

Active Movement at Eden Girls

(September 2017-October 2018)

Background

Secondary schools face a continuing conundrum. The demands of the curriculum, the reduction in time allocated for PE, greater computer utilisation, poor diet and the typical intransigence of teenagers have led to record levels of obesity and lack of fitness. Only 20% of 5-15 year olds undertake Public Health England's minimum requirement for fitness of one hour's moderate physical activity every day and three hours of muscle strengthening a week¹. In Slough, 41.1% of children start secondary school overweight or obese² and 34.8% do less than 30 minutes of physical activity a day (national recommendation is 60 minutes a day)³. Once Slough children become adults, 36.0% are physically inactive (less than 30min a week)⁴ and 61.9% are overweight/obese⁵.

Now we can add a further worry through a lifestyle choice that seriously affects our health. Extensive sitting down is causing more damage to our bodies than we ever imagined and so is recognised as a separate health risk from lack of fitness⁶. 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 people⁷.

There is some good news though. Studies have shown that even low-level activity, including reducing our sitting time, can have major effects on our bodies, emotional wellbeing and long-term health.

"Compared with those that sit least, those that sit most have twice the risk of developing diabetes and cardiovascular disease"⁸

"MRI scan studies shows fat around the organs (bad fat) is associated with sedentary time more so than BMI"⁹

"Reducing sedentary behaviour improves mental health"¹⁰



¹ Public Health England, Everyone Active Everyday, 2016

² National Child Measurement Programme, PHE, 2017/18

³ Sport England Active Lives Survey for Children, 2017/18

⁴ Sport England Active Lives Survey, 2017/18

⁵ Sport England Active Lives Survey, 2016/17

⁶ Sedentary Time and Its Association With Risk for Disease Incidence, Mortality, and Hospitalization in Adults, A Systematic Review and Meta-analysis Aviroop Biswas et al.

⁷ <https://www.theguardian.com/society/2019/mar/26/long-sedentary-periods-are-bad-for-health-and-cost-nhs-700m-a-year>

⁸ Biswas 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.

⁹ Smith L, Thomas EL, Bell JD, et al. "The association between objectively measured sitting and standing with body composition : a pilot study using MRI". BMJ open 2014. Henson J, Edwardson CL, Morgan B, et al

¹⁰ Teychenne M et al. Physical activity, sedentary behaviour and depression among disadvantaged women Health Educ Res 2010.

Concept

Dr Mike Loosemore MBE, one of the world's pioneers in exercise medicine and lead at the Institute of Sport, Exercise and Health at the UCL recognised there was need for an approach that was more empathetic and relevant to the attitudes and lifestyles of those who needed support the most. It was also clear it was not an exercise regime or physical fad that was required but a behaviour change that could integrate non-sedentary behaviour and low-level activity into everyday routine.

This was the unique approach that led to the creation of *Active Movement*. As the name suggests, its central theme is that every movement you make is an active one and that it is the consistent and frequent small steps one takes every day (as opposed to the usual doctrine of burst of intense activity) that builds into a lifestyle of movement and activity that any child can undertake.

In early 2017 Slough Borough Council commissioned *Active Movement* to look at how we can holistically change the behaviour of our young children. As part of this initial pilot, 4 primary schools and 1 secondary school were chosen to be worked on.

Planning

Though the concept was well understood, the requirement to embed a new initiative came with the usual school and teacher concerns about time and workload of 'another thing to do'. In a secondary school environment, where there is such a focus on curriculum and limited time to complete it, this was especially relevant. In addition, the pupil audience were far less co-operative, less interested, more sedentary and more likely to exploit the advantage of the opportunity to move during the classroom routine.

The principles of the programme were designed to overcome these barriers by

- Avoiding the need for equipment, space, facilities, class re-organisation, extra-curricular activity, bureaucracy or compromising teach time
- A comprehensive training and educational programme
- A programme structure to enable easy implementation and engagement
- A full communication programme in situ and online
- Ongoing support for the entire 12-months
- Opportunity for pupils to take ownership and responsibility for the programme

The programme is also designed to be self-contained with all resources delivered by *Active Movement* with budget levels to match.

Implementation

Eden Girls Secondary School, an all-girls and an all-faith Islamic school, offered a unique opportunity. The programme has been implemented in only a few secondary schools compared to the many Early Years and Primary setting. Moreover, the programme was integrated into a building that had been opened only the month before.

The integration of the programme would therefore have to take into account a number of unusual criteria - secondary school education is by its nature highly sedentary; the age group of the children are less open to behaviour change in interest and willingness to participate; the building is new, unknown and with some unfilled class spaces.

However, from the offset, Principal Karim Murcia was committed to the programme and its ethos so prepared to introduce it fully into the school routine and support it as much as possible. This included not only taking a personal interest in its implementation but appointing Emma Seabridge, the school's PE lead, as onsite co-ordinator.

As an additional support, a room was created that was dedicated to the *Active Movement* programme. Called the Active Room it has a number of roles including an information point, a location for Active Classes, briefing room, standing area for meditation, place for *Active Movement* briefings and a publicity centre. It was also the room in which the programme was launched across all schools in the borough in a major PR exercise for press and radio.

Programme delivery

The programme was officially launched in October 2017 with an inset training session for teachers followed by an assembly with the entire school. A separate and well-attended presentation was organised for the parents to be introduced to the specific programme.

The Active Room was set up and was given an additional role to play. It became the central point for the school to be mapped out in terms of paces with key locations (e.g library, maths department, the gym) indicated via a directional sign post placed on the Active Room window. Its role was not only to show location but indicated to pupils the cumulative effect of the small journeys every pupil has to take every day.

A special pupil walk was also created and marked around the school.

The *Active Movement* programme for Eden Girls Secondary School was the full 12-month programme of training, creative resource, online questionnaire, quantitative research, supervision and visit programme, weekly communication and telephone support.

The communication was supplied and covered two distinct areas - to educate pupils about the potential benefits of reducing sitting time and to inspire them to reduce sitting time. These were placed around the school.

The key role as always remained with the teachers. The time and teaching pressures in secondary school are always at odds with the integration of *Active Movement* though it is designed to be neither disruptive nor compromise teaching time.

Nevertheless many teachers began to employ the programme in class on a regular basis through simple introductions such as standing to answer question, greater use of pupils coming to use the white board and standing discussions. An Ofsted inspector noted during a class the impact and inclusivity of debates when conducted upright. There was increasing innovation, some of which is detailed later in the review.

Teachers were also supported by weekly emails highlighting the latest components of the programme for them to follow alongside the KS3/4 *Active Movement* online platform. The pedometer challenge was also undertaken in January.

Further presentations to children took place to maintain the momentum of the programme including the role of nutrition, a launch of the AMbassador programme designed to give pupils greater responsibility as well as follow-up sessions with individual teachers and the Principal Karim.

Outcomes

Quantitative

A behaviour questionnaire was issued at the beginning and at the end of the campaign. Note that the programme crossed two school years so Year 7, 8 and 9 were finally reviewed as Year 8, 9, 10 for a robust comparison. The secondary school questionnaire has been developed for this target audience and so comprises two components - physical behaviour and emotional wellbeing.

It is important to note the attitudinal changes in this group as they enter adolescence where views around physical activity have become entrenched, where the educational setting is much more academically focussed, where emotional maturity can affect response and where individual years can be significantly different.

The programme also had to adapt to cover a change in school year which meant

- In the case of year 7 (then measured as Year 8), when they joined Eden Girls they had come from a much more active school environment (i.e. primary) and were now having to adjust to much more restrained and sedentary classroom protocols
- In the case of Year 9 (then measured as Year 10), they were now moving into a much more pressurised environment now focussed on key exams

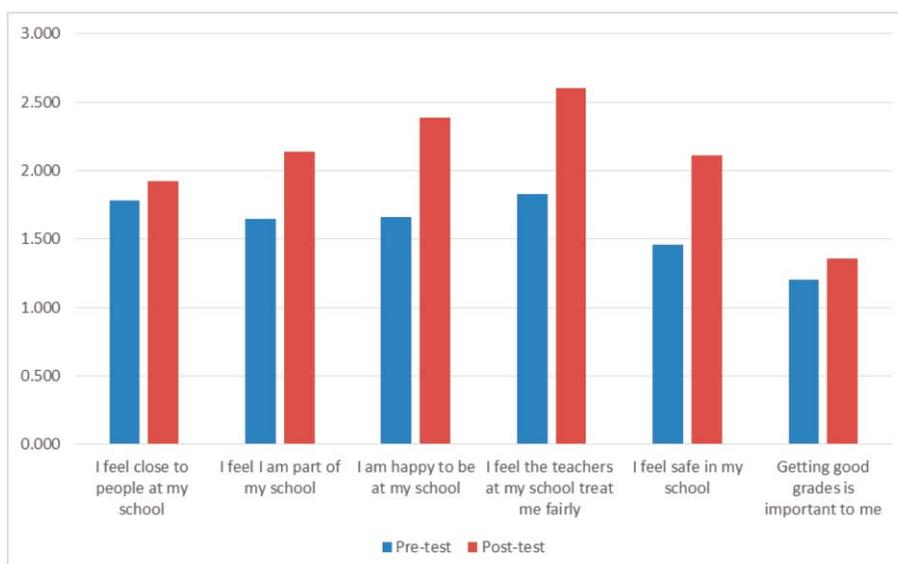
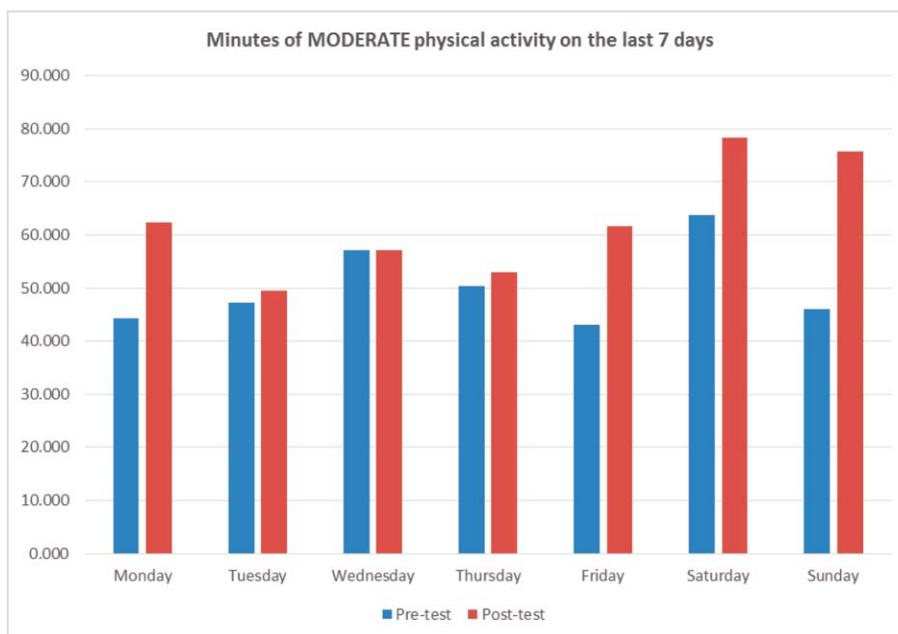
Year 8 were therefore the most adjusted to the new school environment, the most integrated into the programme and as yet less focussed on the GCSEs.

The results of the questionnaire covering 93 matched students showed that

- Across the school 56% of participants increased the amount of time in moderate physical activity
- Across the school 39% of participants increased the amount of time spent in hard physical activity
- The biggest increase was of year 8's increasing in moderate physical activity (*see chart 1 below*)
- There was an average of a 6% increase in persistent absence across Slough secondary schools in 2017/2018 whereas Eden Girls achieved a 2% fall

In terms of emotional wellbeing:

- On average 49.9% of children saw increases in closeness, belonging, happiness, fair treatment and safety (*see chart 2 below*)



Qualitative

A series of interviews were conducted with the Principal (Karim Murcia), a number of student across Years 7-10 and members of staff.

The Headteacher

Principle, Karim Murcia, has always been a strong supporter of the programme and has seen his believe in its effect represented throughout the school.

"The programme is straightforward to implement ...and clever in the way it is designed to integrate strategies into school structures and lesson planning." "It also works smartly to impact students by utilising journeys around the school to show the effect of walking and movement...it has raised awareness and importance amongst students. It has definitely raised the dangers of a sedentary lifestyle."

However, it is during lessons where the programme has had its greatest effect. *"One of the challenges is students becoming passive. Active Movement has improved the quality of teaching and learning outcomes...there is a correlation with the programme and our best teaching."*

This can be further seen in student contribution to lessons. *"Leadership is a specialism of the school particularly through public-speaking and debate. I have seen plenty of lessons where pupils who have previously been shy to express themselves. Through Active Movement these same students have been much more able to articulate their thoughts and ideas."*

This has been recognised to the point where the programme is not just an intervention but part of school policy.

The Students

The focus group were made up of pupils across all ages of the school for Year 7-10. They all expressed understanding of the power of reducing sitting down and being a little more active - *"it heightens metabolism," "you live longer," "it helps memory," "it improves concentration"*. It even had the quality of *'making lessons less boring'*.



Active Movement is great. It's a fun way of exercising and staying healthy. Keep calm and stay active!

It also affected home life. *"I go to the park a lot more." "Instead of going to the shops in the car, I prefer to walk." "Even if far away, I will still walk it."* Parents were aware of the programme through material sent home and from occasional experiences *"I stood up when my dad asked me a question"*.

Its application could also be quite specific. When talking about preparing for a test, one said *"I like to go for a walk because it makes me feel fresh,"* another felt it *"got their mindset right,"* whilst there was a consensus that *"standing up helped revision."*

Perhaps most importantly, it has now changed behaviour as it was intended to do. *"I could not stop doing it now," "it's second nature", "it's really worthwhile," "we should work with other schools to get more children to do it," "we should set an example for others to do it." The school's focus on leadership also was clear - "It would be good to be more involved," "teachers forget so we need to remind them," "I want to have more responsibility."*

The Teachers

"Once you thought about the strategies, it did not require a lot of planning." "The training was very helpful," "The weekly communication kept the programme in the forefront," and "it did not change teaching." At its most positive one teacher not only "brings it into lessons or a specific purpose," but actually "enriches it." When it came to everyday lesson routine, integrating Active Movement "is a natural way to think."

Active Movement helped in lesson delivery. "I use it as Carousel teaching where students go around the room for information," "I created a standing Venn diagram with students," "we stood up to debate politics, religion," "it is natural for Art." Its effects were quite clear - "Retention of knowledge obviously improved when the students were active."

Students gained confidence as "it gives the child ownership of their own learning. They are saying I am a leader in gaining information and will share it with the class by standing up." Another pointed out that "the most timid student I ever came across suddenly said I want to stand up and do this. Her emotional confidence went through the roof." The teacher highlighted to a parent the change in his daughter.

Conclusions and long-term aims

The aim of the *Active Movement* programme cannot be centred around one school or KS3 and 4. It is a transitional programme designed to create a behaviour throughout childhood that becomes a lifetime routine. As a secondary school, Eden Girls represents the last leg of that journey and a culmination of the development through Early Years and primary school.

The evidence suggests the programme can not only drive an increase in activity but also have a positive effect on emotional wellbeing.

The Eden Girls programme has enabled Slough Borough Council and *Active Movement* to better understand the nature of the secondary school environment and how it can make the greatest gains from the concept - so ensuring every child gains full advantage of this unique approach to long-term wellbeing.



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