

ACTIVE MOVEMENT programme and research in Slough primary schools

Background

Primary schools are a formative time for children's education. They enter a more structured, controlled and less physical environment. Education content supersedes active play. The demands on teachers' and children's performance increase.

If that were not bad enough, children are sitting as much as around 6 hours a day. This extensive sedentary behaviour is causing more damage to young bodies than we ever imagined to the point where it now considered a separate health risk.⁵

It is then perhaps not surprising that current Public Health England data estimates that nearly 80% of children between 5-15 years old fail to achieve their guidelines for weekly activity.

And that goes for adults, too. A recent study by Belfast University suggested that 11.6% of all adult deaths are due to people sitting too much, which is 2016 equated to 70,000 people⁶.

A new way of thinking - Active Movement

PE and playing sport will always be important. The problem is that most children grow up being less active through lack of interest, skill, confidence of physical prowess.

The new opportunity is to combat this new health risk of our sedentary lifestyles. Science shows that standing and moving more can reduce obesity, type 2 diabetes and heart disease. Small, regular activity improves muscle strength, bone health, blood flow and emotional wellbeing.

This was the new opportunity identified by Active Movement. Not to get a few children to be a bit more active today - but to encourage all children to be less inactive for a lifetime.

For more information about Active Movement in schools and Early Years settings, visit www.activemovementschools.co.uk

In Slough, 21.0% of reception year children and 41.0% of year 6 children are overweight or obese¹ and 30.8% do less than 30 minutes of physical activity a day². Once Slough children become adults, 31.9% are physically inactive (less than 30min a week)³ and 67.5% are overweight/obese⁴.



Active Movement in Slough

In early 2017, Slough Borough Council commissioned Active Movement to deliver its programme across schools in Slough. Its objectives were to reduce sedentary behaviour and increase low-level activity as a behaviour change for all pupils. This was subsequently increased to over 40 settings of all ages.

Slough also commissioned an independent research study into the programme across two schools (one that did the 12-month programme, the other did not).



The Active Movement system

To embed the behaviour change, Active Movement must permeate all facets of school life through

Everyday routine. Sitting less and standing more is added to every class, lesson, school location and pupil including other wellbeing areas such as immunisation, nutrition and oral health

Easy implementation. No need for equipment, space, facilities, extra-curricular activity, disruption or burdening teachers or compromising teaching time

Consistent support. Included Full teacher training, children presentation, weekly emails, visit programme, onsite content and online resource

Comprehensive communication. Pre-printed, personalised and placed creative resource throughout the school to create an Active Environment

Full evaluation. Every programme comes with pupil questionnaire before and after the programme as well as qualitative assessments via focus groups with children and staff



Independent research

Two Slough Primary schools were selected that were identified as having the highest levels of childhood obesity. St Anthony's Catholic Primary School was selected as the intervention school; Khalsa Primary School was selected as the control school. St Anthony's undertook the 12-month Active Movement programme from January - December 2019.

A detailed assessment included:

Actigraph readings on all Year 4 pupils in both schools to evaluate sedentary time, moderate and vigorous activity and daily steps

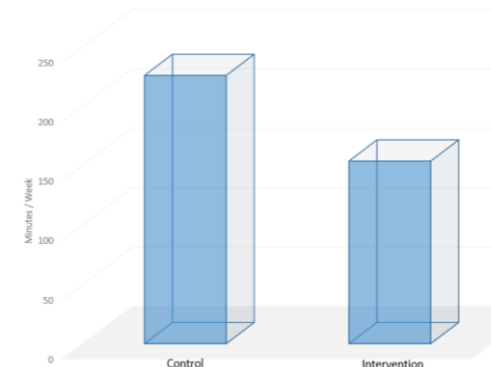
Handgrips were used to evaluate strength

Waist circumference was taken to evaluate effect on weight

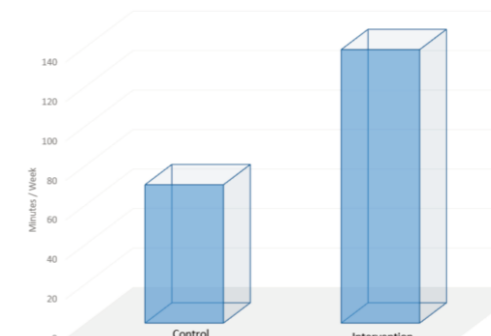
Behaviour questionnaires were taken throughout the entire school to review activity levels in and after school, at weekends and on a daily basis, including sport and pastime activity.

Research outcomes

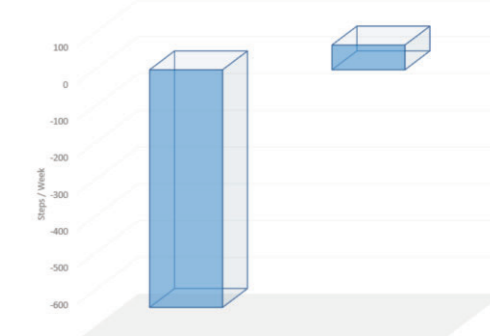
Pre-Post Sedentary Time Differences



Pre-Post Moderate Physical Activity Differences

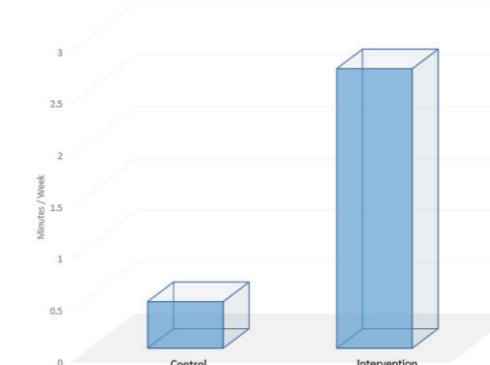


Pre-Post Step Counts Differences

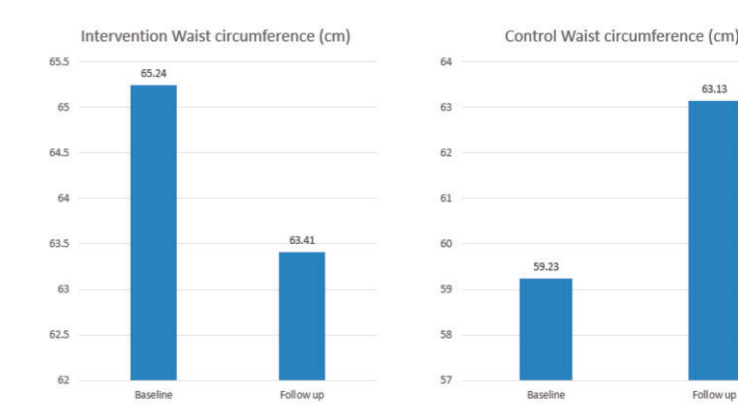
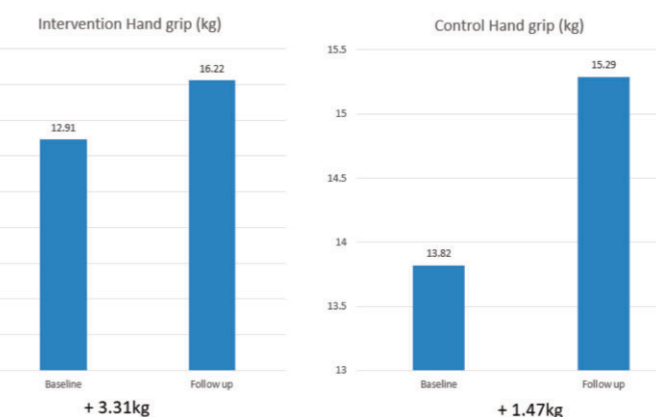


A positive weekly difference in steps of 713.7 steps/week

Pre-Post Vigorous Physical Activity Differences



An 83.4% increase in vigorous activity in the AM school



"It keeps people active inside and outside school." Primary school pupil

"It's part of our daily routine." Primary school pupil

"We walk pretty well everywhere now: into school, into town - we won't go on a bus unless we absolutely have to" Parent of a pupil taking part in the programme

"Staff find it easy to embed positive habits and routine that creates a happy class environment, and helps all children learn and enjoy the lessons." Navroop Mehat, Headteacher, Wexham Court Primary School

"Reducing sitting times and adding even low-level activity to our daily routine at Montem Academy have further increased activity levels, made sedentary lessons more animated and enabled everyone to join in and reap the benefits" Darren Stewart, Associate Principal, Montem Academy Primary School

"Our parents have taken Active Movement on board 100% and have enjoyed being more active with their children, and whole family" Clare Beynon, Headteacher, Castleview Primary School

Conclusions and further implications

Our research has clearly shown that Active Movement has helped increase moderate and vigorous physical activity levels and reduce sedentary time. Pupils take more daily steps, are stronger and have reduced their waist circumference.

The programme is being expanded in 2020 to include further secondary schools and the wider community in Slough. This has been done through the new Health and Wellbeing Slough service.

¹National Child Measurement Programme, PHE, 2017/18
²Sport England Active Lives Survey for Children, 2017/18
³Sport England Active Lives Survey, 2017/18
⁴Sport England Active Lives Survey, 2016/17
⁵Biswas A, et al. "Sedentary time and it's association with risk for disease incidents, mortality, and hospitalisation in adults: a systematic review and meta-analysis". Ann Intern Med 2015.
⁶<https://www.theguardian.com/society/2019/mar/26/long-sedentary-periods-are-bad-for-health-and-cost-nhs-700m-a-year>