

All believing, All achieving

CASE STUDY

All Saints Primary School (Croydon)

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

The workshops were delivered in February and March 2018 by Groundwork London as part of the TRiFOCAL 'Small Change, Big Difference' Campaign.

Highlights:

- The pupils showed large improvements in knowledge after the campaign activities, and significantly more pupils answered the food waste recycling question correctly than the average for all TRiFOCAL schools.
- The pupils also displayed a high level of intention to continue changing their behaviours (linked to campaign objectives) following the workshops.

Background

All Saints Primary School has approximately 365 pupils, a higher than average proportion of whom have special educational needs and disabilities.

Workshops were delivered by Groundwork London for 24 pupils in Year 5. Resources were then given to the class teacher so that the sessions could be repeated with the rest of the year group (a further 27 pupils), ensuring equity of learning.

It should be noted that All Saints Primary School already includes healthy eating within their curriculum and holds an annual eco day where pupils learn about recycling, including recycling food waste¹.

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.

¹ All Saints Primary School does not currently collect food waste separately; as such, recycling advice focuses on spaces outside the school.

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 activities² around food waste and healthy and sustainable eating.

In addition, the workshops aimed to empower pupils to design [Figure 1], promote and run their own campaign to endorse the key messages. The pupils and staff chose the 'Caddy Campaign' as a good match for All Saints. The campaign focused on the importance of using a food caddy to recycle food waste and the environmental impacts of food waste disposal in landfill.

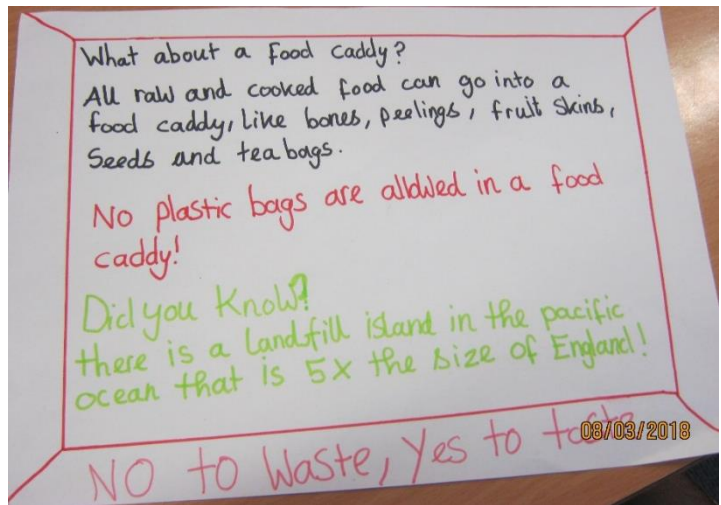


Figure 1 - A food waste poster created by a pupil at All Saints Primary School

At the final workshop, results were reviewed, pupils' knowledge, attitudes and habits were assessed, and learnings were shared with another school participating in 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 quiz³; in total 23 pupils completed both surveys, the results of which can be seen below.

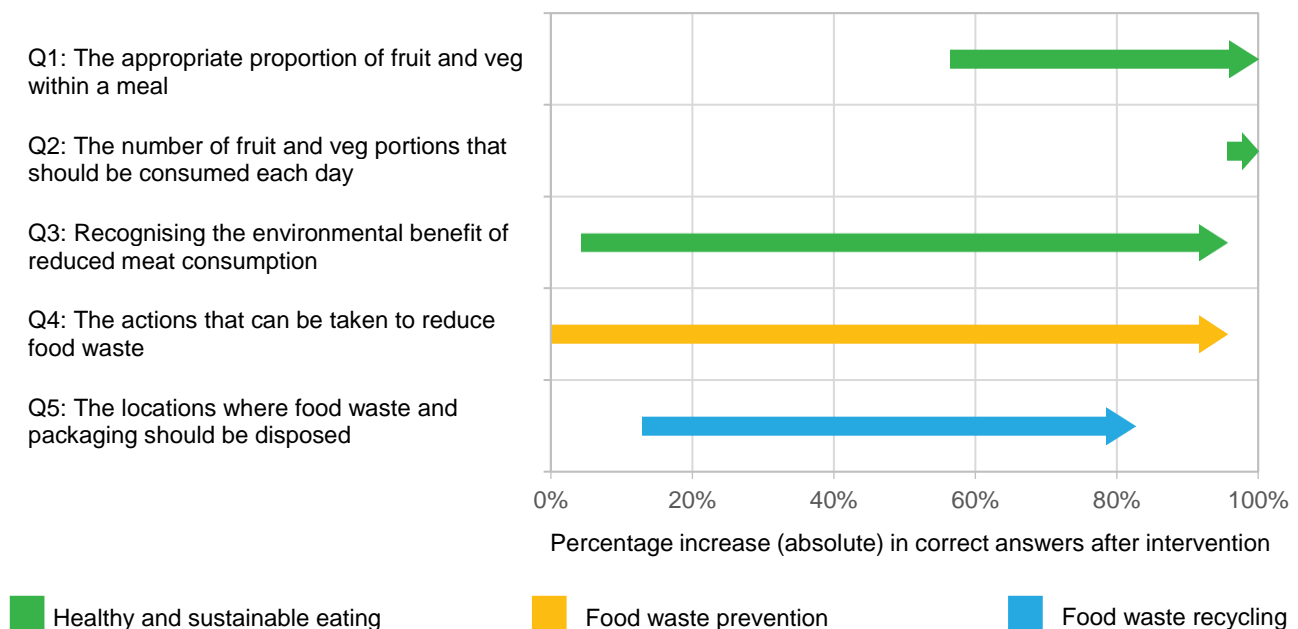


Figure 2 - Percentage increase in correct answers (post-intervention) from pupils completing the 'Small Change, Big Difference' quiz.

² See accompanying [Fact Sheet](#) for comprehensive list of workshop activities.

³ The full quiz can be viewed at <http://resources.trifocal.eu.com/resources/education-packs/>

Knowledge

Pupils had good prior knowledge of healthy eating but lower levels for sustainable eating, food waste prevention and correct disposal of food waste. In the pre-intervention survey, only 1/23 (4%) pupils correctly identified that not eating meat was good for the environment [Figure 2] which is lower than the average (26%) across all TRiFOCAL schools. Furthermore, in the pre-intervention survey none of the pupils could correctly identify all of the methods for reducing food waste and many pupils gave three incorrect answers (10/23).

Large improvements in knowledge were observed. During the pre-intervention survey quiz, no pupil provided all of the correct answers; however, during the post-intervention survey, 83% of pupils answered all questions correctly. The post-intervention survey also revealed: the number of pupils that correctly answered the food waste prevention question had increased to 22/23 (from 0/23); the number of correct answers for sustainable eating increased to 21/23 (from 1/23) and the number of pupils that correctly answered the food waste recycling question increased to 19/23 (from 3/23) [Figure 2]. This post-intervention survey knowledge on food waste recycling stood out as it was considerably higher than the overall average for all TRiFOCAL schools, 83% as opposed to the average of 49%.

Attitude

The pupils were enthusiastic about the workshops and their attitude towards food waste improved after the workshops. For instance, in the pre-intervention survey only 9/23 pupils rated how much they cared about food waste at 4/5 or above; however, this increased to 22/23 in the post-intervention survey. In addition, 18/23 pupils rated their enjoyment of the workshops at 4/5 or above.

Behaviour

There was some evidence that pupils were changing their behaviour both as part of a homework task and during school lunchtimes. The pupils in this school showed more enjoyment of both the pledges and food waste audit than the overall average across all TRiFOCAL schools. All but one of the pupils that attended the workshops made and completed two pledges (one around food waste prevention or recycling and one around healthy sustainable eating, 47 in total). The pupils showed engagement with the homework task with around half (13/23) stating it was one of the most enjoyable parts of the workshops. This was higher than the overall TRiFOCAL schools average of 20%. Whilst this did not manifest in additional pledges being recorded as it did with other schools, it is likely to have contributed to the pupils' high motivation to make longer-term changes (see below).

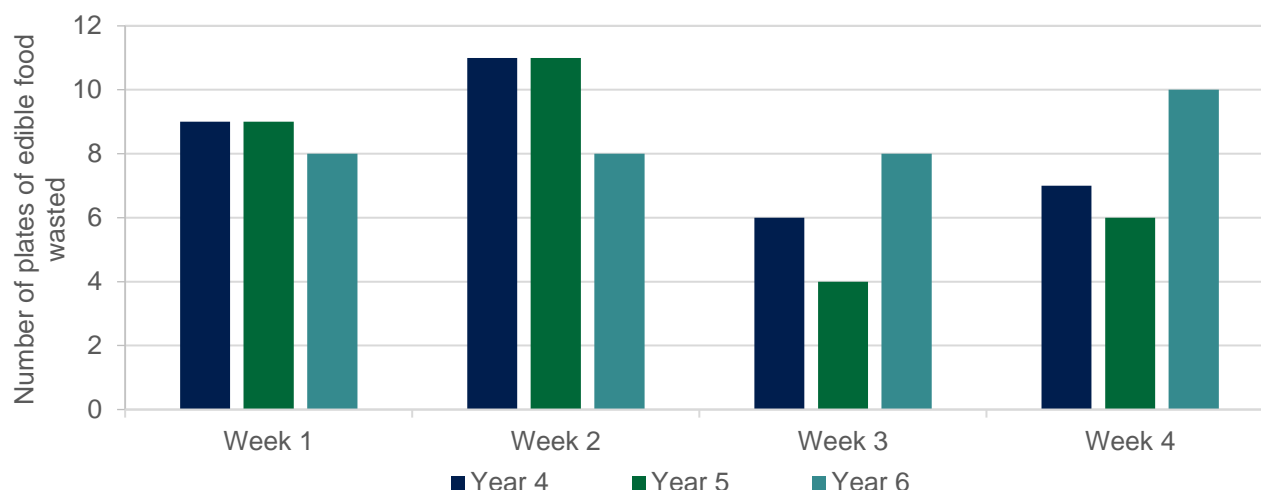


Figure 3 - Results from the lunchtime food waste audits conducted alongside project workshops.

In addition, there was some indication that the campaign facilitated a reduction in lunchtime plate waste. Lunchtime plate waste data for Years 4 and 5 was lower in weeks three & four than in one & two [Figure 3]. While there is not enough data to show an ongoing trend, it is possible that the campaign influenced food waste reduction. During week three for example, the Year 5 pupils visited other classes prior to lunch which reminded them to reduce their food waste. In addition, the menus for week one and three were the same and plate waste between these weeks decreased by five plates (-55.6%) for Year 5 pupils and three

plates (-33.3%) for Year 4 pupils. These figures may not be surprising as pupils receiving the workshops also showed large interest in the weekly weighing of the food waste with 13/23 pupils stating it was one of their favourite parts of the workshops. This was higher than the average for all TRiFOCAL schools at 27% although classroom discussions did also provide anecdotal evidence which could explain food waste variations, such as disliking the food served in weeks two and four and rushing to get outside for playground activities.

Pupils were very enthusiastic about maintaining and/or continuing to change their behaviour in the future. For example, 87% pupils mentioned changes to behaviour around food waste prevention, 52% around food waste recycling, 22% around healthy and sustainable eating and 13% said they would discuss the campaign messages with others. This is higher than the overall TRiFOCAL schools average at 75%, 32%, 12% and 8% respectively.

Cascade effect

The school encouraged pupils to spread the message of the campaign to other pupils, staff and parents. For example, 316 further pupils (~90%) were engaged through the plate waste weighing and school assembly, whilst 70 parents attended the campaign day. Furthermore, the pupils' cascade of campaign messages within the school was especially successful and, in some cases, better than the overall average. For instance, whilst the percentage of pupils discussing the campaign with other pupils and teachers was similar to the overall average, the percentage of pupils talking to kitchen staff was higher (35% or 8/23) was higher compared to the average in all TRiFOCAL schools (13%).

While behaviour change in the home was not measured at All Saints, the majority of pupils reported talking to their parents about the workshops (17/23) and the teachers survey indicated positive change in one family.

'As a family of five we were going through three food waste bins a week! I've now been able to reduce that to less than two through these workshops.'

There is some evidence that pupils were taking the campaign messages of food waste recycling and food waste prevention home to parents and carers. This was highlighted in the surveys as prior to the workshops only two pupils stated they had a food recycling caddy whereas all 24 pupils stated at the end of the project that they had a food recycling caddy at home. It should be noted that Croydon offered food waste collections from houses and flats at both the start and end of the workshops.

Challenges and considerations

Other school priorities may have interrupted the learning and effectiveness of the intervention. There were occasions when the teacher needed to be absent from class during the workshops so alternative staff were present, impacting on knowledge transfer and continuity. In addition, some pupils have additional support in the afternoons when classes were held, this meant unfortunately they missed some key learning and fun activities.

Parent involvement and the cascading of information to wider family members was slightly lower than other TRiFOCAL schools. For instance, only half of the pupils returned their homework books (signed by parents). However, this may have been influenced by changes in the class teacher during workshops, subsequently affecting reminders about homework. In addition, only ~20% of parents attended the campaign day, slightly lower than the overall TRiFOCAL schools average of ~30%. This was surprising as the percentage of pupils discussing the campaign with parents and friends (74% and 65% respectively) was comparable to the overall average for TRiFOCAL schools (83% and 57% respectively). However, the percentage of pupils talking to relatives (22%) and others (4%) was much lower when compared to averages for all TRiFOCAL schools (39% and 26% respectively).

Conclusions and recommendations

Prior to the workshops, pupils had good knowledge of healthy eating but lower levels for sustainable eating, food waste prevention and correct disposal of food waste. This knowledge improved following the workshops, particularly in food waste prevention. In addition, the post-intervention survey answers to the food waste recycling question stood out as the scores were considerably higher than the average for all TRiFOCAL schools. Surveys also showed pupils were enthusiastic about the workshops and their attitude towards food waste improved afterwards. Notably, pupils showed high levels of enthusiasm to make long-term changes in their quiz responses. In addition, the cascade of the campaign messages within the school was especially successful.

The effectiveness of the intervention may have been hindered by staff and pupil absences during workshops. Additionally, parental involvement and the wider cascade of information to other family members was slightly lower in comparison to other TRiFOCAL schools, with a lower number of parents attending the campaign day and fewer homework diaries being completed. As such one future recommendation involves inviting parents to the assembly about food waste at the beginning of the project so that they are on board with supporting their child at early stages. This approach was adopted in later workshops with other schools, for example Dorchester Primary School⁴.

Finally, when considering the campaign event, another recommendation would be to have smoothie bikes present. These bikes were incorporated into campaign days in later TRiFOCAL schools, for example Thornhill Primary School in Islington⁵. Although the focus of this campaign event was promoting recycling using a food caddy, the creation of smoothies adds a fun element, attracting both pupils and parents. It also aligns well with promoting the healthy and sustainable eating objective.

⁴ See separate case study on Dorchester Primary School for more information:
<http://resources.trifocal.eu.com/resources/evaluation-case-studies-schools/>

⁵ See separate case study on Thornhill Primary School for more information:
<http://resources.trifocal.eu.com/resources/evaluation-case-studies-schools/>