CASE STUDY

Red Oak Primary School
Using the Primary PE & Sport Premium innovatively to tackle the rise in Obesity & Inactivity
Introduction

In 2018–2019, Red Oak Primary School decided that they wanted to help improve the health and fitness of pupils by encouraging more activity during sedentary lessons. Considering the current national statistics surrounding childhood obesity, the school wanted to try something new and different to engage all pupils and support a reduction in Obesity and inactivity.

In order to achieve this, Mrs Madsen, Head Teacher and Mr Lee, PE Coordinator met to discuss ideas on how the PE Premium could be used that year to support their aim. They decided to invest in desk pedals, small cycling devices that can be placed under the pupils’ desks within the classroom. The machines feature a display that shows duration of pedalling, number of revolutions per minute and calorie consumption.

Red Oak is now officially the first school in the UK to introduce the pedal desk initiative, attracting worldwide attention (featuring on television and in news articles) for its work on improving the health of its students.

Actions

As a starting point, 30 desk pedals were purchased and trialled with Mr Lee’s Year 3 class. The children were given freedom of use and were allowed to pedal whenever they wanted to, completely at their own will.

Just after a week of the trial, Mr Lee found that the pedals were already having a great effect on improving the concentration and behaviour of children in the class. To determine how effective the pedals were, Mr Lee also carried out some research by recording the electronic data on each of the students’ desk pedals. The findings revealed that an average child completed 85 minutes of cycling during an average school day. This meant that most children in the class were achieving above and beyond the World Health Organisation recommended amount of at least 60 minutes of daily activity, just simply by cycling during classroom based lessons!

Due to the success of the pedals with one class, the school decided to invest further and purchase more pedals for other classes to use.

“We were talking about initiatives that would stimulate the children’s concentration and ensure they could still stay focused on lessons.”

Mrs Madsen, Head Teacher

“The desk pedals keep me healthy and they allow me to move when I want to fidget about. This means that I can move and fidget when I don’t want to keep still and I can still learn at the same time!”

Student
The Outcome/Impact

Mr Lee carried out a case study to show the impact of the pedal desks on a Year 3 class. Below are the findings and statistics to show how the pedal desks links to calories burnt and active minutes generated.

Characteristics:
Year 3 Class (Aged 7-8 years old). 28 students in the class and all had access to a desk pedal for the whole week during their sedentary lessons.

Calories – Mean Average Statistics:
After just one week (5 school days) of using the desk pedals, the mean average for the whole class of 28 students showed that the average student burnt a total of 2672.5Kcals, in a single school week. This is the equivalent of running a full marathon.

Context:
28 students x 1 Marathon distance (26.2 miles) = 733.6 miles travelled by the whole class in a week!

The class cycled more than the distance from London to Berlin (686 miles) in one week!!

The World Health Organisation states:
“Children and youth ages 5–17 should accumulate at least 60 minutes of moderate to vigorous intensity physical activity daily. Amounts of physical activity greater than 60 minutes provide additional health benefits. Most of the daily physical activity should be aerobic.”

Active Minutes Generated:
The most Active Child in the case study class did a mean average of 109 minutes (1 hour 49 minutes) per day of exercise on the desk pedal whilst doing sedentary lessons in a single week.

The least Active Child in the case study class did a mean average of 41 minutes per day of exercise on the desk pedal whilst doing sedentary lessons in a single week.

The average child in the case study class did 85 minutes of exercise per day on the desk pedals whilst in sedentary lessons.

Improvements in Behaviour:
Since the pedal desks have been in place at Red Oak Primary School, children using the pedal bikes in class had less ‘red’ incidents in sedentary lessons than before they used the pedal bikes. This is linked to the fact that the pedal bikes allow the children to develop endorphins (feel good hormones) during their classroom work. As a result this keeps them awake, focused and relieves stress and anxiety. Children with ADHD tendencies have also been more focused and have sat at their desks more rather than wandering around the classroom.

“The desk pedals are amazing, I love them and they help me to stay awake and focused”

Student
Partnership Working

The school were able to purchase the pedals desks within their Sports & PE Premium budget through effective planning and monitoring.

Since Red Oak started the desk pedal initiative, Mrs Madsen & Mr Lee have given presentations and trained many staff from other schools on the benefits of the desk pedals and active pedal classrooms. As a result, hundreds of schools all around the UK have followed in the school’s footsteps and are starting to introduce active pedal classrooms into their own schools.

Diabetes UK, the leading charity for people living with diabetes in the UK, were so impressed by Red Oak’s work that they used the school as a model example of a school fighting against the rapid rise in childhood Type 2 diabetes.

The school continue to share their learning to showcase the benefits and impact the pedal desk initiative has had. This year, they will be attending the Suffolk Primary PE & Sport Conference to deliver a workshop to staff from local Primary Schools. This is to share the success at Red Oak and highlight to other schools that the PE & Sports Premium funding can be used in a sustainable way to create long term change.

“I love the desk pedals, they make our lessons fun and they help me to be active and healthy.”

Student

“I believe this is a brilliant initiative to encourage a fit and healthy lifestyle whilst promoting concentration in lessons.”

Parent

“My daughter has spoken so positively about the pedal bikes, stating they are fun and they are helping her to stay fit and healthy whilst at school.”

Parent