

Evaluation of Practice to Promote Physical Activity in Schools in a Unitary Authority in England

Emmanuel Defever¹, Oscar Mwaanga², Barbara Lee¹, Michelle Jones³

¹ Solent University, Southampton, UK.

² University of London, London, UK.

³ Plymouth Marjon University, Plymouth, UK.

Corresponding author:

Professor Michelle Jones

Research and Knowledge Exchange Office

Plymouth Marjon University

Derriford Road

Plymouth PL6 8BH

Email: MJones@marjon.ac.uk

Highlights

- Primary physical education and sport premium (PESP) funding reports and a school survey were thematically analysed to evaluate physical activity promotion practice in primary and junior schools in a unitary authority in England.
- The PHE eight promising principles of practice to promote physical activity in schools was a useful framework that reflected in practice although 'rewarding physically active behaviour' should be added as a ninth principle.
- Continuing professional development to support a skilled workforce and clarity of understanding regarding physical activity need to be addressed to improve practice and support delivery of the new school sport and activity plan.

Abstract

Objectives: To explore what actually happens in relation to physical activity promotion in primary and junior schools within one unitary authority and to relate this to Public Health England promising principles of practice to promote physical activity in schools.

Study design: A qualitative approach was undertaken to explore practice in all primary and junior schools in the unitary authority of Southampton.

Methods: All primary (n=36) and junior (n=8) schools in Southampton were involved in the study. Publicly available primary physical education and sport premium (PESP) funding reports (n=36) alongside a school survey (n=14) were collated. The collated qualitative data set was semantically coded and then a multi-layered approach including identification, reviewing, defining and naming meaningful and important themes were inductively developed. The inductively developed themes were then fitted in relation to PHE eight promising principles.

Results: There was evidence of practice across all eight promising principles although this varied in depth and scale. There was one set of data that did not fit appropriately within the PHE eight promising principles and warranted its own category broadly termed 'rewards to recognise physical activity'. There was widespread evidence of PESP funding providing increased provision, variety and quality of sport opportunities but limited evidence of physical activity practice or programmes targeting the least active. Two different approaches in relation to ensuring a skilled workforce materialised continuing professional development which reflected in impact statements linked to increased confidence to deliver and quality of physical education versus outsourcing to specialists with little impact cited other than offering specialist or diverse sports.

Conclusions: The study demonstrated that the PHE eight promising principles of practice was a useful framework in relation to current practice, although a ninth promising principle of rewarding physically active behaviour should be considered. The two key themes that need to be addressed for the ambitions established in the new school sport and activity action plan to be deliverable, with PESP funding as a driver, are skilled workforce and development of a wider understanding of what physical activity is.

Key words: Primary PE and Sport Premium, Physical Activity, Sport, Children, Health

Introduction

Physical activity is associated with physiological, developmental, mental, cognitive and social health benefits in young people¹⁻³. Consequently, global physical activity guidelines recommend children aged 5 to 18 years engage in at least 60 minutes of moderate-to-vigorous physical activity every day⁴. The recently updated UK chief medical officer recommendations mirror the global recommendations but reinforce an average of at least 60 minutes per day across the week⁵. It has been estimated that approximately 80% of young people worldwide do not meet the recommended amount of physical activity⁶. The Global Matrix 3.0 physical activity report cards from 49 countries collectively reported a grade of D for physical activity, D+ for sedentary behaviours and C for government and school⁷. Within the UK the scores for England, Wales and Scotland were C-, F and D+ for physical activity respectively and D+, F and F for sedentary behaviours. These data suggest the need for public health intervention.

Children compulsorily spend 40% of their waking time at school⁸ and the school setting provides a location for interface with all children and so is accepted as an environment for population-based physical activity interventions⁹. Schools have the assets to deliver a learning environment in promoting and educating healthy lifestyle among children across the wide age range quickly^{10,11}. A recent multi-level worldwide review highlighted local school contexts as important correlates to physical activity in children¹². Public Health England (PHE)¹⁰ reported outcomes from a rapid review and outlined eight promising principles to increase physical activity in schools and colleges including 1) develop and deliver multi-component interventions, 2) ensure skilled workforce, 3) engage student voice, 4) create active environments, 5) offer choice and variety, 6) embed in curriculum teaching and learning, 7) promote active travel and 8) embed monitoring and evaluation. In contrast systematic reviews of interventions to promote physical activity in school settings have shown no evidence or modest effect^{13,14}.

Within the UK the policy context has shifted towards a paradigm where sport, physical activity and public health have interwoven. Most recently, within England, this was signalled in the school sport and activity action plan jointly published by Department for Education, Department for Digital, Culture, Media and

Sport and Department of Health and Social Care¹⁵. The school sport and activity action plan sets a statement of intent for ongoing collaboration at national level to ensure that sport and physical activity are an integral part of both the school day and after-school activities. Within England primary schools receive funding via the Primary Physical Education and Sport Premium (PESP), which following the implementation of the 'sugar tax', includes indicators such as the proportion of young people engaging in sufficient physical activity. Despite the relatively large sum of public funding (approx. £150 million per annum from 2013-14 to 2016-17 and £300 million per annum from 2017-18 and 2018-19) invested in the PESP there is surprisingly little evidence across the system of its efficacy as a vehicle for improving children's physical activity and consequently health¹⁶. The relatively scarce research related to the PESP has emphasised utilisation of external coaches at the expense of physical education and proposes this risks development of physical competencies and healthy behaviours towards physical activity^{17,18}. In a small-scale survey of schools in Southampton, Arnold et al.¹⁹ suggested the inability to successfully differentiate between sport and physical activity may present a further obstacle to the successful uptake of physical activity in the future. The purpose of this study was therefore to explore what actually happens in relation to physical activity promotion in primary and junior schools within one unitary authority and to relate this to PHE promising principles of practice to promote physical activity in schools.

Methods

Sample

Following ethical approval granted by Solent University the study was conducted within the unitary authority of Southampton. In 2016, the resident population of Southampton was estimated to be 251,565 people and based on the indices of multiple deprivation was ranked 54 out of 326 local authorities suggesting relative high deprivation. In terms of school-age population, the annual school census in Southampton in 2015 revealed that 33% of children were from an ethnic group other than White British and 26% of children were reported to have a first language other than English. All state schools registered under Southampton City Council School list which offered Key Stage 2 (7-11 years) education were sampled; this consisted of 44 schools (36 primary schools and 8 junior schools).

Procedures

Data were collected from all 44 schools including the publicly available school performance and PESP annual report and all schools were approached to complete a survey.

School performance: The publicly available 2015-2016 school performance table was accessed to gather information on Key Stage 2 performance (percentage of children achieving level 4 or above in reading, writing and maths; average point score; and average child level), school workforce (i.e. number of teachers, teaching assistants and support staff; number of children per full time equivalent teacher) and Ofsted ratings. The performance table was accessed in December 2016 to provide an overview of the characteristics of the schools.

PESP report: A publicly available annual report regarding how the PESP funding has been utilised is a requirement of funding. Where publicly available the report was downloaded from the school website in December 2016. A total of 36 PESP reports were obtained; there were eight school websites that did not clearly publicise the report or any information relevant to the spending of the PESP.

School survey: A school survey was conducted between April and December 2016. The survey involved three open-ended questions regarding how children were encouraged to be physically active whilst at school. The three open-ended questions were; 1) what opportunities are there in your school community for children to be active throughout the school day, 2) going through the school day from start to end, can we look at the key times they are up from their desk and active and 3) how are opportunities for children to have additional chances to be active supported? The survey was assigned to PE subject leaders, key stage leaders or an equivalent member of staff in the best position to knowledgeably respond to the survey and was distributed via email and post. Survey recipients were sent second and third reminder emails and also invited to complete the survey as an interview either in person or by phone. A total of 14 schools participated in the survey (32% response rate); ten were primary schools (28% response rate) and four were junior schools (50% response rate). The participating schools were located geographically throughout the city covering most of the city wards.

Data analysis

The information from the school performance table was utilised to determine the characteristics of each school. The data from the school survey and PESP report was collated verbatim and qualitatively analysed to infer and interpret the school's provision related to physical activity. The collated qualitative data set was initially semantically coded to manage the large amount of textual data. Once the data was coded the researcher used a multi-layered approach including identification, reviewing, defining and naming meaningful and important themes that were inductively developed²⁰. The inductively developed themes were then fitted in relation to PHE eight promising principles.

Results

School characteristics

Across the 44 schools the average outcome of children achieving level 4 or above in reading, maths, and writing was 82% (national 80%) with subject rates of reading (91%), writing (92%) and maths (89%). In relation to Ofsted ratings; nine schools were outstanding, 28 schools were good and six schools required improvements. The average performance of those schools that participated in the school survey showed slightly higher achievement levels compared to the average across all 44 city schools (level 4 or above in reading, maths, and writing 86%, reading 95%, writing 95% and maths 93%) and included more Ofsted rated outstanding (n=5) and good schools (n=8).

Evidence of PHE eight promising principles in school practice

Table 1 demonstrates there was evidence of practice across all eight promising principles although this varied in depth and scale. In addition to the eight principles there was one set of data from inductive analysis that did not fit appropriately and warranted its own category broadly termed 'rewards to recognise physical activity'. Schools frequently documented use of rewarding schemes including; a) individual rewards such as a weekly sports award presentation at school assembly, stickers, medals or certificates to provide badges of achievement, personal reports sent to parents and termly newsletters to celebrate children's participation and achievements, b) active whole school rewards of special events such as disco, bouncy castle, circus skills and trips to local leisure centres and c) recognition and reward for the school including UK Playmakers leadership and volunteering award, Sainsburys schools games mark and Modeshift STARS awards for sustainable travel.

Develop multi component interventions and offer choice and variety

There was evidence of increased provision, variety and uptake of extra-curricular sporting activities including after school clubs, competitive intra- and inter school sports, sports days and one off sporting events across PESP reports. A number of costs were identified to support this delivery through the PESP

reports for instance purchase of kits or equipment and logistical expenses such as travel or entry fees. When reported, participation rates were variable across schools ranging from low impact (e.g. 20% of children) to high impact (e.g. 90% of children). Eight PSPE reports identified specific activities targeted at gifted and talented or more able students, for example report PS09 suggested *“these sessions are aimed at enhancing physical skills and developing other components of fitness and will be a mix of fitness testing, general skill development, exploring additional aids to success...”*. The majority of opportunities were during term-time although three reports did identify that PESP funding had allowed non-term time sports activities.

There was frequent evidence of schools reporting at least two hours of weekly physical education provision, usually including indoor and outdoor activity. The PESP is reported as having a positive impact on increasing the quality of this provision, for instance, survey response (P003) identified *“the sport premium has enabled us to have a specialist PE teacher... lessons are more engaging and children have developed their skills which has increased confidence”*. There were also some survey responses which indicated a barrier to adequate provision for example survey response P009 suggested *“Often times PE lessons are cut short or replaced to make up for core curriculum demands”*.

The predominant focus of PESP reports appeared to be on increasing the range and quality of sports activities with only limited reference to physical activity practice. Examples of broader physical activity opportunities were evident in just five PESP reports; one report identified 30 families had been involved and learned games and activities that could be used at home or in the park, three reports identified implementation of programmes targeted at less active or overweight children and one report identified all children engaging in five minutes of exercise at the start of the day and after lunch. One survey response P004 highlighted a challenge in delivery of physical activity opportunities reporting *“Wake up, shake up used to run on a daily basis for KS2 for 6 months, but the support teacher could not continue to run the initiative due to increased commitments with other roles in the school”*.

The majority of survey responses focused on play time as the key opportunity for children to engage in physical activity other than PE or sport. There was relatively limited reference to active travel, a small number of PESP reports identified funding had been utilised on bicycle proficiency and reported engagement in ad-hoc weeks e.g. walk to school week and some survey responses highlighted a tendency for active travel. Only one survey response P006 seemed to indicate active travel was intentionally supported by the school *“Most children are involved in local initiatives that encourage them to cycle, scoot or park and stride to schools, this is very popular and we include a bikers breakfast, badges and competitions to support the Sustrans project. It has a very high uptake”*.

Ensure a Skilled Workforce

Two common approaches to ensuring a skilled workforce were cited a) staff continuing professional development or b) outsourcing to external specialists. There was some evidence in PESP reports of the positive impact of staff continuing professional development for instance several reports identified improved consistency or increased confidence and competence in delivering PE lessons; report PS20 illustrates this *“As well as having a noticeable impact on confidence of staff when teaching the units, this support has provide teachers with knowledge of innovative games which can be applied in a variety of contexts”*. The need for teacher continuing professional development was also highlighted in some survey responses for instance response P009 suggested *“primary teachers are not trained adequately and unfortunately lacks knowledge on how to deliver good quality PE lessons”*. In relation to buying in external specialists (not PE specialists) the reports tended to focus on increasing the range of sports opportunities e.g. swimming, gymnastics, cricket. One report PS11 suggested PESP funding was used to *“employ sports coaches both throughout the school day and to offer bespoke and specialist tuition through after school clubs”*. There was little evidence of the impact of buying in specialists reported.

Student Voice and Community Engagement

Student leadership programmes featured regularly in PESP reports, in particular in relation to older year groups supporting younger year groups e.g. fun activities at play times. The impact of sports leader

programmes was typically linked to positive personal development of student leaders including independence, leadership and self-esteem; for example PESP report JS01 suggests *“The sports leaders have a responsible job and have shown great leadership and energy”*. There was extensive evidence of schools forming links with local secondary schools, colleges, universities, sports clubs and other organisations in order to increase the provision of sports opportunities and access specialist facilities within and outside school hours.

Discussion

The purpose of this study was to explore what actually happens in relation to physical activity promotion in primary and junior schools within one unitary authority in England and to relate this to PHE promising principles of practice. There was evidence of practice across all eight PHE promising principles although this varied in scale and consistency across schools. The alignment between actual practice in schools and PHE promising principles reinforce it is a useful framework through which health promotion practice can be framed; this is important given it is cited in the new school sport and physical activity plan¹⁵. An additional component of 'rewards to recognise physical activity' emerged from practice in schools and seemed to be related to providing encouragement and motivation for children to participate and/or sustain activity participation. A systematic review and meta-analysis of 46 studies indicated that autonomous forms of motivation had moderate positive associations with physical activity whereas controlled forms of motivation had weak negative associations with physical activity in children and adolescents²¹. A risk of the practice identified is an emphasis on external or controlled forms of motivation possibly at the expense of intrinsic motivation. A ninth promising principle rewards to recognise physical activity, with an emphasis on those types of rewards that encourage personal improvement and challenge, should be considered since this is reflected in practice.

Ensuring a skilled workforce was frequently reported in PESP reports but there were two contrasting approaches. One approach was to support existing school staff with continuing professional development with reported impact of improved quality, skills, knowledge and staff confidence to deliver quality PE lessons. The reported positive impact of continuing professional development and survey response suggesting inadequacy of teacher training for physical education reflects other research which has highlighted a decline in the time spent on physical education in primary education programmes²². The other approach was to outsource and employ specialists to deliver sport mirrors existing research^{17,18}; Griggs²³ highlights concern about the extent to which coaches lack appropriate teaching qualifications, prioritise sporting over educational outcomes and lack class management skills. When PESP reports did

include details of spending on outsourcing to specialists (other than PE specialists) none of the reports included any impact of this other than increasing the range of specialist/sports activities on offer.

The findings illustrate that current practice almost exclusively emphasises PE and sport within the school setting whereas relatively few examples of broader physical activity initiatives were evident. The survey suggested the main physical activity opportunity identified by participants was through playtimes which from a public health and physical activity promotion perspective is concerning given the recent evidence that since 1995 breaktimes have been reduced by an average of 45 minutes per week for the youngest children in school²⁴. Arnold et al.¹⁹ also found a high prevalence of sport-oriented provision and low prevalence of physical activity specific initiatives. Jung et al.²⁵ identified the main discourse that constructed policy for PE and school sports stemmed around development of youth sport 'talent' and creating a close link to elite sport development and this was exemplified in the number of PESP reports emphasising gifted and talented programmes. A recent All Party Parliamentary Group report proposes renaming the PESP funding to become the 'Primary Physical Education and Physical Activity Grant'¹⁶ and a recent Department for Education led survey suggested the top priorities of schools for future spending was considered to be 'better engaging the least active pupils' and 'reducing obesity/promoting healthy lifestyles'²⁶. The school sport and activity action plan outlines an ambition to ensure there is a clear and shared understanding of the appropriate level of physical activity and to empower young people to be active through the school day; to achieve this there is evidently a need to support understanding of a broader concept of physical activity.

This novel study has systematically mapped and thematically analysed a range of data to appraise physical activity practice adopted by the primary and junior schools across a unitary authority. The relatively low completion rate of the school survey (32%) is a limitation although over 80% of school did have a PESP report to analyse and so the data is broadly representative of a unitary authority in a deprived region of England, how replicable this would be to other regions remains unclear. The study demonstrated that the PHE eight promising principles of practice was a useful framework in relation to current practice, although a

ninth promising principle of rewarding physically active behaviour should be considered. The two key themes that need to be addressed in order for the ambitions established in the new school sport and physical activity plan to be deliverable, with PESP funding as a driver, appear to be skilled workforce and development of shared and wider understanding of what physical activity is.

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Ethical approval: Ethical approval to undertake this work was granted by the ethics board of Solent University. Written informed consent was obtained from all participating individuals prior to survey data collection.

References

1. Janssen I, LeBlanc AG. Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. *Int J Behav Nutr Phys Act* [Internet]. 2010 May 11 [cited 2019 Jun 27];7(1):40. Available from: <http://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-7-40>
2. Biddle SJH, Asare M. Physical activity and mental health in children and adolescents: a review of reviews. *Br J Sports Med* [Internet]. 2011 Sep 1 [cited 2019 Jun 27];45(11):886–95. Available from: <https://bjsm.bmj.com/content/45/11/886>
3. Donnelly JE, Hillman CH, Castelli D, Etnier JL, Lee S, Tomporowski P, et al. Physical Activity, Fitness, Cognitive Function, and Academic Achievement in Children: A Systematic Review. *Med Sci Sports Exerc* [Internet]. 2016 [cited 2019 Jun 27];48(6):1197–222. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27182986>
4. Organisation WH. WHO | Physical activity and young people [Internet]. WHO. World Health Organization; 2015 [cited 2019 Jun 27]. Available from: https://www.who.int/dietphysicalactivity/factsheet_young_people/en/
5. Davies DSC, Atherton F, McBride M, Calderwood C. UK Chief Medical Officers' Physical Activity Guidelines. *Dep Heal Soc Care, UK* [Internet]. 2019;(September):1–65. Available from: <https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report>
6. Sallis JF, Bull F, Guthold R, Heath GW, Inoue S, Kelly P, et al. Progress in physical activity over the Olympic quadrennium. *Lancet* [Internet]. 2016 Sep 24 [cited 2019 Jun 27];388(10051):1325–36. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0140673616305815>
7. Aubert S, Barnes JD, Abdeta C, Abi Nader P, Adeniyi AF, Aguilar-Farias N, et al. Global Matrix 3.0 Physical Activity Report Card Grades for Children and Youth: Results and Analysis From 49 Countries. *J Phys Act Heal* [Internet]. 2018 Nov 1 [cited 2019 Jun 27];15(S2):S251–73. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/30475137>
8. Fox KR, Cooper A, McKenna J. The School and Promotion of Children's Health-Enhancing Physical Activity: Perspectives from the United Kingdom. *J Teach Phys Educ* [Internet]. 2004 Oct 1 [cited 2019 Jun 27];23(4):338–58. Available from: <http://journals.humankinetics.com/doi/10.1123/jtpe.23.4.338>
9. Story M, Nannery MS, Schwartz MB. Schools and obesity prevention: creating school environments and policies to promote healthy eating and physical activity. *Milbank Q* [Internet]. 2009 Mar [cited 2019 Jun 27];87(1):71–100. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19298416>
10. England PH. What Works in Schools and Colleges to Increase Physical Activity? [Internet]. 2015 [cited 2019 Jun 27]. Available from: www.gov.uk/pheTwitter:@PHE_ukFacebook:www.facebook.com/PublicHealthEngland
11. Van Kann DHH, Kremers SPJ, de Vries NK, de Vries SI, Jansen MWJ. The effect of a school-centered multicomponent intervention on daily physical activity and sedentary behavior in primary school children: The Active Living study. *Prev Med (Baltim)* [Internet]. 2016 Aug [cited 2019 Jun 27];89:64–9. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27235606>
12. Gomes TN, Katzmarzyk PT, Hedeker D, Fogelholm M, Standage M, Onywera V, et al. Correlates of compliance with recommended levels of physical activity in children. *Sci Rep* [Internet]. 2017 Dec 28 [cited 2019 Jun 27];7(1):16507. Available from: <http://www.nature.com/articles/s41598-017-16525-9>
13. Love R, Adams J, van Sluijs EMF. Are school-based physical activity interventions effective and equitable? A systematic review and meta-analysis of cluster randomised controlled trials. *Lancet* [Internet]. 2018 Nov 1 [cited 2019 Jun 27];392:S53. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0140673618321743>
14. Jones M, Defever E, Letsinger A, Steele J, Mackintosh KA. A mixed studies systematic review and meta-analysis of school-based interventions to promote physical activity and/or reduce sedentary

time in children. *J Sport Heal Sci* [Internet]. 2019 Jun 26 [cited 2019 Jun 27]; Available from: <https://www.sciencedirect.com/science/article/pii/S2095254619300808?via%3Dihub>

15. Department for Education, Department for Digital, Culture M and S and D of H and SC. Activity Action Plan. 2019;(July). Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/848082/School_sport_and_activity_action_plan.pdf
16. Child A party parliamentary group of a fit and healthy. A REPORT BY THE ALL-PARTY PARLIAMENTARY GROUP ON A FIT AND HEALTHY CHILDHOOD THE PRIMARY PE AND SPORT PREMIUM [Internet]. [cited 2019 Jun 27]. Available from: <https://publications.parliament.uk/pa/cm/parlpy/150929/fit-and-healthy->
17. Smith A. Primary school physical education and sports coaches: evidence from a study of School Sport Partnerships in north-west England. *Sport Educ Soc* [Internet]. 2015 Oct 3 [cited 2019 Jun 27];20(7):872–88. Available from: <http://www.tandfonline.com/doi/full/10.1080/13573322.2013.847412>
18. Jones L, Green K. Who teaches primary physical education? Change and transformation through the eyes of subject leaders. *Sport Educ Soc* [Internet]. 2017 Aug 18 [cited 2019 Jun 27];22(6):759–71. Available from: <https://www.tandfonline.com/doi/full/10.1080/13573322.2015.1061987>
19. Arnold J, Bruce-Low S, Henderson S, Davies J. Mapping and evaluation of physical activity interventions for school-aged children. *Public Health* [Internet]. 2016 Jul [cited 2019 Jun 27];136:75–9. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27080582>
20. Nowell LS, Norris JM, White DE, Moules NJ. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. [cited 2019 Jun 27]; Available from: <https://us.sagepub.com/en-us/nam/open-access-at-sage>
21. B. Owen K, Smith J, Lubans DR, Ng JYY, Lonsdale C. Self-determined motivation and physical activity in children and adolescents: A systematic review and meta-analysis. *Prev Med (Baltim)* [Internet]. 2014 Oct 1 [cited 2020 Jan 24];67:270–9. Available from: <https://www.sciencedirect.com/science/article/pii/S0091743514002746>
22. Carney C, Armstrong N. The Provision of Physical Education in Primary Initial Teacher Training Courses in England and Wales. *Eur Phys Educ Rev*. 1996;
23. Griggs G. Spending the Primary Physical Education and Sport Premium: a West Midlands case study. *Educ 3-13*. 2016;
24. Baines E, Blatchford P. School break and lunch times and young people 's social lives : A follow-up national study Final report. 2019;(May).
25. Jung H, Pope S, Kirk D. Policy for physical education and school sport in England, 2003–2010: vested interests and dominant discourses. *Phys Educ Sport Pedagog* [Internet]. 2016 Sep 2 [cited 2019 Jun 27];21(5):501–16. Available from: <http://www.tandfonline.com/doi/full/10.1080/17408989.2015.1050661>
26. Education D for. Primary PE and Sport Premium Survey. 2019;(September). Available from: <https://assets.publishing.service.gov.uk/government/>

Table 1: Evidence of Public Health England (PHE) eight promising principles incorporated in school practice

PHE Principle	Evidence of principle incorporated in school practice
Develop and deliver multi-component interventions	Schools reported engagement and involvement with local community, offering placements for sport coaching students, as well as services provided by local partnership to increase participation in local and country level sports competition. Some of the community involvement included Southampton FC running after-school clubs, Ageas Bowl to teach cricket skills and involvement with other local sports clubs (e.g. Sholing Football Club, Eastleigh Football Club, Eastleigh Rugby Club, Southampton Diving Club, Southampton Gymnastics Club, Swaythling Netball Club, Chamberlayne Girls Football Club, Team Lightning Trampoline Club, King Olaf's Golf Society Golf Foundation, and Hedge End Academy).
Ensure skilled workforce	<p>a) Providing professional development and support to school staff: PESP funding was used to support school staff (especially newly qualified staff) with their continuing professional development (CPD) and complete staff training and coaching qualifications to further develop their skills and knowledge. The training was provided by local Solent Sports Partnership (e.g. REAL PE, REAL Dance, REAL Gymnastics, staff evaluation and training course for PE lessons, lunchtime supervisor coaching training) as well as in-service training day. Supporting programme was also delivered by specialist coach to co-coach and work alongside with the teachers during lessons /activities to provide advice and building relations with linked secondary schools</p> <p>b) Outsourcing PE and sports specialists: Majority of the PESP funding was spent to employ PE and sports specialists outsourced from local partnerships such as Testlands MultiSPORT Coaching Ltd, AllSports PE, Solent Sports Partnership, Southampton Solent University students, Serving Tennis and David Lloyds to either partly or wholly organise and manage PE lessons, sports clubs and other physical activities during lunchtime and after-school.</p>
Engage student voice	Pupil leadership programme such as National Playmaker Award, Sports Captains and Sports Leaders (working alongside the specialist sports coaches to encourage children to participate in games at lunchtime), Young Ambassador (Youth Sports Trust) have been documented to ensure children's voices are heard and given ownership of physical activity delivery. The main roles pupil leaders are to help and support the children to motivate and inspire others by organising activities themselves at break times and lunchtimes as well as being positive role models and ambassadors for sport and PE. The programme helps leaders to develop independence, leadership skills including organisation, communication, confidence, self-esteem and teamwork.
Create active environments	<p>a) Facilities are variable amongst schools, but commonly available facilities include playgrounds and sport fields. Facilities that are more specific included trim trail, climbing frame and multi-use game area. PESP funding is often used for specific provisions which require dedicated facilities such as swimming and diving lessons to ensure additional tuition for certain year groups to improve competency is accessed locally.</p> <p>b) Another use of PESP funding was purchasing equipment, either to obtain new or upgrade existing equipment. Some purchases benefit all children to use such as lunchtime play and PE equipment, small games, new dance mats, flags for orienteering, balls, and speed trackers for monitoring. Other purchases are made to benefit selected group of children, for example Premier League football team kit to wear at tournaments, seven racer bikes for bike clubs, PE kits for low income families, sensory equipment for SEND children</p>
Offer choice and variety	Evidence of introducing new sport and activity clubs based on child and parent survey was commonly documented in the PESP report. Also school typically offer various after-school sports clubs which changes termly depending on the availability and demands of the children.
Embed in curriculum, teaching and learning	Although the delivery of lessons is dependent on each teacher, schools tend to be receptive in various teaching methods which encourages active learning. Some teachers tend to take classes to outside when possible, use of orienteering method in science, active maths/English lessons and link PE and science lessons to teach the importance of being active, healthy and balanced diet. Schools have mentioned specific active learning and teaching method such as forest school, outdoor science and EduMove programme as well as utilising external programmes to deliver quality level PE lessons (e.g. SUCCEEDin online planning programme for PE teaching, School Games Challenge Cards)
Promote active travel	There was some evidence of active travel and promoting active travel, for example, bicycle proficiency programmes (Pedal Power, Grant Fielder Star Cycling club), "walk to school" week, and Bikers Breakfast.
Embed monitoring and evaluation	Although the PESP report documents some degree of outcome and impact on a child, clear evidence of monitoring and evaluation method was very limited. One school documented an assessment system to monitor progress of an individual (children are also able to self-assess).