

CASE STUDY

Telferscot Primary School

Telferscot Primary School (Lambeth)

Six workshops on food waste prevention, food waste recycling and healthy sustainable eating, as well as one campaign day (focussed on healthy sustainable eating), were run for Year 5 pupils (nine to ten-year olds) at Telferscot Primary School in Lambeth.

The workshops were delivered between September and November 2017 by Groundwork London as part of the TRiFOCAL 'Small Change, Big Difference' Campaign.

Highlights:

- Pupils' knowledge of food waste prevention methods and healthy sustainable eating improved significantly following the workshops.
- A positive shift in attitude was also observed, particularly around how much pupils said they cared about food waste.
- The workshops also helped stimulate infrastructure changes at the school. The head teacher agreed to instigate paid for recycling collections for lunchtime food waste to encourage pupils to continue measuring and reducing their food waste after the workshops.

Background

Telferscot Primary School has approximately 450 pupils aged between 5 and 11 years old. Workshops were run for 30 pupils from Year 5, apart from the first workshop which was run for the whole year – 60 pupils.

The school was recruited via one of the teachers who was an existing contact of Groundwork London. This teacher had already run food waste recycling activities at the school and planned to run further activities on healthy sustainable eating. The school had a keen interest in reducing food waste and was considering making infrastructural changes e.g. onsite composting.

Objectives

The three key messages of the campaign were:

1. Preventing avoidable food waste
2. Recycling food waste
3. Eating healthy and sustainable foods

The specific objectives of the workshops were for pupils to: increase their knowledge of the key messages, adopt positive attitudes and behaviours around the key messages; and, spread their learnings to other pupils, parents and staff.

Activities

Using a co-production model, workshops were written by Groundwork London staff with teaching experience and reviewed by primary school teachers. The workshops focused on pupil engagement involving interactive learning activities¹ around food waste and healthy and sustainable eating.

In addition, the workshops used a coproduction model to empower pupils to design, promote and run their own campaign to endorse the key messages. The pupils and staff chose a healthy sustainable eating

¹ See accompanying [Fact Sheet](#) for comprehensive list of workshop activities.

campaign which focused on the use of leftovers within recipes. At the campaign day, children collected leftovers recipes and a small number of parents made dishes using leftovers for attendees to taste.

At the final workshop, results were reviewed; pupils' knowledge, attitudes and habits were assessed; and, learnings were shared with another school within the TRiFOCAL project.

Results

The project was evaluated using multiple tools: a weekly lunchtime food waste audit, a questionnaire completed by teachers, and key performance indicators (including homework pledges and counts of pupil, parent and teacher engagement). In addition, pupils were also evaluated using a pre- and post-intervention survey in the form of a quiz. All 30 pupils completed both surveys, the results of which can be seen below.

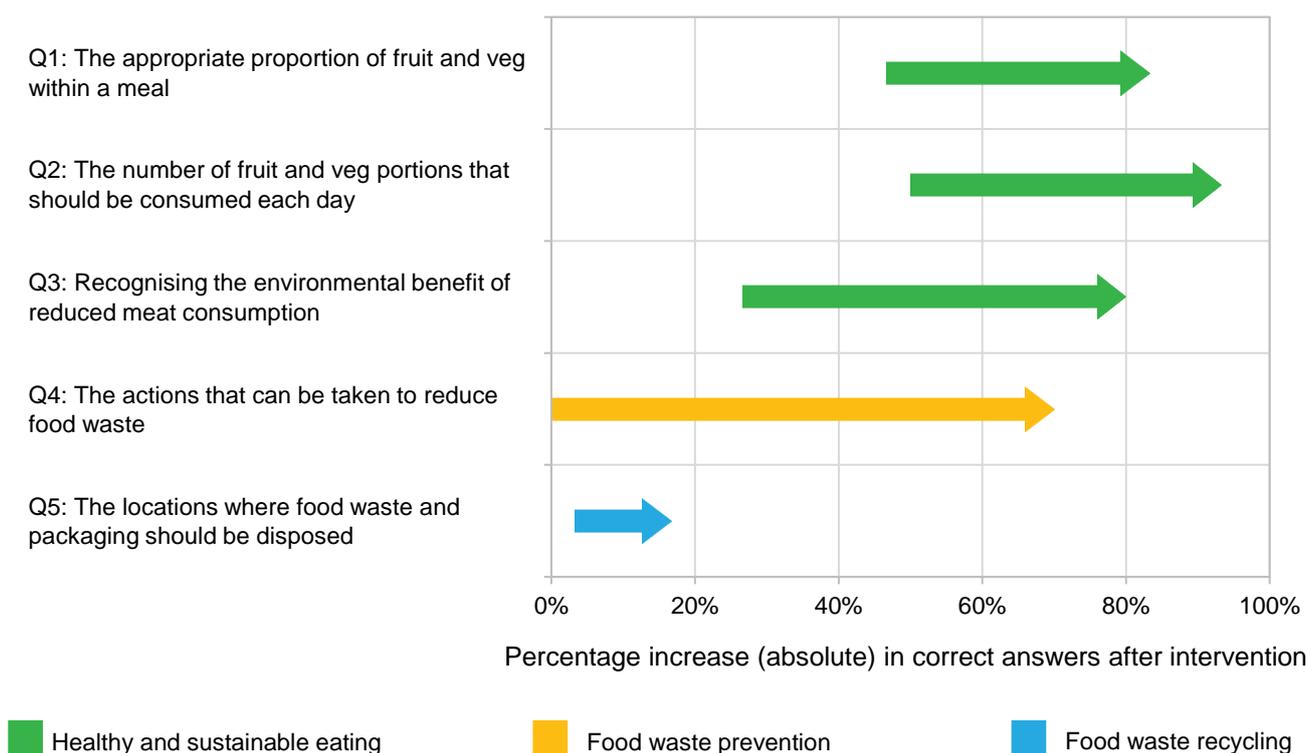


Figure 1 - Percentage increase in correct answers (post-intervention) from pupils completing the 'Small Change, Big Difference' quiz.

Knowledge

Pupils' prior knowledge of sustainable eating, food waste prevention and food waste recycling were mixed, showing some areas of existing knowledge and some areas with low knowledge. The pre-intervention survey revealed that only 8/30 (27%) pupils knew that reducing their consumption of meat is good for the environment [Figure 1]. No pupils correctly identified all three methods of reducing food waste and only 1/30 (3%) pupils correctly identified the appropriate methods for disposing of five food waste and packaging items. These results were not too dissimilar to the results for the average for all TRiFOCAL schools (26%, 6% and 6% respectively).

Evidence showed that most pupils could already easily identify things that did not reduce food waste and some pupils already had good existing knowledge of healthy eating. For instance, in the pre-intervention survey 26/30 pupils correctly identified all three methods that did not reduce food waste. Furthermore, in the same survey, around half of pupils were already able to identify the food plate with the correct portion of fruit and vegetables (14/30) and how many portions of fruit and vegetables should be eaten per day (15/30).

Knowledge improved in all areas after the workshops, with an especially large increase in food waste prevention knowledge. Pupils who correctly identified all methods of reducing food waste increased from

0/30 to 21/30 between the pre- and post-intervention survey [Figure 1]. The number of pupils who recognised that reducing their consumption of meat is good for the environment increased from 8/30 to 24/30. Increases were also observed in the number of pupils able to identify the food plate with the correct portion of fruit and vegetables (14/30 to 26/30) and the number of portions of fruit and vegetables that should be eaten per day (15/30 to 28/30). These large increases in knowledge are likely explained in part by the high level of pupil engagement (as noted by facilitators) and enjoyment pupils received from healthy smoothie making activities, as well as engaged and supported teaching staff who continued learning in between workshops.

Post-intervention knowledge of food waste recycling remained below the average for all TRiFOCAL schools. The number of pupils who correctly identified all appropriate disposal destinations for food waste and packaging items increased from 1/30 in the pre-intervention survey to 5/30 (17%) in the post-intervention survey, whereas the overall schools' post-intervention knowledge was much higher at 49%. However, around half of pupils (16/30) did manage to identify 4/5 of the correct routes of food waste/packaging disposal.

Attitude

There was a large positive shift in pupils' attitude towards food waste after the workshops which may have been reinforced through project buy-in from teachers at the school. When asked to rate how much they cared about food waste out of five, the number of pupils scoring four or above moved from 5/30 in the pre-intervention survey to 28/30 in the post-intervention survey. While the number of pupils discussing the workshops with parents and friends (27/30 and 20/30 respectively) was similar to the overall average for all TRiFOCAL schools, the percentage of pupils that talked to other teachers was considerably higher (17/30 or 57% in this school as opposed to 38% in all TRiFOCAL schools). This may reflect the high levels of buy-in from teachers at Telferscot.

Changes in attitude were observed in topic areas which represented initially low knowledge levels. Pupils had very low prior knowledge of both food waste reduction and recycling. However, when asked what they would do differently following the workshops, pupils commonly mentioned changes related to food waste reduction (18/30) and food waste recycling (20/30), whilst only 2/30 pupils mentioned healthy and sustainable eating changes.

Behaviour

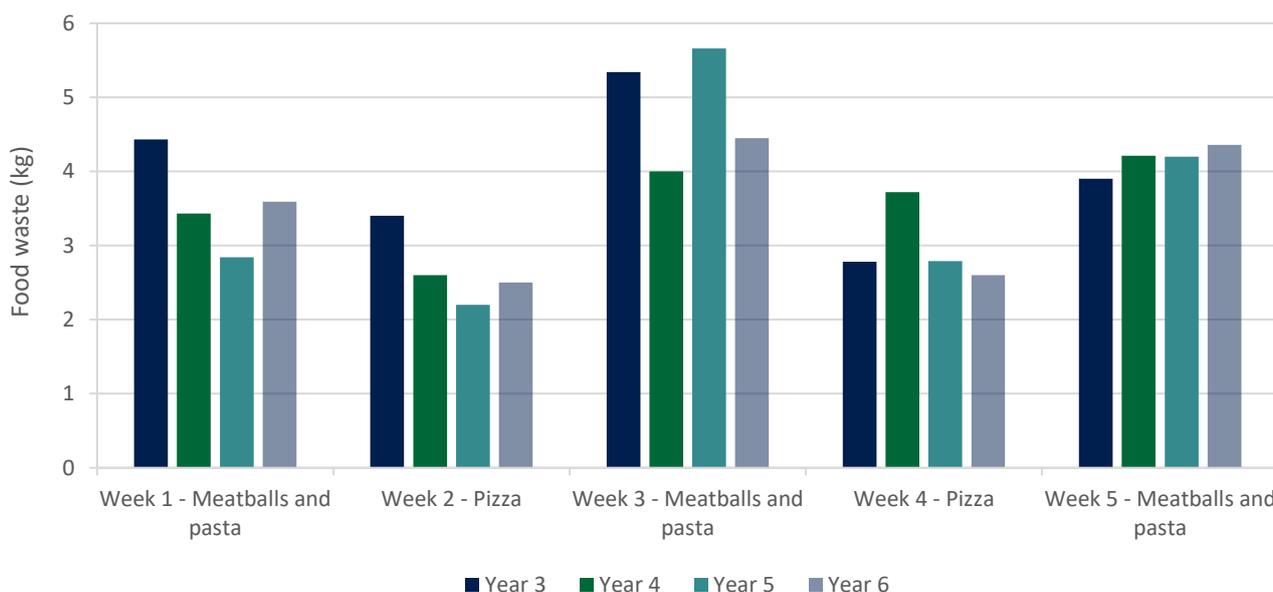


Figure 2 - Results from the lunchtime food waste audits conducted alongside project workshops.

Behaviour changes were seen for healthy eating, food waste prevention and food waste recycling when structured as part of a homework task or implemented as part of the school routine. However, there was no evidence of food waste reduction within the school. All pupils made one pledge around food waste prevention and one around healthy and sustainable eating (60 pledges in total). Their parents confirmed via their homework books that all pledges had been successfully completed. However, the food waste audit showed no consistent trend in the plate waste data across the six-week period for Years 3, 4, 5 or 6. Food waste for all year groups varied considerably each week [Figure 2], ranging from 2.2 kg to 5.7kg. It can be difficult to change the amount of food waste generated within a school setting, as certain factors such as portion size are generally outside of the child's control. This issue of portion sizes highlighted the importance of working with kitchen staff and school catering operators to improve intervention outcomes.

Cascade effect

Perhaps the most successful outcome of the workshops was the wider cascade of campaign messages. The school organised for Year 5 to share their learning in a school assembly and via video link with another school in London. Through the school assembly, the pupils spread the campaign messages to the remaining pupils in the school and 15 teachers. Although the impact of this was not measured, it is likely to have increased awareness of the campaign messages.

In addition, the head teacher facilitated permanent changes to the infrastructure of the school to promote both food waste recycling and healthy sustainable eating. Prior to the workshops there was no food waste collection at the school. However, following the workshops, the head teacher agreed to instigate recycling collections for lunchtime food waste to encourage pupils to continue measuring and reducing their food waste. In addition, as the school was keen to start growing their own food, and Groundwork London organised a Corporate Volunteer Day where a group of volunteers spent the day improving the school grounds by adding an onsite compost and food growing area.

Challenges and considerations

The large group size in the first workshop (food waste reduction and recycling) may have had a negative impact on learning. On request from the school, all Year 5 pupils (60 pupils) attended this workshop so they could understand the project. However, having 60 pupils in a classroom designed for 30 meant that the workshop took longer to deliver and not all activities could be completed. This may have also affected the dissemination of campaign messages.

Another challenge was that the campaign day was held as part of an existing school event. The school did not separately promote the campaign to parents as they did not want to overload them with information. Due to this, the messages of the campaign were diluted with the wider event. Learning taken from this was that combining the campaign day with existing events is not preferable for future schools' delivery.

Conclusions and recommendations

The workshops were successful in meeting their objectives, improving knowledge and attitudes of pupils on the key campaign messages. The pupils initially had particularly low knowledge of sustainable eating and food waste prevention, making large improvements following the workshops.

Nevertheless, there is still room for further improvements in pupils' learning of the campaign messages. This is especially the case in the area of food waste recycling where only slight improvements in knowledge were experienced following the workshops. However, this may have been influenced by the larger class present at the workshop, subsequently impacting knowledge uptake and retention associated with the topic.

In addition, the combination of the campaign day within a wider event may have also negatively influenced the wider dissemination of campaign messages. It is therefore recommended that in order to ensure key messages are delivered effectively, workshops should be limited to 30 pupils, and events should be stand-alone, rather than incorporated in wider events.

Despite these issues, the workshops exceeded expectations in relation to the cascading of information. The head teacher fully embraced the messages of the workshops and facilitated permanent changes to the school's infrastructure, including paying for a food waste collection service and facilitating improvements to the school grounds so that pupils can grow their own food. The school also encouraged pupils to spread the messages by actively discussing the project both within the school (via an assembly and discussion with other teachers) and externally (via video-link with another TRiFOCAL school in Hackney).

The workshops also partly met their objectives in relation to behaviour changes. Behaviour changes seemed to be successful when there was structure in place (e.g. homework books) and pupils were empowered to choose the change they made (e.g. different options for pledges). However, behaviour change highlighted through completed pledges did not translate to food waste reduction at the school. This may have been due to factors outside of children's control and as such a future recommendation would be to work closely with catering operators at the school, subsequently encouraging pupil input into portion sizes.