkit for children in grades kindergarten to grade 3 to promote and develop children's overall wellness developed by PHE Canada with support from AstraZeneca Canada. [www.atmybest.ca](http://www.atmybest.ca)
- **Weight of the World (WoW)** - is an educational program that promotes physical activity and healthy eating among children and youth and helps young people kick-start daily life changes in schools, families, communities and the world. [www.weightoftheworld.ca](http://www.weightoftheworld.ca)