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Physical Activity and the Wellbeing of Children and Young People

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The purpose of this paper is to inform the Education Committee's understanding of the value of physical activity (PA) and sport on children and young people's physical health and emotional wellbeing. The paper will begin by exploring the role of regular PA in safeguarding children's physical and mental health, now and in their future. The paper will also explore the progressive decline in physical activity among NI Youth. It will examine efforts to support schools in increasing the participation of children and young people in PE in Northern Ireland, including the role of the NI Curriculum Sports Programme. The paper will finish by exploring similar initiatives in other jurisdictions in the UK and the factors that support their effective delivery.

Table of Contents

- 1 Introduction3
- 2 Physical activity and the health of children and young people4
- 3 Physical activity and the emotional wellbeing of children and young people5
- 4 Progressive decline in physical activity among NI youth7
- 5 Schools are an ideal setting to increase physical activity8
- 6 Barriers to participating in physical education in schools9
- 7 The physical education curriculum in Northern Ireland 11
- 8 Initiatives to support physical activity in NI schools 12
- 9 The Curriculum Sports Programme 14
- 10 The Sports Programme (2019/20) 17
- 11 Initiatives to support PA among young people across the UK 19
- 12 Factors that foster positive engagement in physical activity 22
- 13 Conclusion 23

1 Introduction

In children and young people (CYP), regular physical activity is associated with better musculoskeletal health, increased cardiovascular fitness along with a healthy weight status. There is also strong evidence to suggest it will reduce CYP's probability of developing a range of chronic conditions in adulthood including type 2 diabetes and some cancers. Physical activity is also shown to improve the emotional wellbeing of CYP by reducing stress and anxiety as well as improving self-esteem and encouraging the development of pro social behaviours.

Despite the well-publicised benefits, levels of PA among children and young people is a major health concern. Research indicates that children living in Northern Ireland (NI) are the least likely to meet the recommended levels of PA, when compared with other countries across the UK¹ and in Europe.² Trends also indicate a progressive decline in PA levels across primary school years culminating in a significant drop in activity once children transition to secondary education.

Schools have been identified as an ideal setting to engage CYP in physical activity as they have an extensive reach to youth populations.³ Despite this, several structural issues exist that prevent schools from harnessing these opportunities including a lack of emphasis on physical education (PE) programmes. Gender, socioeconomic background and the ability of teachers to effectively deliver quality lessons (particularly in primary schools), have also been identified as participation barriers.

Research indicates that 19% of primary pupils in NI receive 30 minutes or less PE per week, and only 40% of post primary pupils receive the recommended 120 minutes per week. Several government and charitable initiatives have been established to support schools in the delivery of PE and recent evaluations have demonstrated their positive impact. One such initiative is the Curriculum Sports Programme (CSP), a joint venture between the FAI, the GAA and the Department of Education. The programme which was delivered over 10 years, successfully increased teacher's confidence to deliver effective PE lessons and had a positive impact on a range of pupil's physical skills. The programme is currently undergoing a refresh to introduce greater focus on mental health and encouraging the participation of females.

Similar initiatives are being introduced in England, Scotland and Wales with equally positive results. Several factors have been identified which can increase the positive outcomes of such initiatives including programmes that provide a diverse range of activities along with active student choice and positive teacher-student relationships. While an understanding of these factors is important, commentators have argued that in the absence of a 'requirement' to meet the two hour per week PE guideline, progress and change is difficult and recommend introducing a compulsory requirement to comply with the guidance.

¹ Griffiths, L.J, Cortina-Borja, M., Sera, F, Poulidou, T, Geraci, M, Rich, C, Cole, T.J, Law, C, Joshi, H, Ness, A.R.; et al. (2013) How active are our children? Findings from the Millennium Cohort Study. *BMJ Open*, 3

² Van Hecke, L.; Loyen, A.; Verloigne, M.; Van Der Ploeg, H.P. et al. (2016) Variation in population levels of physical activity in European children and adolescents according to cross-European studies: A systematic literature review within DEDIPAC. *Int. J. Behav. Nutr. Phys. Act.* , 13, 70.

³ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

2 Physical activity and the health of children and young people

The physical health benefits of regular PA in adults are well established.⁴ Regular participation in such activities is associated with a longer and better quality of life and a reduced risk of a variety of diseases.⁵ A large body of evidence also demonstrates that inactivity is one of the most significant causes of death, disability, and reduced quality of life across the developed world.⁶

Discussions of the benefits of PA for children and young people are often rightly framed in the context of how it will impact their future health as adults. However, PA has also been shown to have a positive impact on a host of factors affecting children's immediate physical health and evidence-based data is strong for its beneficial effects on musculoskeletal health, several components of cardiovascular health, blood pressure and obesity.⁷

The number of obese children and adolescents (aged five to 19 years) worldwide has risen tenfold in the past four decades.⁸ In the UK almost 1 in 5 children are overweight or obese when they start primary school, rising to 1 in 3 by the beginning of secondary school.⁹ In NI at least 26% of children are classed as overweight or obese.¹⁰ NI Children are also becoming obese younger and are more likely to be obese as adults if they were obese as children.¹¹ The estimated total lifetime cost of childhood obesity in Northern Ireland is around £2.1 billion, or £18,797 per person.¹²

Worldwide, the majority of children spend more than two hours per day watching TV, and laptop and phone use in children is increasing substantially.¹³ Besides screen activities, children engage in many other sedentary behaviours, e.g., sitting in the classroom and doing homework.¹⁴ Studies in Europe and the United States, show that children spend approximately 8h per day sedentary. This reduction in daily PA is closely related to the increase in obesity among this age group.¹⁵ As a result the

⁴ Public Health England (2016) Health matters: getting every adult active every day [online] Available at: <https://www.gov.uk/government/publications/health-matters-getting-every-adult-active-every-day/health-matters-getting-every-adult-active-every-day>

⁵ Public Health England (2016) Health matters: getting every adult active every day [online] Available at: <https://www.gov.uk/government/publications/health-matters-getting-every-adult-active-every-day/health-matters-getting-every-adult-active-every-day>

⁶ Physical Inactivity: A Global Public Health Problem World Health Organisation Website [online] Available at: https://www.who.int/dietphysicalactivity/factsheet_inactivity/en/

⁷ Tenfold increase in childhood and adolescent obesity in four decades: new study by Imperial College London and WHO World Health Organisation Website [online] available at: <http://homepages.wmich.edu/~sayers/Youth%20PA%20recs%202005.pdf>

⁸ Hills, Andrew & Andersen, Lars & Byrne, Nuala. (2011). Physical activity and obesity in children. British journal of sports medicine. 45. 866-70.

⁹ About childhood obesity. Royal College of Paediatrics and Child Health Website [online] available at: <https://www.rcpch.ac.uk/key-topics/nutrition-obesity/about-childhood-obesity>

¹⁰ Corrigan, D & Scarlett, M (2018) Health Survey (NI): First Results 2017/18 <https://www.health-ni.gov.uk/sites/default/files/publications/health/hsni-first-results-17-18.pdf>

¹¹ Millar, Seán & Perry, Ivan & Balanda, Kevin & Dee, Anne. (2017). What are the estimated costs of childhood overweight and obesity on the island of Ireland?.

¹² Millar, Seán & Perry, Ivan & Balanda, Kevin & Dee, Anne. (2017). What are the estimated costs of childhood overweight and obesity on the island of Ireland?.

¹³ Rideout V.J, Foehr U.G, Roberts D.F. (2010) Generation M2: Media in the Lives of 8- to 18-Year-Olds. Kaiser Family Foundation

¹⁴ Ids T.S, Maher C.A, Ridley K, Kittel D.M. (2010) Descriptive epidemiology of screen and non-screen sedentary time in adolescents: A cross sectional study. Int. J. Behav. Nutr. Phys. Act.; 7:92.

¹⁵ Hills, Andrew & Andersen, Lars & Byrne, Nuala. (2011). Physical activity and obesity in children. British journal of sports medicine. 45. 866-70.

engagement of children and adolescents in PA and sport has become a fundamental goal of obesity prevention.¹⁶

Physical activity in childhood is also crucial to the development of fundamental movement skills (FMS), a common set of movement activities (e.g., running, balancing, catching, jumping, throwing) that form the building blocks for the development of more complicated sport and movement skills.¹⁷ There is strong evidence supporting positive associations between FMS proficiency and multiple aspects of health-related physical fitness including cardiorespiratory fitness, musculoskeletal fitness and body composition.¹⁸ Evidence also suggests that those who have developed a strong foundation in FMS are more likely to be active, both during childhood and later in life.¹⁹

A common misconception is that these skills are naturally acquired and developed through childhood. While many children will develop rudimentary forms of FMS independently, research indicates that without appropriate practice and opportunity to be physically active, they will struggle to achieve a mature form of FMS proficiency.²⁰ It is expected that these skills should be acquired by 11-12 years of age and as a result primary schools provide an ideal environment for regular and structured programmes that provide an opportunity for children to acquire movement proficiency.²¹

3 Physical activity and the emotional wellbeing of children and young people

The link between PA and improved mental health among adults is well proven. Research suggests that up to 12% of future cases of depression in the adult population could be prevented by just one hour of physical activity per week.²² The recent concerns over the increase in mental health issues amongst school age children have led to an increased focus on whether PA can have the same positive benefits on child and adolescent mental health.

According to figures from the 2017 Global Burden of Disease study, anxiety and depressive disorders are among the top four leading causes of the disease burden among young people in Western Europe.²³ In NI, recently released research indicates that anxiety and depression are 25% more

¹⁶ Hills, Andrew & Andersen, Lars & Byrne, Nuala. (2011). Physical activity and obesity in children. *British journal of sports medicine*. 45. 866-70. 10.1136/bjsports-2011-090199.

¹⁷ Rainer, P and Jarvis, S (2020) Fundamental Movement Skills: Are they a "Fundamental" part of a young child's Physical Education? University of South Wales Sports Blog [online] Available at: <https://www.southwales.ac.uk/sport/sports-blogs/fundamental-movement-skills-are-they-fundamental-part-young-childrens-physical-education/>

¹⁸ Bremer, E., & Cairney, J. (2016) Fundamental Movement Skills and Health-Related Outcomes: A Narrative Review of Longitudinal and Intervention Studies Targeting Typically Developing Children. *American journal of lifestyle medicine*, 12(2),148–159

¹⁹ Okely A, Booth M, Patterson JW. Relationship of physical activity to fundamental movement skills among adolescents. *Med Sci Sports Exerc*.2001;33:1899-1904.

²⁰ Jarvis, S and Rainer, P (2020) Fundamental movement skills and their relationship with measures of health-related physical fitness of primary school children prior to secondary school transition: a Welsh perspective *International Journal of Primary, Elementary and Early Years Education* Volume 48, 2020 - Issue 1

²¹ Rainer, P and Jarvis, S (2020) Fundamental Movement Skills: Are they a "Fundamental" part of a young child's Physical Education? University of South Wales Sports Blog [online] Available at: <https://www.southwales.ac.uk/sport/sports-blogs/fundamental-movement-skills-are-they-fundamental-part-young-childrens-physical-education/>

²² Harvey SB, Øverland S, Hatch SL, et al. Exercise and the Prevention of Depression: Results of the HUNT Cohort Study. *American Journal of Psychiatry*. 2017 Oct 3;appi-1p

²³ Potrebny T, Wiium N, Lundegard MM. Temporal trends in adolescents' self-reported psychosomatic health complaints from

common in CYP compared to other parts of the UK.²⁴ One in eight CYP in NI experience emotional difficulties and one in eight meet the criteria for common mood and anxiety disorders.²⁵ The research cited a wide range of child, family and socio-economic factors as being associated with the increased levels of depression and anxiety disorders. The influence of social media, the internet and cyber bullying were also cited as potential factors.

It has been acknowledged that the impact of PA on mental health is less well documented for children.²⁶ However, several studies have identified a positive relationship with participation in organised PA, particularly in the school setting, and improved mental health outcomes in CYP including:

- Reduced anxiety and depression;
- Increased resilience;
- Improved well-being; and
- Increases in self-esteem²⁷

A study assessing the relationship between activity and psychological health in 9-10 year old children in England found that children who exercised regularly were less likely to suffer from depression. Data from the Avon Longitudinal Study of Children and Parents (ALSPAC) also reported that participation in regular exercise was associated with a lower risk of depression in 14 year olds.²⁸ Research carried out among US teenagers to identify protective factors that may diminish the negative impacts of bullying reported that lower levels of PA were related to more severe measures of sadness and suicidal thoughts.²⁹ Moreover, strong and consistent relationships have been found between sedentary time using screens for leisure and symptoms of depression and psychological distress.³⁰

Exercising regularly has been shown to reduce risk factors for the development of anxiety in adults, but studies on school age children and young people are less common.³¹ However, in a recent review of the effects of exercise on children with attention deficit disorder, the authors found that short-term

1980-2016: a systematic review and meta-analysis. *PLoS One*. 2017;12(11)

²⁴ Bunting, L, McCartan, C, Davidson, G, Grant, A, McBride, O, Mulholland, C, Murphy, J, Schubotz, D, Cameron, J & Mark Shevlin (2020) The mental health of children and parents in Northern Ireland Results of the Youth Wellbeing Prevalence Survey Youth Wellbeing NI
http://www.hscboard.hscni.net/download/PUBLICATIONS/MENTAL%20HEALTH%20AND%20LEARNING%20DISABILITY/youth_wellbeing/Youth-Wellbeing.pdf

²⁵ Bunting, L, McCartan, C, Davidson, G, Grant, A, McBride, O, Mulholland, C, Murphy, J, Schubotz, D, Cameron, J & Mark Shevlin (2020) The mental health of children and parents in Northern Ireland Results of the Youth Wellbeing Prevalence Survey Youth Wellbeing NI
http://www.hscboard.hscni.net/download/PUBLICATIONS/MENTAL%20HEALTH%20AND%20LEARNING%20DISABILITY/youth_wellbeing/Youth-Wellbeing.pdf

²⁶ Hagell A (2016) The connections between young people's mental health and sport participation: Scoping the evidence. London: AYPH

²⁷ Hagell A (2016) The connections between young people's mental health and sport participation: Scoping the evidence. London: AYPH

²⁸ Wiles, N. J, Haase, A. M, Lawlor, D. A, Ness, A., & Lewis, G. (2012). Physical activity and depression in adolescents: cross sectional findings from the ALSPAC cohort. *Social psychiatry and psychiatric epidemiology*, 47(7), 1023–1033.

²⁹ Sibold J, Edwards E, Murray-Close D, Hudziak J (2015) Physical activity, sadness and suicidality in bullied US adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 54, 808-815

³⁰ Hoare E, Milton K, Foster C, Allender S. The associations between sedentary behaviour and mental health among adolescents: a systematic review. *Int J Behav Nutr Phys Act*. 2016;13(1):108

³¹ Hagell A (2016) The connections between young people's mental health and sport participation: Scoping the evidence. London: AYPH

aerobic exercise had a significant effect on attention, hyperactivity and impulsivity, and they also noted a positive impact on anxiety.³²

In an analysis of the Czech Republic Health Behaviour in School-aged Children study, the researchers reported that participation in organised PA, particularly team and individual sports was associated with better self-rated health and higher life satisfaction.³³ It has also been suggested that participation in organised PA, may help young adolescents gain confidence and acquire social skills, potentially promoting increased resilience.³⁴ A study of 203 teenagers in New Zealand found a positive association between PA and increased self-esteem.³⁵

Research suggests physical activity can also help adolescents develop important skills such as leadership and empathy. A study of 705 middle school children in America indicated that those who scored highest in leadership skills were more physically active on a weekly basis. The same children were also more likely to show high scores in empathy.³⁶ In their study on the impact of physical education and sport on pupil outcomes Stead & Neville concluded that physical education, physical activity and sport help to develop positive social behaviours as well as leadership and citizenship skills.³⁷

4 Progressive decline in physical activity among NI youth

Consistent with trends observed worldwide, the majority of young people in NI are not meeting the 60 min of daily PA recommended by the World Health Organisation (WHO) and the United Kingdom (UK) Chief Medical Officer.^{38 39}

Research indicates that fewer than half of children and adolescents across the island of Ireland are meeting the guidelines⁴⁰, and children living in NI are least likely to meet the recommended levels of PA, when compared with other countries across the UK⁴¹ and in Europe⁴². The Children's Sport

³² Cerrillo-Urbina A, Garcia-Hermoso A, Sanchez-Lopez M, Pardo-Guijarro M, Santos Gomez J and Martinez-Vizcaino V (2015) The effects of physical exercise in children with attention deficit hyperactivity disorder: a systematic review and meta-analysis of randomized control trials. *Child: Care, health and Development*, 41, 779-788

³³ Badura, P, Geckova, A, Sigmundova, D, van Dijk, J, Reijneveld, S (2015) When children play, they feel better: organized activity participation and health in adolescents. *BMC Public Health*, 15:1090

³⁴ Eime R, Young J, Harvey J, Charity M and Payne M (2013) A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10:98

³⁵ Donaldson S and Ronan k (2006) The effects of sports participation on young adolescents' emotional well-being. *Adolescence*, 41, 369-389

³⁶ Nauret, R (2019) Physical Activity Helps Improve Social Skills Psychcentral Website [online] available at:

³⁷ Stead, R and Nevil, M (2010) The impact of physical education and sport on education outcomes: a review of literature Institute of Youth Sport School of Sport, Exercise and Health Sciences Loughborough University

https://www.icsspe.org/system/files/Stead%20and%20Neville%20The%20Impact%20of%20Physical%20Education%20a%20Sport%20on%20Education%20Outcomes_0.pdf

³⁸ World Health Organisation. Global Recommendations on Physical Activity for Health; WHO: Geneva, Switzerland, 2010.

³⁹ Davies, D.S.C.; Atherton, F.; McBride, M.; Calderwood, C. UK Chief Medical Officers' Physical Activity Guidelines; Department Health Social Care: London, UK, 2019; pp. 1–65

⁴⁰ Harrington, D.M.; Murphy, M.; Carlin, A.; Coppinger, T.; Donnelly, A.E.; Dowd, K.; Keating, T.; Murphy, N.; Murtagh, E.; O'Brien, W.; et al. Results From Ireland North and South's 2016 Report Card on Physical Activity for Children and Youth. *J. Phys. Act. Health* 2016, 13, S183–S188

⁴¹ Griffiths, L.J, Cortina-Borja, M., Sera, F, Poulidou, T, Geraci, M, Rich, C, Cole, T.J, Law, C, Joshi, H, Ness, A.R.; et al. (2013) How active are our children? Findings from the Millennium Cohort Study. *BMJ Open*, 3

⁴² Van Hecke, L.; Loyen, A.; Verloigne, M.; Van Der Ploeg, H.P. et al. (2016) Variation in population levels of physical activity in European children and adolescents according to cross-European studies: A systematic literature review within DEDIPAC. *Int. J. Behav. Nutr. Phys. Act.* , 13, 70.

Participation and Physical Activity Study (CSPPA) indicates that in 2018, 13% of school children in NI met the guidelines of 60 min of PA per day.⁴³ The research also revealed that the proportion of participants achieving 60 min of PA daily was higher in primary school pupils (20%), compared with post-primary school pupils (11%). These findings support trends of age-related decline found in other UK cohort studies, which indicate a progressive decline in PA levels across primary school years.⁴⁴

Similarly, in spite of the well-publicised benefits, and the fact that the development of Fundamental Movement Skills are embedded within the National Curriculum in England, Northern Ireland and Wales, it is widely reported that many children leave primary school without fully developing these skills.⁴⁵ Research conducted at the University of South Wales with over 300 primary school children 10-11 years of age showed that less than 10% of both boys and girls were able to demonstrate total competency in any of the featured FMS.⁴⁶

If children are unable to perform basic FMS they are more likely to be excluded from participation in organised sports and play experiences with friends because of a lack of physical skills and are also less likely to engage in PA in later life.⁴⁷ This has generally been termed as the 'proficiency barrier', and critically, it often culminates at the time when children progress from primary to secondary school and are expected to engage in a range of sports and activities that support the secondary school PE curriculum.⁴⁸ In contrast, research has reported that children with high levels of FMS proficiency leaving primary school show little decline in PA participation throughout crucial periods, such as the transition to secondary school and into adulthood.⁴⁹

5 Schools are an ideal setting to increase physical activity

Children's emotional health, physical fitness and obesity levels are resultant of a complex range of individual, family and community level factors which schools alone cannot solve.⁵⁰ However, schools can have a direct and measurable impact on children's weight and physical wellbeing, particularly

⁴³ Woods, C.B., Tannehill D., Quinlan, A., Moyna, N. and Walsh, J. (2018). The Children's Sport Participation and Physical Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and The Irish Sports Council, Dublin, Ireland.

⁴⁴ Cooper, A.R, Goodman, A., Page, A.S, Sherar, L.B et al (2015) Objectively measured physical activity and sedentary time in youth: The International children's accelerometry database (ICAD). *Int. J. Behav. Nutr. Phys. Act.* 12,1–10.

⁴⁵ Rainer, P and Jarvis, S (2020) Fundamental Movement Skills: Are they a "Fundamental" part of a young child's Physical Education? University of South Wales Sports Blog [online] Available at: <https://www.southwales.ac.uk/sport/sports-blogs/fundamental-movement-skills-are-they-fundamental-part-young-childs-physical-education/>

⁴⁶ Jarvis, S and Ranier, P (2020) Fundamental movement skills and their relationship with measures of health-related physical fitness of primary school children prior to secondary school transition: a Welsh perspective *International Journal of Primary, Elementary and Early Years Education* Volume 48, 2020 - Issue 1

⁴⁷ Gallahue DL and Ozmun JC (1998) *Understanding Motor Development: Infants, Children, Adolescents, Adult*. 5th ed. Boston, Mass: McGraw-Hill; 1998.

⁴⁸ Rainer, P and Jarvis, S (2020) Fundamental Movement Skills: Are they a "Fundamental" part of a young child's Physical Education? University of South Wales Sports Blog [online] Available at: <https://www.southwales.ac.uk/sport/sports-blogs/fundamental-movement-skills-are-they-fundamental-part-young-childs-physical-education/>

⁴⁹ Rainer, P and Jarvis, S (2020) Fundamental Movement Skills: Are they a "Fundamental" part of a young child's Physical Education? University of South Wales Sports Blog [online] Available at: <https://www.southwales.ac.uk/sport/sports-blogs/fundamental-movement-skills-are-they-fundamental-part-young-childs-physical-education/>

⁵⁰ OFSTED (2018) Obesity, healthy eating and physical activity in primary schools. A thematic review into what actions schools are taking to reduce childhood obesity No. 180017 [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/726114/Obesity_healthy_eating_and_physical_activity_in_primary_schools_170718.pdf

through the provision of structure PA and the transfer of positive lifestyle and nutrition knowledge.⁵¹ Research indicates that children's PA levels are directly related to the opportunities they have to be active.⁵² For many children, school is the main opportunity they have for being physically active, either through PE or after-school activities.⁵³

Schools are ideally placed for the implementation of PA programmes as they have an extensive reach to youth populations and to children from all socio-economic backgrounds.⁵⁴ Schools also provide an opportunity to engage with sub groups of students that are under-represented in sport and PA and are less likely to engage in these activities in other settings.⁵⁵ The sphere of schools influence also spans from early years through to school-age and adolescence.⁵⁶ Given the general decline in PA as children get older, the school environment provides an opportunity to promote positive PA behaviours and targeted interventions to retain children's interest at times when they are most likely to disengage.⁵⁷

Some of the barriers identified by children and young people with regard to engaging in physical activity outside the school setting include transport issues, cost and local availability.⁵⁸ Through the provision of free, convenient access to facilities and professional guidance, schools can provide high quality PA and sport experiences that many CYP would otherwise struggle to access.⁵⁹

6 Barriers to participating in physical education in schools

Despite the opportunities that schools present for increasing physical activity among CYP, several structural issues exist that prevent schools from harnessing these opportunities. The WHO has described decreasing PA throughout the school day, the lack of emphasis of physical education

⁵¹OFSTED (2018) Obesity, healthy eating and physical activity in primary schools. A thematic review into what actions schools are taking to reduce childhood obesity No. 180017 [online] Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/726114/Obesity_healthy_eating_and_physical_activity_in_primary_schools_170718.pdf

⁵² Mahar MT (2011) Impact of short bouts of physical activity on attention-to-task in elementary school children. *Preventive Medicine*. 2011;52(Suppl):S60–S64

⁵³ Telama R, Yang X, Laakso L, Viikari J. Physical activity in childhood and adolescence as predictor of physical activity in adulthood. *Am J Prev Med*. 1997;13:317-323.

⁵⁴ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

⁵⁵ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

⁵⁶ Public Health England (2020) What works in schools and colleges to increase physical activity? [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/876242/Guidance_to_increase_physical_activity_among_children_and_young_people_in_schools_and_colleges.pdf

⁵⁷ Public Health England (2020) What works in schools and colleges to increase physical activity? [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/876242/Guidance_to_increase_physical_activity_among_children_and_young_people_in_schools_and_colleges.pdf

⁵⁸ Woods, C.B., Tannehill D., Quinlan, A., Moyna, N. and Walsh, J. (2010). The Children's Sport Participation and Physical Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and the Irish Sports Council, Dublin, Ireland.

⁵⁹ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

programmes and the removal of dedicated green spaces or play areas within school grounds as an alarming worldwide trend.⁶⁰

International research suggests that gender inequality is also evident with regard to levels of physical activity and the delivery of PE. In NI there is a significant association between gender and meeting PA guidelines at post-primary level. Post-primary males are more likely to meet daily PA guidelines than females (16% versus 10%) and the female decline in PA is significantly more dramatic than that of their male peers during adolescence.⁶¹ In 2016, research from the Youth Sport Trust and Women in Sport found that whilst both boys and girls understood the significance of an active lifestyle, there was a big disconnect between girls' attitudes and actual behaviour.⁶² Issues with confidence and self-consciousness, the pressure of academic school work, and lack of encouragement from teachers and parents, all hold teenage girls back from being physically active.⁶³ Girls are also more likely to speak about the lack of choice with regard to options for PE as a barrier to participation.⁶⁴

It has also been reported that the types of sports and activity that a school provides are a critical factor in understanding the differences in participation. A general lack of balance has been identified in the opportunities provided to children and young for participation in physical activity in schools in Northern Ireland.⁶⁵ While there is some breadth in the range of PE activities on offer in primary schools, the post-primary PE curriculum remains games dominated, particularly for males.⁶⁶ The number of opportunities provided for participation in traditional team sports or invasion games (e.g. Soccer, GAA) generally outnumber the opportunities to participate in non-invasive court (tennis, Badminton) or fielding games (cricket, Baseball).⁶⁷ This lack of balance is also reflected in extracurricular and community settings too.⁶⁸ As a result, children whose interests are in non-traditional sports and physical activities are less likely to feel engaged with PE lessons and are less likely to develop an interest that they can carry into the community setting or adulthood.

The teacher plays a prominent role in children and young people's experience of PE in schools. At primary level, PE is delivered by a generalist teacher who has undertaken a PE element in their basic

⁶⁰ https://apps.who.int/iris/bitstream/handle/10665/67796/WHO_NMH_NPH_PAH_03.2.pdf?sequence=1&isAllowed=y

⁶¹ Connolly, S, Carlin, A, Johnston, A, Woods, C, Powell, C, Belton, S, O'Brien, W, Saunders, J, Duff, C, Farmer, O and Murphy, M (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *Int. J. Environ. Res. Public Health*, 17, 6849

⁶² Survey shows large gender gap in attitudes to physical activity for teenagers Youth Sports Trust Website Nov 6th 2017 [online] Available at: <https://www.youthsporttrust.org/news/survey-shows-large-gender-gap-attitudes-physical-activity-teenagers>

⁶³ Survey shows large gender gap in attitudes to physical activity for teenagers Youth Sports Trust Website Nov 6th 2017 [online] Available at: <https://www.youthsporttrust.org/news/survey-shows-large-gender-gap-attitudes-physical-activity-teenagers>

⁶⁴ Survey shows large gender gap in attitudes to physical activity for teenagers Youth Sports Trust Website Nov 6th 2017 [online] Available at: <https://www.youthsporttrust.org/news/survey-shows-large-gender-gap-attitudes-physical-activity-teenagers>

⁶⁵ Woods, C.B., Tannehill D, Quinlan, A., Moyna, N. and Walsh, J. (2010). The Children's Sport Participation and Physical Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and the Irish Sports Council, Dublin, Ireland.

⁶⁶ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

⁶⁷ Woods, C.B., Tannehill D., Quinlan, A., Moyna, N. and Walsh, J. (2010). The Children's Sport Participation and Physical Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and The Irish Sports Council, Dublin, Ireland.

⁶⁸ Woods, C.B., Tannehill D., Quinlan, A., Moyna, N. and Walsh, J. (2010). The Children's Sport Participation and Physical Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and the Irish Sports Council, Dublin, Ireland.

professional teacher training or in-service training in PE.⁶⁹ It is recognised that primary school teachers receive inadequate time allocation within their teacher training programmes to adequately prepare them to teach physical education⁷⁰ and primary level teachers report feel less prepared and confident in their abilities to deliver an effective PE lesson.⁷¹

An association between socio-economic status (SES) and PA among adolescents, where those with higher SES are more physically active than those with lower SES, is well established in the literature. In Northern Ireland, SES was not associated with meeting daily PA recommendations, however it does appear to be a determinant of participation levels in some settings.⁷² Data from the CSPPA study suggest that pupils attending schools with low SES in NI were more likely to receive the recommended 120 min of PE; however, beyond the school day children from lower SES groups were not participating in sport (school or community) to the same levels as their high SES peers.⁷³

7 The physical education curriculum in Northern Ireland

The NI curriculum aims to empower young people to achieve their potential and to make informed and responsible choices and decisions throughout their lives: as individuals, as contributors to society and as contributors to the economy and the environment.⁷⁴ Physical Education is viewed as having a significant role to play in this and is a compulsory part of the curriculum for all pupils at every Key Stage, from age four to 16.⁷⁵

The Council for the Curriculum, Examinations and Assessment (CEAA) describes how PE at primary level (Key stage 1 and 2) focuses on generating an environment of fun, enjoyment and achievement through a variety of progressively challenging and innovative activities.⁷⁶ Upon completion of primary education, children should understand and appreciate the benefits of physical activity and the relationship between physical activity and good health. Children should also have developed competency in a variety of physical skills.⁷⁷

⁶⁹ Woods, C.B., Tannehill D., Quinlan, A., Moyna, N. and Walsh, J. (2010). The Children's Sport Participation and Physical Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and the Irish Sports Council, Dublin, Ireland.

⁷⁰ Hardman K. Current situation and prospects for physical education in the European Union. 2007; Available at: <http://www.europarl.europa.eu/activities/committees/studies/download.do?file=16041>.

⁷¹ Sloan S. The continuing development of primary sector physical education: Working together to raise quality of provision. *European Physical Education Review*. 2010; 16(3):267-281.

⁷² Connolly, S, Carlin, A, Johnston, A, Woods, C, Powell, C, Belton, S, O'Brien, W, Saunders, J, Duff, C, Farmer, O and Murphy, M (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *Int. J. Environ. Res. Public Health* , 17, 6849

⁷³ Connolly, S, Carlin, A, Johnston, A, Woods, C, Powell, C, Belton, S, O'Brien, W, Saunders, J, Duff, C, Farmer, O and Murphy, M (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *Int. J. Environ. Res. Public Health* , 17, 6849

⁷⁴ <https://ceea.org.uk/about/what-we-do/curriculum/curriculum-aim-and-objectives>

⁷⁵ Council for the Curriculum Examinations and Assessment (2008) Physical Education Non-Statutory Guidance for Key Stage 4 [online] available at: <https://ceea.org.uk/downloads/docs/ceea-asset/Curriculum/Physical%20Education%20Non-Statutory%20Guidance%20for%20Key%20Stage%204.pdf>

⁷⁶ Key Stage 1 and 2, Curriculum, Physical Education CEA Website [online] available at: <https://ceea.org.uk/key-stages-1-2/curriculum/physical-education>

⁷⁷ Key Stage 1 and 2, Curriculum, Physical Education CEA Website [online] available <https://ceea.org.uk/key-stages-1-2/curriculum/physical-education>

At post-primary level the PE curriculum focuses on ensuring that pupils have opportunities to participate in regular and frequent PA and that they are encouraged to make informed and responsible choices about the role of PA in their lives both in and out of school.⁷⁸

Department of Education (DE) guidance recommends that NI schools (primary and post-primary) should provide pupils with a minimum of two hours curricular PE per week.⁷⁹ However, it is up to individual schools to decide how much time is allocated to PE and research suggests schools are falling short on achieving this, particularly in the primary years. Data from the CSPPA study found that 19% of primary pupils in NI received 30 minutes or less PE per week, and only 40% of post primary pupils received the recommended 120 minutes per week.⁸⁰

Commentators have argued that the absence of a 'requirement' to meet this two hour per week guideline, means that progress and change is difficult to achieve in terms of time allocation in the face of 'curriculum squeeze' where increasing focus is placed on exam outcomes.⁸¹

8 Initiatives to support physical activity in NI schools

Commentators have emphasised the importance of interventions in all avenues of activity and sport for children and young people including PE, extra-curricular sport, extra-school sport and general PA. This section will examine a selection of government and charitable programmes that have been established in NI schools to encourage increased levels of PA.

The Active School Travel Programme

One of the key ways in which people can be more physically active is through walking and cycling as part of everyday life.⁸² The fundamental aim of the Active School Travel programme is to provide schools with the skills and knowledge to get more children walking, cycling and scooting as their main mode of transport to school. The programme which is funded by the Department for Infrastructure and the Public Health Agency provides schools with a planned programme of activities throughout the year, both in and outside of the classroom, as well as support from a dedicated Sustrans Active Travel Officer.⁸³

⁷⁸ Council for the Curriculum Examinations and Assessment (2008) Physical Education Non-Statutory Guidance for Key Stage 4 [online] available at: <https://ccea.org.uk/downloads/docs/ccea-asset/Curriculum/Physical%20Education%20Non-Statutory%20Guidance%20for%20Key%20Stage%204.pdf>

⁷⁹ Statutory Curriculum, Department of Education Website [online] Available at: <https://www.education-ni.gov.uk/articles/statutory-curriculum>

⁸⁰ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

⁸¹ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

⁸² Nelson NM, Woods CB. Engineering children's physical activity: making active choices easy. *Municipal Engineer* 2007;160(2):103-109.

⁸³ Active School Travel in Northern Ireland Sustrans Website [online] Available at: <https://www.sustrans.org.uk/our-blog/projects/2019/northern-ireland/active-school-travel-in-northern-ireland>

According to Sustrans, the charity that delivers the programme, at the end of the 2018-19 school year, the number of children walking, cycling and scooting to school at participating schools increased from 35% to 53%. At the same time, the number of pupils being driven to school fell from 58% to 41%.⁸⁴

Extended Schools

Through the Extended Schools programme, funding is made available to schools with significant numbers of pupils drawn from the most deprived areas or who have a Free School Meal Entitlement (FSME), enabling the provision of a wide range of additional services and activities before, during and beyond the normal school day (including after-school, evenings, weekends and holiday periods).

Where assessed as required by schools, this may include opportunities to participate in a variety of activities related to play, leisure, sport and recreation, as well as the promotion of healthy lifestyles. Such activities may be organised by schools themselves or involve delivery by external organisations or groups. The 2018/19 Extended Schools Annual report indicated that:

- Almost all schools and clusters (91%) provided “strong” or “some” evidence that extended schools is fostering health and wellbeing; and
- The majority of schools provide evidence of increased numbers of pupils and parents engaging in physical activities.⁸⁵

The Daily Mile

The daily mile is a programme that encourages nurseries and schools to bring children outside for a 15 minute run or jog every day. The aim of the programme is to promote social, emotional and mental health and wellbeing, as well as fitness. It takes place at a time of the teacher’s choosing and children run in their school clothes with no special kit or equipment required. It is up to individual schools to decide whether they would like to participate or not.

More than 3,600 schools worldwide have introduced the initiative, including about 1,200 in England, 770 in Scotland, 210 in Wales, 85 in Northern Ireland and more than 100 in the Republic of Ireland. In a recent study, researchers compared the health of children at a primary school which takes part in the scheme with those at a school which does not and found that children who took part in the Daily Mile were significantly healthier than those who did not, with greater levels of fitness and lower levels of body fat.⁸⁶ The success of the programme has led to calls for it to be introduced in government policy.

Girls Active

The programme which operates around the UK is aimed at tackling the negative attitudes that girls have towards their body image and to improve their attitude towards PE, sport and PA.⁸⁷ Girls Active was introduced to NI in November 2016 as a pilot project with 10 secondary schools in partnership

⁸⁴ Active School Travel in Northern Ireland Sustrans Website [online] Available at: <https://www.sustrans.org.uk/our-blog/projects/2019/northern-ireland/active-school-travel-in-northern-ireland>

⁸⁵ Department of Education (2020) Extended Schools Programme Annual Report 2018/19 Department of Education: Bangor

⁸⁶ <https://www.bbc.co.uk/news/uk-scotland-44053387>

⁸⁷ Girlsactive Youth Sport Trust Website [online] Available at: <https://www.youthsporttrust.org/girls-active>

with Armagh City, Banbridge and Craigavon Council supported by funding from the Department for Communities. The programme has now extended to 30 schools.

Girls Active begins with a one-day teacher training workshop for two staff and includes the following support:

- A report on girls' participation and perceptions of PE, sport and PA in the participating school;
- Self-review framework and action plan tools;
- Inspirational hard copy and electronic resources for teachers and girls; and
- Seed funding and ongoing support.⁸⁸

The Girl Active network has recently expanded to include primary schools who, through the Girls Active: Stepping up for Change programme, work together with secondary schools to support girls' experiences as they transition from primary to secondary.⁸⁹

9 The Curriculum Sports Programme

Introduced in the 2007/08 academic year, the CSP was delivered to primary school pupils in Foundation and Key Stage 1 pupils (primary 1 to 4) by coaches from the Irish Football Association (IFA) and Gaelic Athletic Association (GAA).⁹⁰ The programme was supported by the Department of Education (DE).

The main aims of the programme were to:

- To develop FMS through participation in enjoyable games;
- Help raise confidence, self-esteem and motivation to learn in other curricular areas; and
- Raise the confidence of, and provide support to, primary teachers in delivering PE.⁹¹

Pupils in Foundation 1 and Key stage 1 were chosen as the target group for the programme in recognition of it being a crucial stage for the development of basic FMS such as agility, balance, coordination, speed, and running jumping and catching.

In addition to its core aims, the programme also supported a positive transition from compulsory school-based PA to sport in the community. Many national governing bodies of sport provide coaching sessions to school-aged children in the school setting which has resulted in the development of modified forms of their sport which in turn have been successful in recruiting children to their sports at a young age.⁹²

⁸⁸ Girlsactive Youth Sport Trust Website [online] Available at: <https://www.youthsporttrust.org/girls-active>

⁸⁹ Girlsactive Youth Sport Trust Website [online] Available at: <https://www.youthsporttrust.org/girls-active>

⁹⁰ Department of Education (2015) Revised Nov 2015 Budget 2017-18—Contingency Equality And Human Rights Budget Reduction Screening For Curriculum Sports Programme [online] available at: <https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf>

⁹¹ Northern Ireland Football Association (2015) Curriculum Sports Programme 2015 [online] available at: <https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

⁹² Woods, C.B., Tannehill D, Quinlan, A., Moyna, N. and Walsh, J. (2010). The Children's Sport Participation and Physical

The CSP supported delivery of several NI health and education policies

In addition to supporting the statutory PE curriculum, the programme was aimed at supporting a number of outcomes in the draft Programme for Government 2016-21 (PfG), notably that:

- We have a more equal society;
- We give our children and young people the best start in life; and
- We enjoy long, healthy, active lives.

The CSP also supported the delivery of cross-departmental strategies such as 'A Fitter Future for All' (2012-2022), a strategy led by the Department of Health,⁹³ and 'Sport Matters: The NI Strategy for Sport and Physical Recreation' (2009–2019), developed by the Department for Communities in partnership with Sport NI.⁹⁴

Working in partnership central to the delivery of the CSP

In 2016/17, the programme was delivered by approximately 50 coaches in 450 primary schools across all regions of NI, involving over 36,000 pupils.⁹⁵ The programme was geographically spread around the country, covering all of NI with at least one coach in each Local Council area and with a minimum of 4 coaches in each of the former five Education and Library Boards.⁹⁶ Primary/Preparatory schools throughout NI were entitled to apply to take part in the programme. The IFA and GAA selected the schools who participated in the programme and allocated coaches to the successful schools. As the programme was constrained by the level of funding it received, not all primary schools were able to participate.⁹⁷

Of the 450 schools that participated in the programme in 2016/17, 59% (265) were maintained schools, 28% (128) were controlled schools, 5% (21) integrated schools, 4% (16) Irish medium schools and 4% (20) were special schools.⁹⁸ Both boys and girls participated in the project. In 2016/17, the numbers were 18,550 (51%) and 17,643 (49%) respectively.⁹⁹ The coaches who

Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and the Irish Sports Council, Dublin, Ireland.

⁹³ Department of Health (2019) A Fitter Future For All outcome Framework Revised For 2019 -2022 [online] Available at: <https://www.health-ni.gov.uk/sites/default/files/publications/health/fitter-future-sto.pdf>

⁹⁴ Department for Communities (2009) The Northern Ireland Strategy for Sport and Physical Recreation 2009 to 2019 Belfast: Department for Communities

⁹⁵ Department of Education (2015) Revised Nov 2015 Budget 2017-18—Contingency Equality And Human Rights Budget Reduction Screening For Curriculum Sports Programme [online] available at: <https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20E2%80%93%20Curriculum%20Sports%20Programme.pdf>

⁹⁶ Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at: <https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

⁹⁷ Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at: <https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

⁹⁸ Department of Education (2015) Revised Nov 2015 Budget 2017-18—Contingency Equality And Human Rights Budget Reduction Screening For Curriculum Sports Programme [online] available at: <https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20E2%80%93%20Curriculum%20Sports%20Programme.pdf>

⁹⁹ Department of Education (2015) Revised Nov 2015 Budget 2017-18—Contingency Equality And Human Rights Budget Reduction Screening For Curriculum Sports Programme [online] available at: <https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20E2%80%93%20Curriculum%20Sports%20Programme.pdf>

delivered the programme were required to hold a university degree in a relevant sports related discipline and/or a Post Graduate Certificate of Education (PGCE) as well as an in-depth knowledge of the revised curriculum.¹⁰⁰

The school coaches worked with the class teacher to plan the delivery of a physical literacy programme which centred on developing FSM through a variety of sports including GAA and Soccer. Lessons were delivered weekly for the full academic year with each one lasting approximately 40 minutes.¹⁰¹ The lessons also consisted of cross-circular themes that could be continued into the classroom. The lessons took place during curriculum time and the class teacher participated in delivering all of the lessons to support their own learning and development. Teachers and principals were also expected to contribute to the overall programme evaluation process.¹⁰²

Amid much criticism, funding for the programme was phased out in 2018

Until 2015/16 the CSP received up to £1.5m of funding annually, equally split between the IFA and GAA. In 2015/16, due to budgetary constraints, funding for the programme was reduced to £1.3m.¹⁰³ In 2017, the DE said that due to budgetary constraints it would be unable to continue supporting the CSP project with funding due to expire on the 31st of October 2017.¹⁰⁴ However, following a budget monitoring round, an additional £10m was allocated to the DE a portion of which was allocated to funding the programme from the 1st November 2017 to 31 March 2018.¹⁰⁵ In March 2018, a further £750,000 was made available to keep to programme running until October 2018 at which point investment in the programme ended.¹⁰⁶ The loss of funding for the programme drew sharp criticism for the GAA, the IFA as well as schools and principals who felt that pupils were going to miss out on vital tools to support the development of a healthy lifestyle and positive mental wellbeing.¹⁰⁷

Robust evaluation of the programme was lacking but overall feedback was positive

In May 2015, the DE's Economic Advisory Unit (EAU) published an evaluation of the CSP. The purpose of the evaluation was to review the effectiveness of the programme, in terms of its impact and how well it had met its objectives. The EAU's findings were inconclusive, mainly due to the absence

[-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf](https://www.niar.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf)

¹⁰⁰ Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at:

<https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

¹⁰¹ Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at:

<https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

¹⁰² Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at:

<https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

¹⁰³ Department of Education (2015) Revised Nov 2015 Budget 2017-18—Contingency Equality And Human Rights Budget

Reduction Screening For Curriculum Sports Programme [online] available at: <https://www.education>

[Ni-gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf](https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf)

[-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf](https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf)

¹⁰⁴ Meredith, R (2018) Education funding boost 'bypasses sport' BBC News Website [online] Available at:

<https://www.bbc.co.uk/news/uk-northern-ireland-41585902>

¹⁰⁵ ¹⁰⁵ Meredith, R (2018) School sports programme gets reprieve in funding boost BBC News Website [online] Available at:

<https://www.bbc.co.uk/news/uk-northern-ireland-41602804>

¹⁰⁶ Meredith, R (2018) School sports scheme gets £750,000 boost saving 50 jobs BBC News Website [online] Available at:

<https://www.bbc.co.uk/news/uk-northern-ireland-43522656>

¹⁰⁷ Meredith, R (2018) Primary school sports coaching government funding ends BBC News Website [online] Available at:

<https://www.bbc.co.uk/news/uk-northern-ireland-45955267>

of any robust system for measuring its impact.¹⁰⁸ While some evidence was available to demonstrate the benefits of the programme, the EAU questioned the reliability of this data and highlighted the need for improved monitoring arrangements. The evaluation acknowledged that the IFA and GAA had already taken some steps to address the issue, and agreed that it would be difficult to identify a robust method for measuring the extent to which this programme met all of its objectives.¹⁰⁹

In July 2015, the FA provided an in-depth report on the outcomes of the programme during the 2014/2015 academic year including evaluations of the impact across pupils, teachers and schools. Pupils took part in a number of baseline measurement tests designed to examine if any improvement had occurred in a variety of physical skills including agility, balance and coordination and fundamental sporting skills of dribbling and passing. The results demonstrated that both age groups improved their average score across all measures over the four month period including quicker reaction times, improved efficiency of movement, increased speed, strength and co-ordination as well as passing technique.¹¹⁰

A large proportion of the teachers (232) involved in the CSP also took part in evaluations to inform outcomes of the programme. At the beginning of the 2014/2015 academic year, 28.2% of teachers involved in the CSP described their understanding of physical Literacy and FMS as good or excellent. Positively, this rose to 93.5% upon completion of the academic year.¹¹¹ The 56.2% of teachers who stated that they had average to poor understanding pre-programme, significantly diminished to 6.5%. This drop would suggest that the CSP coaches had a significant impact on teacher understanding. School principals were also enthusiastic about the outcomes of the programme with all 121 of those involved in the evaluation reporting that the programme has benefited their pupils in the area of Physical Literacy/Fundamental Movement Skills.¹¹²

10 The Sports Programme (2019/20)

Information in this section was provided by the Curriculum & Assessment Team of the Department of Education on the 29/10/20.

In 2019-20, the DE refreshed the CSP to focus on pupils and teachers at Key Stage 2 (primary 5 to 7). The purpose of the refreshed programme remains supporting the provision of curriculum PE in primary schools but also has a greater emphasis on:

¹⁰⁸ Department of Education (2015) Revised Nov 2015 Budget 2017-18–Contingency Equality And Human Rights Budget Reduction Screening For Curriculum Sports Programme [online] available at: <https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf>

¹⁰⁹ Department of Education (2015) Revised Nov 2015 Budget 2017-18–Contingency Equality And Human Rights Budget Reduction Screening For Curriculum Sports Programme [online] available at: <https://www.education-ni.gov.uk/sites/default/files/publications/education/Equality%20Screening%20-%20Budget%202017-18%20%E2%80%93%20Curriculum%20Sports%20Programme.pdf>

¹¹⁰ Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at: <https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

¹¹¹ Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at: <https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

¹¹² Northern Ireland Football Association (2015) Curriculum Sports Programme July 15 Report [online] Available at: <https://www.irishfa.com/media/7207/curriculum-sports-programme-end-of-year-report-july-2015.pdf>

- Pupils learning about mental health and wellbeing including resilience, self-esteem; and
- Promoting continued female participation in physical exercise.

Following discussions and based on evidence of need identified, in part, by the School Omnibus Survey¹¹³, a bespoke programme was developed by the DE in conjunction with the IFA and GAA.

A greater focus on teacher training and supporting transition to post primary

The department has stated that the educational rationale for focusing on Key Stage 2 is two-fold. Firstly, it provides an opportunity to provide professional and skills development for a new group of primary teachers: those who teach Years 5 to 7. Teachers at Foundation and Key Stage 1 benefited from the support of the CSP for over ten years, hence the focus on Key Stage 2.

To further enhance teacher development, the IFA and GAA coaches will offer key stage 2 teachers the opportunity to participate in formal coaching training courses as part of their annual staff development. The IFA and GAA are also collaborating with the Education Authority to establish formal professional learning programmes to increase specialist PE knowledge among teachers with the aim of having a direct impact on the quality of their delivery of the subject in the future.

Secondly, focusing the programme at Key Stage 2 provides an opportunity to enhance the skills and confidence of pupils who are transitioning to post-primary school, a time when evidence suggests that confidence and skills and engagement have traditionally dropped.

Programme delivery is focused on areas with high concentration of social disadvantage

The IFA and GAA have been asked to target primary schools with high concentrations of social disadvantage whilst still ensuring a wide geographical spread. To this end, the programme aims to target a minimum of 80% of primary schools in each district council area or county who are within the highest third of FSME. However, other schools are also eligible to participate in the programme. Importantly, focusing on primary schools means that boys and girls have equal access to the programme.

Each block of delivery is for a 10 week period and pupils from P5, P6 and P7 classes will receive the programme. The 24 coaches employed by the programme target 2 schools per day over a 3.5 day week equating to 168 schools per week for the 10 week block.

Pupils will receive one lesson from the coach that will include moderate to vigorous intense physical activity around a topic agreed with the teachers i.e. games, movement (gymnastics), dance or athletics. Key areas that link the content to the curriculum are addressed in the session with pupils given time to reflect on what they are doing and to make links to classroom-based activity.

¹¹³ School Omnibus Survey Department of Education Website [online] Available at: <https://www.education.ni.gov.uk/articles/survey-reports>

Lessons are progressive and include follow-up, classroom-based lessons by the teacher. Pupils are also encouraged to play and be involved in physical activity at home with their peers, siblings and parents. To help prepare parents for the activities they are invited into the school to receive information on the programme and/or a leaflet with the programme details is sent home.

Independent evaluation is central to the new programme

In 2019-20, it was agreed that both the IFA and GAA would jointly commission an independent evaluation of the impact of the programme on pupils, teachers and schools. The purpose of the evaluation was so the Department could consider its findings to build a strong evidence base around current curricular PE, and wider sports provision, in NI schools. The evaluation is currently ongoing.

11 Initiatives to support PA among young people across the UK

Similar to NI, PE is a mandatory subject for all CYP in England, Wales and Scotland with a common recommendation that two hours per week should be allocated to the subject. However, there is no compulsion on schools to allocate the two hours and research suggests varying levels of adherence to the recommendation across the jurisdictions.

In Wales, the 2018 School Sport Survey showed that around 100 minutes are dedicated each week to PE in primary and secondary schools in Wales.¹¹⁴ In 2011, the Scottish Government made a commitment to ensure that, by 2014, every pupil would benefit from at least two hours of PE in primary school and two periods (100 minutes) in S1 to S4 each week (ages 12 to 16). In 2017, 93 per cent of schools met the target of providing at least 100 minutes of PE to all pupils in S1 to S4.¹¹⁵

This section will explore a range of initiatives that have been established in England, Scotland and Wales to support greater participation in PE in schools in order to combat the rising levels of inactivity that have been identified among CYP.

Initiatives in England are focused on greater involvement of marginalised groups

Inclusion 2020 - is being led by Youth Sport Trust and a consortium of organisations to increase opportunities for young people with special educational needs and disabilities (SEND) to enjoy PE, school sport and PA.

The trust will support 50 Lead Inclusion Schools across England – designated as hubs of expertise on inclusive PE and sport - to act as champions in their local areas. As well as staging events, they will

¹¹⁴Sport Wales (2018) School Sport Survey 2018 State of the Nation
<https://www.sport.wales/files/be75d2ef7a9f0620a5bcbd371ba9c9ce.pdf>

¹¹⁵EACEA National Policies Platform (2020) United Kingdom (Scotland) Sport, youth fitness and physical activity [online] Available at: <https://eacea.ec.europa.eu/national-policies/en/content/youthwiki/73-sport-youth-fitness-and-physical-activity-united-kingdom-scotland>

be responsible for training staff and sharing best practice with other schools to improve the provision of PE, school sport and PA for young people with SEND.¹¹⁶

Active in Mind is funded through Sport England National Lottery funding. It established 25 projects that target young people who are already experiencing low level mental health issues and are already part of a wellbeing support programme within their school (pastoral support/counselling) or beyond the school (Tier 1 or 2 Children and Adolescent Mental Health Services).

The projects create a 'nurture group' environment for those young people most in need of support, using sport and PA as the vehicle for change. They increase PA and provide an alternative approach to simply addressing the mental health of the participant and look to also address their lifestyle, mind-set and support network. The projects are supported by a named and trained Wellbeing Champion (lead adult member of staff) and delivered through a small team of Young Mental Health Champions (young people aged 15-18).

Scottish initiatives are building pathways between school and community sports

Active Schools - is Sportscotland's (the national agency for sport) national initiative that aims to provide more and higher quality opportunities for children to participate in sport before school, during lunchtime and after school.¹¹⁷ Sportscotland works in partnership with all 32 Scottish local authorities to invest in and support the Active Schools Network. The network has been developed over ten years and consists of over 400 managers and coordinators who are responsible for developing and supporting the delivery of quality sporting opportunities for children and young people.¹¹⁸

A core part of the initiative is the recruitment of volunteers who deliver the activity sessions in primary, secondary and ASD schools. The volunteers can include club coaches, teachers, PE specialists, parents as well as paid professional coaches.¹¹⁹ In 2018/19, 21,000 volunteers delivered 398,000 sessions in schools covering a variety of sports including basketball, football and athletics as well as dance and movement. The initiative also develops effective pathways between schools and sports clubs in the local community with 2,700 links created in 2017/18, to help pupils participate in sport outside their school.¹²⁰

The Active Play and Play Champs Partnerships - are being delivered through a partnership model between Inspiring Scotland and local third sector groups (PEEK/Jeely Piece/FARE), along with the University of Strathclyde and Agile. The programme has been developed as part of the Glasgow Improvement Challenge.¹²¹ The programmes aim to improve children's physical activity and physical literacy levels, which improve their physical and mental health, develop their team work and social

¹¹⁶ Inclusion 2020 Youth Sport Trust Website [online] Available at: <https://www.youthsporttrust.org/inclusion-2020>

¹¹⁷ Active Schools sportscotland Website [online] Available at: <https://sportscotland.org.uk/schools/active-schools/>

¹¹⁸ Active Schools sportscotland Website [online] Available at: <https://sportscotland.org.uk/schools/active-schools/>

¹¹⁹ Active Schools sportscotland Website [online] Available at: <https://sportscotland.org.uk/schools/active-schools/>

¹²⁰ Active Schools Report: 2018-2019 sportscotland Website [online] Available at: <https://sportscotland.org.uk/schools/active-schools/active-schools-report-2018-2019/>

¹²¹ Physical Education, Physical Activity and School Sport Glasgow City Council Website [online] Available at: <https://www.glasgow.gov.uk/article/18856/Physical-Education-Physical-Activity-and-School-Sport>

skills plus improve focus and behaviour in class.¹²² The programme is being supported by the Scottish government with the ultimate aim of rolling out the programme out nationally.

Active Play runs with a P3 or 4 class and teacher for 10 weeks, supported by a play charity (FARE, Jeely Piece Club or PEEK).¹²³ Each session takes one hour, with a structured first half led by the play charity/teacher and free play in the second half hour. Play Champs trains 10 P5 or p6 children to promote greater engagement in active play to other children during play time and lunch breaks. The programme is delivered by a Support for Learning Worker (SLW) over 8 weeks¹²⁴

Initiatives in Wales are focused on student choice and developing fundamental skills

Play to Learn and Dragon Multi skills and Sports are two Sports Wales initiatives funded by the National Lottery. Play to Learn aims to encourage children aged 3-7 to learn key movement skills. The programme provides a set of resources that can be used by parents, health professionals, nursery staff and teachers and includes, story books to act out creative movements, skills cards to help children practice key movements such as running and jumping and games targeted at the age group.¹²⁵ Dragon Multi skills and Sports give 7 – 11-year olds the opportunity to grasp key FMS. Once the FMS have been mastered, children move on to Dragon Sport where they are introduced to athletics, cricket, football, golf, hockey, netball, rugby and tennis.¹²⁶

Sessions take place with qualified tutors in primary schools, leisure centres and clubs across Wales. Children learn essential skills like throwing and catching through fun skill drills and games. Whilst the primary focus of Dragon Sport is improving sports provision for 7-11 year olds across Wales, Dragon Sport also focuses on recruiting parents and other volunteers as helpers to support the development of after school and community sports clubs.¹²⁷

The 5x60 scheme - aims to encourage secondary school pupils to be more active, more often by encouraging them to exercise for at least 60 minutes, five days a week.¹²⁸ Programme Officers hold consultations with groups of pupils within a school before deciding on a programme of activities to be run in extra- curricular sessions. By consulting with pupils, officers can ensure that the activities provided are ones proving popular with pupils and therefore ensuring full and active attendance.¹²⁹ Some of the activities offered by 5x60 are Street Dance, football, cricket and climbing. Most of the sessions happen during lunchtimes and after school. The aim is to provide a mixed programme of

¹²² FMR Research (2019) Active Play for Raising Attainment Year 2 Progress Report August 2017 – June 2018 [online] Available at: <https://www.glasgow.gov.uk/CHttpHandler.ashx?id=44282&p=0>

¹²³ FMR Research (2019) Active Play for Raising Attainment Year 2 Progress Report August 2017 – June 2018 [online] Available at: <https://www.glasgow.gov.uk/CHttpHandler.ashx?id=44282&p=0>

¹²⁴ FMR Research (2019) Active Play for Raising Attainment Year 2 Progress Report August 2017 – June 2018 [online] Available at: <https://www.glasgow.gov.uk/CHttpHandler.ashx?id=44282&p=0>

¹²⁵ Play to Learn Sports Wales Website [online] Available at: <https://www.sport.wales/content-vault/play-to-learn/>

¹²⁶ Dragon Multi-Skills & Sport Sports Wales Website [online] Available at <https://www.sport.wales/content-vault/dragon-multi-skills-sport/>

¹²⁷ Dragon Multi-Skills & Sport Sports Wales Website [online] Available at: <https://www.sport.wales/content-vault/dragon-multi-skills-sport/>

¹²⁸ 5x60 Programme Swansea Council Website [online] Available at: <https://www.swansea.gov.uk/article/27407/5-x-60>

¹²⁹ 5x60 Programme Swansea Council Website [online] Available at: <https://www.swansea.gov.uk/article/27407/5-x-60>

sports and activities so that everyone will find something that they enjoy while getting fit at the same time. The Welsh Government funded initiative is run by Sport Wales.¹³⁰

12 Factors that foster positive engagement in physical activity

In addition to identifying barriers that limit young people's participation in PE, sport and general PA, commentators have also identified a number of factors that can foster greater engagement in school programmes and in the community. Many of these form the basis of initiatives mentioned above and others being introduced across the UK.

Programmes that provide a diverse range of opportunities are more likely to encourage students' participation.¹³¹ There is still a big demand for traditional sports such as rugby, soccer and GAA in schools, however, a mixture of traditional, non-traditional and non-competitive activities are more likely to engage a greater number of students particularly among certain cohorts of students including girls and pupils with special educational needs.¹³² In addition to providing more choice, allowing pupils to get involved in planning activities and making their own decisions based on their personal needs is also more likely to foster engagement.¹³³

Studies report that a lack of enjoyment is cited as being a factor leading to dropout from sport and PA.¹³⁴ Evidence-based models targeting a range of practices that are known to enhance fun and enjoyment during sport and P.E are emerging and demonstrating evidence that they can be successful in sustaining children's and young people's participation.¹³⁵ Related to this, programmes that are overly focused on competitiveness and team based sports can act as a deterrent, particularly for females.¹³⁶

Several authors have suggested that parents and friends may have a role in enhancing PA.¹³⁷ The CSPPA study found that social support from family and friends were significant predictors for participants meeting the PA guidelines. These results emphasise the importance of both parental and peer support for PA as crucial considerations within interventions and approaches to the promotion of PA.¹³⁸

¹³⁰ 5x60 Programme Swansea Council Website [online] Available at: <https://www.swansea.gov.uk/article/27407/5-x-60>

¹³¹ Marsh, S (2015) How to make PE more inclusive: top tips for teachers [online] Available at: <https://www.theguardian.com/teacher-network/2015/may/24/how-to-pe-inclusive-top-tips-for-teachers>

¹³² Marsh, S (2015) How to make PE more inclusive: top tips for teachers [online] Available at: <https://www.theguardian.com/teacher-network/2015/may/24/how-to-pe-inclusive-top-tips-for-teachers>

¹³³ Connolly, S, Carlin, A, Johnston, A, and Woods, C et.al. (2020) Physical Activity, Sport and Physical Education in Northern Ireland School Children: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 17. 10

¹³⁴ Crane, J, Temple, V, (2014) A systematic review of dropout from organized sport among children and youth. *Eur. Phys. Educ. Rev.* 21, 114–131

¹³⁵ Visek, A.J., Achrafi, S.M, Mannix, H.M, McDonnell, K.A, Harris, B.S, DiPietro, L, Manning, H. (2015) The Fun Integration Theory: Toward Sustaining Children and Adolescents Sport Participation. *J. Phys. Act. Health*, 12, 424–433

¹³⁶ Corr, M, McSharry, J, Murtagh, E. (2018) Adolescent Girls' Perceptions of Physical Activity: A Systematic Review of Qualitative Studies. *Am. J. Health Promot.* 33, 806–819.

¹³⁷ Laird, Y.; Fawcner, S.; Kelly, P.; McNamee, L.; Niven, A. The role of social support on physical activity behaviour in adolescent girls: A systematic review and meta-analysis. *Int. J. Behav. Nutr. Phys. Act.* **2016**, 13,79

¹³⁸ Woods, C.B., Tannehill D., Quinlan, A., Moyna, N. and Walsh, J. (2010). The Children's Sport Participation and Physical Activity Study (CSPPA). Research Report No 1. School of Health and Human Performance, Dublin City University and The Irish Sports Council, Dublin, Ireland.

13 Conclusion

Schools are attractive settings in which to promote positive PA behaviours because of their broad student reach and the fact that students spend large amounts of their day in school. However, despite the well-publicised benefits of PA for students' emotional health and physical wellbeing, schools are under increasing pressure to focus on exam outcomes often resulting in a reduced emphasis on the importance of PE programmes. The recent dramatic rise in the prevalence of obesity in CYP along with a decline in PA and an increase in sedentary behaviours further highlights the need for effective PE programmes. Schools and teachers need adequate support and training to enhance their delivery of PE and have begun working in partnership with various government, charitable and sporting bodies to deliver targeted PA programmes. Several of the initiatives have demonstrated positive outcomes for students and teachers including an increase in children's physical skills and increased confidence among teachers to deliver effective PE programmes. However, commentators have argued that progress and change is being hampered by the absence of a 'requirement' to meet the two hour per week PE guideline. Introducing a mandatory minimum requirement for PE alongside initiatives that have been proven to positively impact children and young people's experience of PA could help secure positive physical and emotional health outcomes for children now and in their future.