

Eat more Fruit and Vegetables

Abstract

This paper looks at the 'Eat more Fruit and Vegetables' unit of work as used with a class of 26 students in Year 2.

Design and technology linked with other areas of the curriculum

With the introduction of both the literacy and numeracy hours in primary schools and the pressures that these have placed on teachers, there is a danger that a subject such as design and technology, which involves substantial planning and preparation, can be easily pushed to one side and neglected. There is evidence to show that design and technology can make an extremely valuable contribution to children's learning at primary level.

'The practical experiences that design and technology provides are rich in opportunities for children to develop basic skills in numeracy, literacy and information technology.' (DATA, 1997)

This is particularly true in relation to literacy where the benefits are apparent for both children and teachers. For the children this includes using and developing their language skills in activities where there is a real purpose to the work they are doing and where the work is set in contexts which are relevant to them. There is also evidence to suggest that during design and technology activities, children are very well motivated and therefore reach higher levels in their writing and speaking. (DATA, 1999)

For teachers, the literacy hour can be made to come alive through the meaningful contexts which design and technology provides. It also provides plenty of opportunities for teachers to assess children's use and application of language. This raises issues for a design and technology subject leader when planning a whole school Scheme of Work. For example, it makes sense to link the design and technology units of work directly with literacy and to block these into the literacy timetable for each term.

Introduction

The following study was carried out with 26 children in a Year 2 class during the spring term. Apart from the investigative activities at the beginning, which were carried out in two afternoons, the focused practical tasks and the designing and making activities were carried out during two consecutive mornings (before and after play on both days).

The children's previous school experience included a topic about fruit in the reception class based on the story of Handa's Surprise and a topic about 'ourselves' in Year 1 where

they learnt about nutritious food in the context of looking after our bodies and staying healthy.

At present this unit of work is not necessarily one which would always be carried out at this time of year. It was partly a trial run in my capacity as subject leader.

Unit of work

I decided to focus on fruit salads in this unit of work, rather than looking at vegetables as well because of the expense of providing fresh produce. However, as an introduction I asked the children to think back to the work they had done in previous years so that as a class we could brainstorm about foods that are healthy for us. I wrote this up as a 'mind map'.

Once we had done this, we looked specifically at fruit and again working as a whole class we made a mind map of the information they could give me about fruit. This kind of recording serves as a visual sorting of information and is a useful way to begin a topic, looking at the first map, adding information to it to ascertain what has been learnt. This can serve as a broad assessment of whole class learning. When children are older they can do their own mind maps which then help to assess their individual learning.

'Mapping can help information flow to, from among pupils and teachers ... most importantly, children learn a procedure for investigating, visualising and organising information.' (Fisher, 1995)

By the end of the unit of work I hoped that most of the children would:

'have gained an understanding of the properties, including taste, texture and appearance of a range of fruit and then prepared and combined ingredients into a specific product, have used basic tools safely, have recognised that it is important to eat more fruit.' (QCA, 1998)

Ideas

Through the investigative and evaluative activity I intended that the children should cover the learning objectives as set out in the QCA document. I used the DATA *Helpsheets* 'Eat more Fruit and Vegetables' (DATA, 1999) to help me plan this activity and used their examples of simple charts to devise my own chart to use with the children.

For the first activity the children worked as a whole class looking at different fruits, categorising them by colour, taste and texture and recording this information on a chart. They then worked on their own, filling in the same chart and drawing pictures underneath

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of the fruits, which were 'juicy' in order to show that they could read information from their charts.

This activity promoted lots of excitement and interest and provided a very good opportunity for the children to use vocabulary describing the properties of the fruit. Within the whole class work I also got the children to discuss their ideas in groups of two or three, asking them to report back to the class in order to share and compare their ideas.

'We can help children to develop their thinking in design and technology by giving them opportunities to talk and to listen to others in different situations and for different purposes.' (DATA, 1999)

This is also a good way of including those less able children who find it hard to contribute to discussions on their own as they can feel confident and valued as part of their small group. This activity was supervised by myself alone, teaching the whole class and then working with the least able children to complete their charts.

Focused practical task

For this part of the unit of work the children worked in groups at tables supervised by myself, a primary helper and a special needs support worker. As before, the learning objectives were taken from the QCA document. After the initial discussion about hygiene and then whole class hand washing, we discussed as a whole class what preparation the fruits selected might need. I demonstrated using a knife to slice fruit safely and introduced the squeezer showing children how to use it. Prompted by questioning from me, we discussed how this changed the fruit and meant that the flesh became redundant. Each group was then responsible for the preparation of one type of fruit at their table and afterwards reported back to the class on what they had carried out and experienced. As with the investigative task, the children recorded their own and other groups' findings on a chart. This activity promoted lots of discussion and interest enabling all the children to participate in sharing their thoughts and ideas. I felt confident that the children had developed confidence in practical skills which they could use safely and effectively as although they had prepared different fruits they had all had the opportunity to use a knife to slice their fruits.

Design and make activity

I decided to carry out this part of the unit of work during the literacy hour in a morning session, partly because I felt that the children were more ready at this time of day to concentrate on writing and thinking of ideas

for their fruit salad. Through word level work we compiled lists of words associated with the activities we had already carried out. For example, names of fruit, tools used for preparing them and words describing their taste, texture and colour. These would serve as word banks to assist the children when planning their fruit salads. I showed the children a fruit salad leaflet I had prepared for them and through whole class questioning we established certain criteria for their designs. We agreed that everyone would make a salad that was a healthy food, aimed at appealing to the children in the reception classes. The children themselves decided what kind of things they needed to consider to fulfil this criteria, e.g. making sure there were no pips, not making the salad too big as younger children might not want to eat such large portions and so on. We looked back at the charts they had filled in to remind them about the properties of the different fruits and to encourage them to use this information when making their decisions about which fruit to use in their designs.

I realised quite soon after they had started making drawings of what they wanted their salads to look like, that although we had talked about the different fruit salads you could have, they had not really understood how the preparation of the fruit would be a crucial part of what their salads would look like. Many of them drew whole apples with stalks and leaves on, bananas with their skins on and so on! This has implications for future IDEAs for this unit of work. The children need to be able to look at more variety of fruit salads as an end product (this in turn has implications for the cost of funding activities involving food).

At this point I stopped the class for them to assess what they had done so far; to evaluate their drawings and for specific children to share their work with the rest of the class. I used this opportunity to show in greater detail how a design should demonstrate what you want your final product to look like, using examples of children's work which did so.

I also used this shared discussion for my own informal assessment purposes, seeing whether the children could use appropriate vocabulary when discussing their work.

In the afternoon the children worked in groups to prepare a selection of fruit using skills learned in the focused practical tasks. They then used their planning leaflets to make their own fruit salads according to their designs. Before the most important part of the activity, that of 'sampling' their work, we held a class evaluation session where the children discussed as a group which fruit salads they

felt were most successful in terms of appearance and then reported back to the whole class. The answers included comments such as:

'We liked Joanne's best because we liked the dark colour of the grapes with the rest of the fruit.'

And

'We liked Benjamin's best because he didn't put so much fruit in.'

I was pleased to see how honest and thoughtful the children were and all this whilst waiting to eat their product! As part of encouraging the children to reflect upon their work and as a form of evaluation, I asked them to use the 'Work in Progress' space on their leaflet to note down things they found difficult during the activity.

Evaluation

The aims of this unit of work were:

- to develop the children's understanding of designing and making with food and the importance of healthy eating
- for the pupils to make choices based on the properties of different fruit in order to design and make a product for a particular target group to encourage them to eat more fruit.
- to give the children the opportunity to investigate and taste different foods and develop vocabulary to describe the appearance, taste, smell and texture.
- to provide opportunities for the children to apply hygienic practices and to use basic tools and equipment effectively and safely.

The children were very motivated by this project and worked consistently with enthusiasm and interest. Many of them showed in their design leaflets that they understood the need for considered choices when it came to designing their fruit salad for a particular group (e.g. making sure there were no pips in the salad because very young children don't like pips or not making too big a portion because very young children might not want to eat as much).

They thoroughly enjoyed investigating and tasting the different fruits and were able to talk about them using the vocabulary, which I introduced. Although I modelled the use of basic tools and equipment to the whole class, they only had the opportunity to apply one or two of these and this would be something to consider when teaching this unit of work again. When this unit of work is repeated or in the capacity of advising colleagues I would suggest that throughout each section it would

be beneficial to have as much adult help as possible, to maximise the children's opportunities for experiencing the different techniques demonstrated. I would also try and give the children a wider variety of 'fruit salads' to investigate at the start to ensure that they have a clear understanding of what a 'fruit salad' really is and the different formats that it can come in.

Also as preparation at the start of this project, I would encourage the children to do some research out of school, looking at different fruits they might have at home, going shopping with their parents and looking at the different fruit salads available commercially and keeping a diary of food eaten at home to support discussion in the classroom about healthy eating.

As design and technology is at present a known weakness in our school, this unit of work required a lot of time to plan and organise and was also quite disruptive to the timetable as it exists at the moment. However, the benefits in terms of the children's experience and learning in such a purposeful context, only serve to highlight the importance of making design and technology more accessible to colleagues. It has inspired me as a co-ordinator to get on and organise resources at the school to enable this to happen and to push for space within the school management plan to provide INSET for colleagues.

'Making D&T more manageable', here we come!

References

Caviglioli, O. and Harris, I. (2000) *Map Wise*, Network Educational Press

DATA (1996) *Primary Co-ordinator's File*, Wellesbourne: DATA

DATA (1997) *Planning into Practice*, Wellesbourne: DATA

DATA (1999) *Developing Language through Design and Technology*, Wellesbourne: DATA

DATA (2000) *DATA Helpsheets*, Wellesbourne: DATA

QCA (1998) *Design and Technology: A Scheme of Work at Key Stages 1 and 2*, London: QCA