CASE STUDY  MCCLINTOCK PRIMARY SCHOOL, TYRONE

Through their meetings, the Eco-Committee identified litter as a problem in the play-ground. They felt this was an issue they could and should resolve.

Waste Resource Efficiency

Pupils looked at the waste hierarchy and decided on REDUCE as the most effective method. Pupils from P6 and P7 carried out independent research on the types and levels of waste in Northern Ireland.

Wanting to share their findings, the P6 and P7 pupils organised a whole school assembly. As well as presenting their research, pupils also suggested ways for younger children to reduce, reuse and recycle within school.

As part of Northern Ireland’s Love Food Hate Waste campaign, the whole school took part in activities to reduce food waste including; using over ripe bananas to make banana bread, making fruit smoothies and learning about the difference between ‘USE BY’ and ‘BEST BEFORE’.

The school’s waste work extended to home and the wider community. Parents reported that children were taking an interest in what was being thrown away and whether it was recyclable. Pupils were also offering tips on saving food and portion size.

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The Eco Co-ordinator worked with all teachers to develop a whole school focus on waste management.

P1 and P2 sorted and identified waste, P3 and P4 created Junk Art robots, and P6 and P7 wrote and performed a drama about waste reduction using handmade life-size rubbish monsters.

Pupils from P6 and P7 carried out independent research on the types and levels of waste in Northern Ireland.

The school won the European Week for Waste Reduction Education category. In recognition of their ‘Stop Food Waste’ campaign during which they weighed all food waste and cooked with leftovers in Key Stage 2.

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The Eco-Committee found that the volume of food being composted at school was too high to maintain and so are eagerly awaiting the issue of larger compost bins to their council area.

Pupils reinforced their measurement skills by weighing compostable materials and finding the class average. This real life application of data collection and processing skills was linked to CCEA Numeracy tasks.

The school linked with the environmental education and recycling officer at their local council. Pupils from P5 to P7 went on a school trip to Tullyvar Landfill Site at Ballygawley and were shocked to see the amount of waste that arrives daily. The children were inspired by the increased levels of recycling.

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Adopt A Spot

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The Eco-Committee now plan to reduce energy waste as well and have already begun monitoring usage each month.

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Case Study

School: McClintock Primary School, Tyrone

Q&A

Q: Why did you initially choose Waste Resource Efficiency as an Eco-Schools topic?
A: I found that the children had a great interest in becoming more resource efficient. We feel that this topic works well as everyone can get involved – from Year 1 through to Year 7. Children could also see the benefits of their hard work and continue to educate their parents at home. Through our Eco-Committee meetings the children were concerned that there was litter in their playground and felt that this was something that we could and should improve in our school. The children also looked at the waste hierarchy. This model highlights the last resort of waste management being that the waste goes into the black bin and ultimately landfill. At McClintock Primary School, we have been educating the children that we should firstly reduce waste as this is the most cost effective method for managing waste e.g. buying bananas without a bag, taking own shopping bags when out shopping. Then children should then reuse waste e.g. using old Chinese food tubs to store crayons or keep food fresh. Recycling or compost is the next stage in waste management.

Q: What previous Eco-Schools work did you build upon by choosing to look more closely at Waste?
A: We had previously completed a lot of work on Reduce, Reuse and Recycle. We already had recycling and composting bins in each classroom and these were being used effectively and efficiently. The children also recycle the milk cartons that they have at break time. Eco-Committee members take turns being the “Power Ranger” – their job is to make sure all lights are turned off and to take each classroom’s composting bins into the composting area in the Eco Garden. Scrap paper is reused, we print on both sides of the page. Parents are also involved with our recycling endeavour. They send in newspapers for covering the tables during painting and other household waste for ‘junk art’ lessons, such as bottle tops and cereal boxes.

Q: Did you look at the 3 Rs of waste management (Reduce, Reuse, Recycle)? Which of the 3 Rs did you look at and what work did you do in this area?
A: Yes. P6/7 children carried out independent research on the types and levels of waste being produced in Northern Ireland. Following lessons and class discussions the children felt that it was important to share what they had learnt with the rest of the school. P6/7 organised a whole-school assembly at which they presented their findings and suggested ways in which the younger children could reduce, reuse and recycle within the school. The school also collected batteries, old phones, ink cartridges and old clothes for recycling. The children also took part in European Week for Waste Reduction which ran from the 22nd – 30th November 2014. The children were encouraged to take positive actions to reduce their waste, particularly focusing on reducing food waste. All children participated in a wide variety of activities throughout the week, including using over ripe bananas to make banana bread.
make banana bread, making fruit smoothies and understanding the difference between the terms ‘use by’ and ‘best before.’ The children were previously unaware of the differences between the dates written on foods and reported that they would normally have thrown the food away. We also shared good practice of reducing food waste and how to store food properly – apparently the average Northern Irish family throws away £60 of food each month. The pupils at McClintock thought that this money could be much better spent! The children were delighted to learn that through their ‘Stop Food Waste’ campaign work on this topic, they had won the overall prize for the Waste Reduction Education category.

Q: How did you integrate your chosen case study topic into the curriculum for your individual school?
A: The children wrote and performed short dramas in groups for the whole school. This developed their talking, listening and drama skills, not forgetting their group work skills! Waste and electricity usage monitoring has reinforced numeracy and data collection and processing skills. The children have enjoyed a ‘real life’ application of those skills. The children have been monitoring the total monthly gas and electricity usage and comparing this to the previous year’s results. The pupils also reinforced their measurement skills by weighing the compost materials and finding the class average.

There is a CCEA Numeracy task relating to reduce, reuse and recycle that the children completed as part of their Numeracy assessments.

For World Book Day the Eco-Committee organised a book-swap. Children were encouraged to bring in books (in good condition) that they were finished with and swap them. The Eco-Committee ran this event independently and it proved so popular that we hope to hold similar events each term.

Q: How did you co-ordinate with other teachers/non-teaching staff to ensure a whole school approach?
A: Thankfully, all staff members really see the importance and benefit of helping the children at McClintock to develop skills that will ensure they are positive contributors to society in the future. As a staff we decided to have a whole school focus on waste management. Within this every teacher taught specific lessons aimed at the appropriate level. For example, in P1/2, the children sorted rubbish into recyclable and landfill waste. In P3/4 they discussed how landfill waste could be reused and made into something different. For example, they created junk art robots. P6/7 created life sized rubbish monsters which they used in a drama about waste reduction that was performed for the whole school.

Q: How do you encourage pupil participation? How did the pupils have ownership of this project?
A: The Eco-Committee became very passionate about getting across the message of reducing waste. Following the P6/7 school assembly the Eco-Committee produced posters to be displayed around the building reminding other pupils of practical ways in which they could reduce, reuse and recycle. P6/7 pupils were appointed as class representatives for each year. In this role they could discuss issues with each year group and take suggestions and ideas from across the school. The children have organised and held litter picks. Pupils were particularly concerned to take responsibility, not just for the playground, but also for the local community play park and pavements.

Q: How did the pupils/whole school benefit from this work?
A: The pupils were very engaged with the topic and were much more aware about the importance of waste reduction and this extended into home life. Parents reported that children were taking an interest in what was being thrown out and whether it was recyclable. They were also offering parents tips on preserving food by using the freezer, only cooking enough food by better portion control and how best to store it!

Q: Did you receive any support or resources from parents, staff or outside agencies?
A: Though our links with Anthea Owens, (Environmental Education and Recycling Officer at Fermanagh and Omagh District Council), P5 to P7 went on a school trip to Tullyvar Landfill Site at Ballygawley. Here the waste from Fermanagh and Omagh District Council is processed and disposed of. The children were shocked to see the levels of waste that came in daily.
They were particularly alarmed by the effluent produced and collected in large pits. They heard how harmful it is to health and how one worker fell in and nearly lost his life. The damage to the environment also struck a chord with the children. The children were inspired by the amount of recycling being carried out at the site and how this has increased in recent years and the council is hoping to further increase this.

Q: Did you have to source any funding?
A: Through the Keep Northern Ireland Beautiful, Adopt-a-Spot scheme we secured 25 litter pickers, high-visibility jackets and gloves to aid the children in their waste collection in the playground and surrounding community.

Q: What advice would you offer to schools undertaking the Waste Resource Efficiency topic?
Do you have any useful suggestions for other teachers embarking on the topic?
A: It’s very worthwhile and you can see genuine enjoyment and engagement by the children with benefits both in school and at home. For example, children were asking their parents to put sandwiches in Tupperware boxes so that they did not have to throw away cling film that they used to be packed in. There is a multitude of maths investigations that can be undertaken using data that the children have collected themselves.

Q: Has doing this topic driven other Eco-Schools ideas? What are your future plans regarding Eco-Schools?
A: Yes. We created a mini-beast hotel with the support of parents and the local community who donated scrap materials. This has enabled the children to see wildlife up close and driven engagement in WAU lessons. We have been looking at reducing electricity and gas consumption and the children have been monitoring usage each month. The Power Rangers now ensure that lights, computers and projectors are turned off at lunch time as well as home time. The Eco-Committee continues to meet and suggest ideas for around the school and are keen to continue to reduce, reuse and recycle. We plan to focus on fair trade products within the school to coincide with Fairtrade Fortnight in 2016.
## Resource efficiency

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<tr>
<th></th>
<th>Start date for period over which Waste consumption was calculated</th>
<th>Finish date for period over which Waste consumption was calculated</th>
<th>No. of school days in this period</th>
<th>Amount of waste (kg/bags/bins – 120, 240, 1110 litre etc.)</th>
<th>How did you measure your waste consumption?</th>
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<tr>
<td>General waste</td>
<td>23/2/15</td>
<td>6/3/15</td>
<td>10</td>
<td>12 bags – 50L bin liners</td>
<td>Caretaker counted full bags over the two week period from classrooms</td>
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<td>6/3/15</td>
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<td>Composting</td>
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<td>Bins measured daily before composting in school grounds – measured by pupils</td>
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<td>6 bags – 50L bin liners</td>
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