



PHYSICAL ACTIVITY, SPORT & EDUCATION

This briefing note summarises some of the key evidence on regular physical activity, physical education and sport and their value to education.

School as a Setting for Promoting Physical Activity and Sport

The 2005/06 School Sport Survey highlighted the important roles Physical Education and sport play in school life, suggesting they help to raise standards, improve behaviour and health, increase attendance and develop social skills.¹

According to researchers²⁻⁵, schools are an appropriate setting for the promotion of physical activity and other health behaviours for a number of reasons:

- Schools provide one of the few opportunities to address the full range of individuals in a population, and a last chance to access, at no extra cost, a captive audience².
- Schools provide a range of opportunities for pupils to engage in physical activity, such as break-time, travel to and from school, physical education lessons and extra-curricular clubs.³
- Elements of the traditional school curriculum relate directly to health.⁴
- Any positive impact schools have on young people has the potential added benefit of having a lifetime, as well as an immediate effect.⁵

The Department of Health and the Department for Education and Skills believe that the 2012 Olympic Games in London provides the ideal opportunity to increase the level of interest in sport and relate this to the benefits of a healthy lifestyle.⁶ Schools will be at the forefront of this ambitious change, since most children get their first opportunity to try sport and discover their talent and potential in school.⁷

Schools have a responsibility to develop young people's physical skills and to encourage them to recognise the importance of pursuing a healthy lifestyle and keeping themselves and others safe.⁸ Schools can demonstrate their commitment to this responsibility by striving to achieve Healthy Schools Status. Healthy Schools must fulfil criteria to enhance opportunities for physical activity throughout the school day. For example, they must guarantee to provide a minimum of two hours structured physical activity to all pupils each week.⁶

When the escalating problem of obesity in children in the UK is taken into consideration then the role of the school in promoting physical education, school sport and physical activity becomes increasingly important.⁹

Academic Achievement

Participation in regular physical activity and sport has been linked to improvements in academic performance in several studies.

Evidence presented by the Youth Sport Trust¹⁰, shows that all cohorts of sports colleges have seen improvements in their GCSE performance since becoming designated as a specialist sports college. It was also found that Specialist Sports Colleges are performing better than non specialist schools in terms of achieving five or more GCSEs at grades A* - C.¹⁰ DCMS and DfES proposed that this improvement in academic achievement may be explained in terms of physical activity increasing pupil concentration, commitment and self-esteem.¹¹

The link between regular physical activity, sport and academic performance has been demonstrated in other research.

- An independent evaluation of the Government initiative 'Playing for Success' highlighted that on average, primary pupils who attended schemes improved their numeracy scores by the equivalent of 17 months and secondary pupils by 24 months. The scheme has also shown improvements in literacy scores, with secondary pupils improving their reading ability by 8 months.¹²
- There is also a consensus across teachers and pupils involved in 'The Class Moves' initiative that the programme assists pupils' concentration and behaviour in the classroom and has had a notable effect on relaxing and re-focusing pupils.¹³

There appears to be some debate about the intensity of activity needed to achieve these benefits. A recently published research paper found that higher examination grades were associated with vigorous physical activity and not moderate intensity physical activity.¹⁴

Social Inclusion

The education sector has the potential to reduce inequalities in health. Educational attainment influences socio-economic position and traditionally education is a route out of poverty for those living in disadvantage.¹⁵

Regular participation in physical activity and/or sport has been linked to an increased sense of identity and improved self-esteem. Sport and physical activity might be an ideal vehicle for engaging the most vulnerable young people in society.¹⁶

The Qualifications and Curriculum Authority (QCA) survey¹⁷ into physical education and school sport has found that successful PE and school sport contribute to:

- Lower levels of truancy and improved behaviour, in many of the schools visited incidences of negative behaviour were low or being reduced, exclusions were low or declining as a direct result of changes to more structured and purposefully active playtimes and opportunities to practice skills linked to the PE curriculum.

A World Health Organisation report¹⁸ found that youth who participate in organised sports are less likely to smoke cigarettes and use drugs than non-sports participants. It is also discussed that participants of organised sports have lower rates of anti-social behaviour and teenage pregnancy than non-participants.

Youth crime is a widespread problem, 30% of males and 21% of females aged 10-25 years admitted to committing at least one offence in the previous 12 months and 7% of these offenders committed at least 6 offences in the past 12 months. These figures exclude young people living in institutions, prisons or the homeless and thus some high offending groups.¹⁹ There are strong theoretical arguments for the potentially positive contribution which sport can make to reduce the propensity to commit crime. The WHO technical paper¹⁸ suggests that sport can impact on crime levels by:

1. Providing an outlet for aggression.
2. Diverting individuals from negative influences; &
3. Enhancing self-confidence and giving social recognition within the school and community, thus reducing the need to engage in risky behaviours to gain status.

There are several initiatives (Appendix A) which have attempted to use physical activity and sport as a vehicle to reduce crime and anti-social

behaviour. However, Evidence from Collins (2002)²⁰ suggests the relationship between sport and crime is tenuous:

- Programmes focusing on outreach approaches, credible leadership, 'bottom-up' approaches and non-traditional, local, provision appear to have the best chance of success with the most marginal 'at-risk' groups.
- Sport appears to be most effective when combined with programmes that seek to address wider personal and social development.

The Environment

The most recent Department for Transport figures revealed that across Great Britain in 2006 there were 63 child pedestrians and 20 child cyclists killed in road accidents.²¹ Cycling and walking are essentially safe activities; it would take 21,000 average years of cycling to suffer a fatal injury.²² However, between 1995/97 and 2005, the proportion of 5-10 year olds going to school by car increased from 38 to 43% and the proportion walking fell from 53 to 49% . Over the same period, the time spent cycling per day decreased by 9% and the average total distance spent cycling for travel purposes fell by 12%.²¹

In a study on physical activity promotion in schools, Cale (2000) revealed that the school environment and school policies were not always conducive to physical activity participation and many could have done more to provide a more stimulating 'activity' environment.²

Summary

Both cross-sectional and longitudinal studies have shown that the rate of academic learning per unit of class time is enhanced in physically active students, so that lack of curricular time is not a valid reason for denying children a daily programme of quality physical education.

Research is unequivocal on the point that children who are physically active tend to be healthier, happier and better learners than their sedentary peers.

References

1. The Department for Education and Skills and TNS. (2006). 2005/06 School Sport Survey. www.teachernet.gov.uk/pe

2. Cale, L. (2000). Physical activity promotion in secondary schools. *European Physical Education Review*, 6 (1): 71-90.
3. Jago, R. & Baranowski, T. (2004). Non-curricular approaches for increasing physical activity in youth: a review. *Preventive Medicine* 39 (1): 157-163.
4. Pate, R.R., Davis, M.G., Robinson, T.N., Stone, E.J., McKenzie, T.L. & Young, J.C. (2006). Promoting physical activity in children and youth. A leadership role for schools. A scientific statement from the American heart association council on nutrition, physical activity, and metabolism (physical activity committee) in collaboration with the councils on cardiovascular disease in the young and cardiovascular nursing. *Circulation*, 114 (11):1214-24
5. Fox, K.R. (1996). Physical activity promotion in secondary schools. *European Physical Education Review*, 6 (1): 71-90.
6. Department for Education and Skills and Department of Health. (2005). National Healthy Schools Status: A guide for schools. London: DH
7. Department for Culture, Media and Sport. (2000). A sporting future for all. London: DCMS.
8. Department for Education and Employment, Qualifications and Curriculum Authority (1999) The National Curriculum. London: Stationery Office p.11
9. Reilly, J.J. & Dorosty, A.R. (1999) Epidemic of obesity in UK children. *The Lancet*, 354, November 27.
10. The Youth Sport Trust. (2007). Know the Score: A collection of evidence to support the impact of the sports college network.
11. Department for Education and Skills and Department of Culture, Media and Sport. (2003). Learning through PE and sport: A guide to the Physical Education, School Sport and Club Links Strategy, London: DfES/DCMS.
12. Department for Education and Skills (2003) Playing for Success: 4th Evaluation Report. Nottingham: National Foundation for Educational Research.
13. Health Education Board for Scotland (2001) Evaluation of Class Moves!®. Scottish Council for Research in Education: Edinburgh
14. Coe, D.P., Pivarnik, J.M., Womack, C.J., Reeves, M.J. & Malina, R.M. (2006). Effect of Physical Education and Activity Levels on Academic Achievement in Children. *Medicine & Science in Sports & Exercise*, 38 (8): 1515-1519.
15. Acheson, D. (1998). Saving Lives: Our Healthier Nation. London: HMSO.
16. Sport England (1999) The Value of Sport. London: Sport England
17. Qualifications and Curriculum Authority (2001) Survey into Physical Education and School Sport.
18. Jones-Palm, D.H. & Palm, J. (2004) Physical Activity and its Impact on Health Behaviour Among Youth. World Health Organisation.

19. Wilson, D., Sharp, C. & Paterson, A. (2006). Young People and Crime: Findings from the 2004 Offending, Crime and Justice Survey. Home Office Statistical Bulletin 17/06. London: Home Office.
20. Collins, M. F. (2002) Sport and social exclusion. London: Routledge
21. Department for Transport. (2007). Transport Trends 2006 edition. London: DfT
22. Safe Routes to Schools, Sustrans. (2005). Health benefits of walking and cycling to school. Information sheet FS15. Department for Transport and Esmee Fairburn Foundation.
23. Central Council of Physical Recreation. (2002). Everybody Wins: Sport and Social Inclusion. London: CCPR.
24. Details of Positive Futures case studies available at: <http://drugs.homeoffice.gov.uk/talking-shop/casestudies/positive-future-barking-dagenh1>

Appendix A

Testaway Housing in partnership with Hampshire Police, Andover Rugby Club and with Sportsmatch funding involved delinquent juveniles from local housing estates in playing rugby during the summer holidays. This scheme was identified by the local Police Superintendent to contributing to a 46% reduction in vandalism.²³

Positive Futures is a national social inclusion programme using sport and leisure activities to engage with disadvantaged and socially marginalised young adults. A Barking and Dagenham Positive Futures project engaged teenagers in the local area in playing five a side and eleven a side football. Local police believe crime on the Gascoigne estate to have fallen by 70% since the project started. Encouragingly, 18 of the 190-odd young people who've engaged with the project are now qualified as coaches, four are working for the Arsenal community scheme and many more have been influenced to go back to school, on towards college, or into jobs.²⁴