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Association for Physical Education



Health Position Paper

January 2013



Association for Physical Education Health Position Paper

Physical education's contribution to public health

Physical education contributes to public health and personal well-being through the physical learning context that it provides for every child. Health and well-being should be viewed holistically to comprise physical, mental and social aspects of health which contribute to people's quality of life. afPE recommends that limited views of children's health and well-being which reduce the latter to a focus on size, weight and shape are avoided.

Curriculum physical education is an inclusive learning entitlement which should ensure that all children:

- Are provided with opportunities to become competent in a broad, balanced range of physical activities.
- Are helped to enjoy being active, and to feel confident and comfortable in a physical activity context so that they are more likely to choose to be active in their own time.
- Experience and appreciate the benefits (physical, psychological and social) of a healthy, active lifestyle.
- Are aware of how active they are and should be, and know how to find out about and access activity opportunities in the community, including at school, around the home and in the local area.
- Understand about 'energy balance' and the need to increase physical activity in daily living to assist with 'healthy' weight management.

High quality physical education addresses key outcomes identified as important to children, such as 'being healthy', 'enjoying and achieving' and 'making a positive contribution to school and society'. It also embraces whole school approaches to the promotion of healthy lifestyles and incorporates physical activity for health recommendations and guidance within national strategies associated with promoting activity and addressing childhood obesity such as: 'At Least Five A Week' (Department of Health, 2004) in England, 'Creating an Active Wales' (Welsh Assembly Government, 2009), 'Let's Make Scotland More Active' (Scottish Government Physical Activity Task Force, 2003) and Northern Ireland's 'Fit Futures: Focus on Food, Activity and Young People' (Department of Health, Social Services and Public Safety, 2005).



Physical activity, physical education and school sport

Physical activity, physical education and school sport are similar in that they all include physical movement, but there are important differences between them, as clarified in the following descriptions.

Physical activity is a broad term referring to all bodily movement that uses energy. It includes all forms of physical education, sports and dance activities. However, it is wider than this, as it also includes indoor and outdoor play, work-related activity, outdoor and adventurous activities, active travel (e.g. walking, cycling, rollerblading, scooting) and routine, habitual activities such as using the stairs, doing housework and gardening.

Physical education is the planned, progressive learning that takes place in school curriculum timetabled time and which is delivered to all pupils¹. This involves both 'learning to move' (i.e. becoming more physically competent) and 'moving to learn' (e.g. learning through movement, a range of skills and understandings beyond physical activity, such as co-operating with others). The context for the learning is physical activity, with children experiencing a broad range of activities, including sport and dance.

School sport is the structured learning that takes place beyond the curriculum (i.e. in the extended curriculum) within school settings; this is sometimes referred to as out-of-school-hours learning. Again, the context for the learning is physical activity. The 'school sport' programme has the potential to develop and broaden the foundation learning that takes place in physical education. It also forms a vital link with 'community sport and activity'.

Whilst all pupils may be encouraged to be involved in school and community sport, not all choose or are able to do so, for a host of reasons. Between 33% and 90% of girls and between 24% and 81% of boys in the UK are not reaching the recommended 'one hour a day' of physical activity to benefit their health; these proportions vary across the UK, as detailed in the following table:

Country	Boys	Girls
England (2-15 years)	68%	76%
Northern Ireland (8-12 years)	81%	90%
Wales (4-15 years)	37%	55%
Scotland (2-15 years)	24%	33%

Table 1. Proportion of children NOT meeting 'one hour a day' physical activity recommendation (adapted from 'Start Active, Stay Active' Report, 2011, p. 14).

The aim of Physical Education is to develop physical competence so that all children are able to move efficiently, effectively and safely and understand what they are doing. The outcome - physical literacy - is as important to children's overall development as literacy and numeracy.

¹ afPE's view of physical education is as follows:



For some children and young people (particularly girls), school physical education is their only regular opportunity for physical activity and makes an important contribution to their overall activity levels. It is therefore considered crucial that pupils receive at least 2 hours of physical education a week and that this is of the highest quality.

Physical activity recommendation for health

In 2011, the 'Start Active, Stay Active' report on physical activity for health was published by the four UK home countries' Chief Medical Officers. This included physical activity for health recommendations for the early years (under 5s), children and young people (5-18 years), adults (19-64 years) and older adults (65+ years). These replace previous recommendations from the four UK home countries. As the Association for Physical Education promotes and supports physical education throughout the lifespan, recommendations for all the different age ranges are reported below.

Within these recommendations, 'moderate' intensity activity is described as that which causes participants to breathe faster, experience an increase in heart rate, and feel warmer. 'Vigorous' intensity activity is that which results in participants breathing very hard, being short of breath, having a rapid heartbeat, and not being able to carry on a conversation comfortably. The amount of activity needed for it to be described as 'moderate' or 'vigorous' varies from one person to another.

Early Years (under 5s)

- 1. Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
- 2. Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.
- 3. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

Children and Young People (5-18 years)

- 1. All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours per day.
- 2. Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
- 3. All children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.



Adults (19-64 years)

- 1. Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more one way to approach this is to do 30 minutes on at least 5 days a week.
- 2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
- 3. Adults should also undertake physical activity to improve muscle strength on at least two days a week.
- 4. All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Older Adults (65+ years)

- Older adults who participate in any amount of physical activity gain some health benefits, including maintenance of good physical and cognitive function. Some physical activity is better than none, and more physical activity provides greater health benefits.
- 2. Older adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more one way to approach this is to do 30 minutes on at least 5 days a week.
- 3. For those who are already regularly active at moderate intensity, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous activity.
- 4. Older adults should also undertake physical activity to improve balance and coordination on at least two days a week.
- 5. Older adults at risk of falls should incorporate physical activity to improve balance and co-ordination on at least two days a week.
- 6. All older adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Reference: Department of Health (England), Department of Health, Social Sciences and Public Safety (Northern Ireland), the Scottish Government (Scotland) & the Welsh Government (Wales) (2011). Start Active, Stay Active. A report on physical activity for health from the four home countries' Chief Medical Officers.



Significance of the 'Start Active, Stay Active' report

The 'Start Active, Stay Active' report is highly significant in that it represents a unique UK-wide consensus on the amount and type of physical activity that is needed to benefit health. To reach this consensus, international, large-scale reviews in the US and Canada were drawn from as well as the World Health Organisation Global Recommendations on Physical Activity for Health. 'Start Active, Stay Active' updates existing guidelines and includes new guidelines for early years and older people for the first time in the UK.

The guidelines are flexible to encourage the creation of new ways to achieve the health benefits of an active lifestyle and to prompt the development of new partnerships to help create a more active society. The guidelines also highlight the risks of excessive sedentary behaviour, which exist independently of any overall volume of physical activity. Health inequities in relation to physical inactivity according to income, gender, age, ethnicity and disability, are acknowledged. Organisations and professions with a part to play in promoting physical activity (such as afPE) are challenged to work across communities to make physical activity a reality for all.

Key features of the 'Start Active, Stay Active' report

The key features of this report include:

A lifecourse approach

The overriding message is that people need to be active throughout life and that physical activity should be a natural part of everyday life, from the early years through to older adulthood. The guidelines stress the importance of adapting physical activity to the needs of people at different life stages.

A stronger recognition of the role of vigorous intensity activity

Vigorous physical activity has significant health benefits. Previous national programmes and campaigns have emphasised the health benefits of moderate intensity physical activity in order to entice low active, non-sporty people to become more active. This may have led to an assumption that vigorous intensity activity does not benefit health but this is not the case.

The flexibility to combine moderate and vigorous intensity activity

Both moderate and vigorous intensity activity have benefits, so people are encouraged to combine different amounts and types of activity, according to their lifestyle and preferences. Sessions of moderate intensity activity can be swapped for shorter sessions of vigorous intensity activity.



An emphasis upon daily activity

Across all age ranges, it is recommended that people are active in some way every day. By being active daily, individuals will gain some health benefits which result from responses that occur for up to one to two days, following activity. Being active daily also helps to develop more sustainable, lifelong activity habits.

New guidelines on sedentary behaviour

The key message is that some activity is better than none. However, across each age group, it is possible for people to achieve recommended levels of physical activity but still put their health at risk if they spend the rest of the time sitting or lying down. The new guidelines, therefore, highlight the need to limit sedentary behaviour and emphasise that action to limit sedentary behaviour is quite different to action to promote physical activity. Addressing this new agenda poses important challenges for the workplace, schools and childcare settings.

Of course, guidelines themselves do not change behaviour. Behaviour change is complex and difficult and can only be achieved through collaboration between organisations and professionals working together to make it easier for people to be more active and less sedentary. A good starting point is planned translation and communication of the guidelines, matched with concerted and committed action on physical activity to tackle barriers to being active at all levels, from the personal through to the environmental. In schools and colleges, safe routes to schools and active playgrounds need to be developed, alongside ensuring the provision of high quality physical education and health education through formal and informal curricula.

The physical activity guideline for 5-18 year olds

As many members of the Association for Physical Education teach children and young people aged 5-18 year olds, this section highlights noteworthy points associated with understanding and implementing the physical activity recommendation for this particular age group.

- The headline recommendation for this age group is 'a minimum of one hour a day of moderate to vigorous physical activity'.
- The intensity of physical activity should be above and beyond that experienced during daily living. This means that light activity such as moving around the house and walking slowly between school lessons or while shopping does not contribute towards the 'one hour a day' of physical activity. A reduction in sedentary time should, however, result in an increase in light intensity physical activity and total energy expenditure.
- Regular physical activity is associated with numerous health benefits for the 5-18 age group, including reduced body fat and the promotion of healthy weight, enhanced bone and cardio-metabolic health, and improved psychological wellbeing.



- The evidence supports recommendations on limiting sedentary behaviour, which
 may be associated with health risks that are independent of participation in
 physical activity. Physical activity has very low risks for most children and young
 people; however, the risk of poor health from inactivity is very high.
- The guidelines are relevant to all children and young people aged 5-18 years, irrespective of gender, disability, race or socio-economic status, but should be interpreted with consideration of individual physical and mental capabilities. For children and young people with disabilities, the guidelines need to be adjusted for each individual based on that person's exercise capacity and any special health issues or risks.
- For children and young people who are currently inactive, doing some physical inactivity, even if it is less than the guidelines, will provide some health benefits.
 For such individuals, a gradual increase in the frequency, duration and intensity of activity to achieve the guidelines is recommended.
- Children who are overweight or obese can gain health benefits from meeting the recommended levels of physical activity, even in the absence of changes to their weight status. To achieve a healthy weight, children and young people who are overweight and obese may need to engage in additional physical activity beyond the 60 minutes recommended in the guidelines, combined with a reduced calorie intake. However, children and young people of any weight should first aim to achieve and sustain the level of activity recommended in the guidelines. Overweight and obese children and young people may find physical activity uncomfortable and embarrassing so it is important that adults encourage and support their involvement by adapting activities to ensure they are inclusive, achievable and enjoyable.
- There is a dose-response association between activity and health outcomes such that regular participation in activity at a higher level than the guideline (e.g. of greater duration, increased intensity) is associated with even greater benefits. The guidelines acknowledge the dose-response relationship by recommending up to several hours of activity daily in order to obtain maximal benefits.
- Some of the health benefits associated with physical activity result from acute responses that occur for up to 24-48 hours following activity. To reflect this evidence and to encourage regular activity habits across the week, daily physical activity is recommended.
- For some health outcomes, vigorous intensity physical activity is required. For example, vigorous activity is required to increase cardio-respiratory fitness in young people and it is also important in optimising bone health, particularly prior to the adolescent growth spurt.
- Muscle strengthening and bone health are most favourably affected by resistance training and impact activities. The guidelines recommend that activities that strengthen muscle and bone should be incorporated on at least three days a week (this is an increase from previous recommendations which



stated 'at least twice a week'). For children, this can include activities that require lifting their own body weight and jumping and climbing activities, combined with the use of large apparatus and toys. For young people, resistance-type exercise during high intensity sport, dance, water-based activities or weight (resistance) training are appropriate.

- Sedentary behaviours, such as TV viewing or accumulated total sedentary time, are associated with overweight and obesity and metabolic dysfunction in young people. This suggests that prolonged periods of sedentary behaviour are an independent risk factor for poor health. Therefore, reducing sedentary time and breaking up extended periods of sitting is strongly advised.
- The guidelines need to be interpreted with consideration for children and young people's growth and development. Children and young people are a heterogeneous population. Encouraging childhood physical activity is especially important for children from disadvantaged or vulnerable groups or where family or peer support for being active is limited.
- Opportunities to be physically active need to be available on a daily basis, within the constraints of other pressures such as schooling. Activities should be varied and challenging, as appropriate for the age and stage of development.
- The degree of structure and organisation of activity changes gradually with a shift away from unstructured, active play predominant at younger ages towards structured and organised physical activity in youth (e.g. regular physical education, sport, dance and active travel). A balance of unstructured and structured activity enables young people to be active both independently and dependent on adults.
- If children have positive experiences of physical activity, they are more likely to remain active. Children should learn to manage physical risks themselves, as this will enhance their development of physical and social skills.
- There is a substantial positive association between parental and social support and physical activity in young people. For girls in particular, the main facilitators to being physically active are likely to be social and family influences (e.g. having a peer group who approve of activity or having active siblings and supportive parents). This highlights the importance of taking account of 'pupil voice' when designing, delivering and evaluating PE curricula and physical activity programmes within school and community settings, and working with families to increase the opportunities and support for physical activity within the lives of children and young people.



National physical activity targets set by UK governments

Back in 2002, the government in England set the following Public Service Agreement (PSA) target:

To ensure that **75%** of children do 2 hours of high-quality physical education and school sport a week by **2006** and **85% by 2008**.

This was commonly referred to as the '2 hours a week' target. The government proclaimed that the 75% target was met in 2006 and that the 85% target for 2008 was achieved in 2007. Following this, a long-term government ambition was established in England for 2010:

To ensure that all children should have 2 hours of curriculum physical education and the opportunity to access a further 2 to 3 hours of sport beyond the curriculum per week.

This became known as the 'five hours a week' target.

The Scottish Executive similarly aimed to increase and maintain the proportion of physically active children in Scotland and set a target of 80 per cent of all children aged 16 and under meeting the minimum recommended levels of physical activity by 2022, these being the accumulation of at least one hour of moderate activity on most days of the week. There were also recommendations for curriculum provision:

While *Curriculum for Excellence* gives both freedom and responsibility to those planning and delivering the curriculum, the Scottish Government expects schools to continue to work towards the provision of two hours of good quality PE for each child every week. This commitment will be reflected in *Building the Curriculum 3: A framework for Learning and Teaching*. Physical activity and sport will take place in addition to planned PE sessions, at break times and lunchtimes and beyond the school day. Taken together, the experiences and outcomes in physical education, physical activity and sport are intended to establish the pattern of daily physical activity which, research has shown, is most likely to lead to sustained physical activity in adult life.

The Welsh Assembly Government similarly committed itself to increasing activity levels within the Welsh population. It declared an aspiration that schools should provide at least 2 hours per week of effective and meaningful physical education for every pupil, to contribute to the recommended physical activity level for children of one hour per day of at least moderate intensity activity. In addition, it launched a '5x60' Secondary School Sport Programme, aimed at increasing the number of secondary aged pupils taking part in physical activity for 60 minutes, at least five times a week. By targeting children and young people who do not take part in physical activity, the Welsh Assembly Government hoped to reach a target of 90% of secondary school pupils taking part in '5x60' minutes of physical activity per week by 2020.



The Northern Ireland Strategy for Sport and Physical Recreation 2007-2017 (Department of Culture, Arts and Leisure, 2007) followed up national concerns for health and included the following targets:

By 2009, to have established a baseline for the number of children of compulsory school age participating in a minimum of two hours quality physical education;

By 2014, to provide every child in Northern Ireland over the age of 8 years with the opportunity to participate in at least two hours per week of extracurricular sport and physical recreation.

The relationship between the physical activity recommendation and national targets set by UK governments

National targets and the physical activity recommendation for health clearly differ but are complementary. The 'one hour a day' recommendation is how active children should be to gain health benefits.

England's previous 2010 ambition for '5 hours a week' target, along with the other home nations' targets for sport beyond curriculum time, make significant and important contributions to the physical activity recommendation, but still fall short, for the following reasons:

- 4 to 5 hours a week is 2 to 3 hours short of the 7 hours a week required to meet the 'one hour a day' recommendation.
- Children will not be actively moving during all of the 4 to 5 hours a week of physical education and school sport, since this involves changing time, and time spent on valuable learning activities such as planning, observing, analysing, coaching and officiating.

It is a challenge for schools to involve every child in up to 5 hours of physical education and school sport a week, especially younger children whose school days tend to be shorter; and learners at the top of the school age range, when there is so much competition for young people's time and commitment.

To increase the amount of physical activity in physical education lessons, afPE recommends that pupils be actively moving for at least 50% of the available learning time. This can usually be achieved through effective planning and efficient management and organisation of pupils and resources.

In summary, the physical activity recommendation for health and government targets for physical education and school sport support each other, in that increased time available for physical education and school sport can help to deliver the physical activity recommendation. The high quality experiences afforded by physical education and school sport should also motivate and encourage children to be active in their own time, to pursue activities that they particularly enjoy, and provide children with the



necessary knowledge, skills and understanding to enable them to take up and pursue activities now and in the future.

There is the added challenge of ensuring that every child, some possibly resistant to organised activity, others meeting difficulties in accessing it for a range of social and economic reasons, is willing and able to find ways of being active for at least 2 to 3 hours, away from the school setting, such as in and around the home, and with family, friends or as individuals. This emphasises the importance of the school context in supporting the entitlement of all children, whatever their circumstances to the physical activity and physical education which are so important for their development, health and well-being.

Physical Education's contribution to whole school approaches to the promotion of healthy, active lifestyles

In addition to every child receiving valuable learning in curriculum physical education, there should be numerous other opportunities to be physically active within the school context. The most effective way of maximising physical activity opportunities in schools is through a whole school approach to activity and health promotion, such as the 'Healthy School' and the 'Active School'. Whilst the 'Healthy School' initiative has a broader focus, both approaches involve creating a school ethos and environment which encourages and facilitates physical activity for all pupils and staff. Such strategies to promote healthy behaviours include: safer travel to school (e.g. 'walking buses'); providing attractive, appealing play areas; and making equipment/facilities accessible for both organised and informal activities.

In order to promote healthy, active lifestyles amongst children and young people, the Association for Physical Education recommends the following:

- The key role of curriculum physical education should be recognised and supported in any strategy addressing children's health and well-being.
- Curriculum physical education should develop the understanding, skills, confidence and attitudes required for all pupils to be active in their own time. This should include teaching about the physical, psychological and social health benefits of physical activity, the physical activity recommendation for their age, and the broad range of physical activity opportunities within the school setting and the local community.
- Schools should regularly monitor pupils' activity levels to determine which
 individuals are and are not meeting the physical activity recommendation for
 their age; this can occur instead of, or alongside, the monitoring of health-related
 fitness components. Educational assessment programmes which incorporate
 criterion-referenced standards and provide individualised feedback on activity
 and health-related fitness measures are recommended.
- Any form of monitoring carried out with pupils (including fitness testing, the use
 of activity diaries, pedometers, heart rate monitors etc) should be positive,
 meaningful, relevant and developmentally appropriate, and be part of a planned,



progressive programme of study, the primary aim of which is to promote healthy, active lifestyles.

- Physical education should be centrally and collaboratively involved in addressing the 'physical activity' aspect of whole-school approaches to health, including helping to develop a whole-school physical activity policy, and engaging pupils (and staff) in a broad range of interesting and appealing curricular and out-ofschool hours physical activity opportunities.
- Physical activity sessions (such as 'energy breaks' during lessons or during lunchtimes e.g. 'wake and shake' and 'take 10') are welcomed as an important addition to physical education. They complement curriculum physical education but should never replace it. Physical education focuses on learning through the context of physical activity and is for all pupils; in this respect, it is the cornerstone of effective 'physical activity promotion'.
- As encouraged through whole school approaches to the promotion of health, pupils and parents should have a 'voice' with respect to what they want from physical activity in schools and the range of activities they would like to take part in. Staff in schools should seek and respect the views of pupils and parents and try, where possible, to take on board their ideas (as exemplified in the 'Nike Girls in Sport' project).
- Schools should identify pupils who do not meet the physical activity recommendation for their age and attempt to establish why this is, bearing in mind that some individuals may not be able to access physical activity opportunities beyond physical education. This may be the case for children: with disabilities; from families without a car; with low skill levels; who have significant household duties; and who act as carers. Culturally aware and sensitive communication with these pupils and their families could help to understand their non-participation and reduce barriers to their involvement. This may be achieved through adaptation of existing policies and practices and the creation of new and different ways of involving or engaging them in the sort of activities they would like. Further strategies may need to be developed to address the challenges of those young people who, despite all provision and opportunities, choose to drop out from physical activity.
- PE teachers should have the knowledge, understanding and skills to be effective promoters of physical activity. This should include learning about the social construction of health and fitness and the complexity of behaviour change as a form of social reform. This may require adjustments to the initial training of teachers of PE and the provision of professional development, specific to the promotion of healthy, active lifestyles.



Actions taken to date by the Association for Physical Education to embrace 'health'

- afPE board members contributed to the production of the 'health and fitness' modules within the National CPD Programme (Learning about health in PE; Are your pupils healthy, active and fit? Does your school promote healthy, active lifestyles?).
- afPE contributed to and endorsed the Department of Health's Physical Activity Toolkit published in 2007.
- afPE organised and delivered a specialist seminar in May 2007 on 'Physical Education and Childhood Obesity'.
- A series of articles on 'Physical Education and Obesity' have been published in 'Physical Education Matters'.
- Since 2007, afPE annual conferences have included 'health' focused keynote presentations and workshops associated with physical education's role in promoting health and physical activity.
- afPE has had regular representation on the Department of Health's Physical Activity working group.
- There has been close liaison with the Department of Health about joint regional conferences on 'activity promotion' with secondary physical education and personal, health and social education (PSHE) teachers.
- afPE published a response to 'Recommendations within the 2009 Annual Report of the Chief Medical Officer' in England.
- The production and dissemination of this health position paper (and its predecessor in 2008) which outlines and clarifies physical education's contribution to public health and personal well-being.

January 2013

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For further information, or to inform afPE about good practice in this area, please contact admin@afpe.org.uk