

<b>CASE STUDIES</b>
Classroom Practice
Materials
Food and Bio-related
Unlocking the secrets of Food Technology
Healthy, funky, saleable lunches
Extreme makeover
Cool food
Space nuggets
Memory catchers
Kiwi bread
Links with a practicing food technologist
Batters in a bottle
Food Hawke's Bay
Value-added noodles
Tararua chocolates
<b>Digital Technology</b>
Electronics
Teaching Practice
Graphics
Older Case Studies
Technologists' Practice
Enterprise Links

**CLASSROOM PRACTICE CASE STUDY**      **JANUARY 2007**

**FOOD TECHNOLOGY**      **YEAR 10**



**BATTERS IN A BOTTLE**

In this unit, students used functional modelling and processing as a method of developing their ideas and producing high quality Materials Technology outcomes.

**TEACHER GUIDANCE**

- Planning
- Working with a client
- Developing/refining basic skills
- Testing
- Presentation of a quality product

**Study BP622**

- Abstract
- Background
- Pre-planning
- Delivery
- Outcomes
- What next?
- Two years later...
- Using the unit in another school

- GALLERIES:
- Project gallery
  - Workbooks
  - Jessie
  - Sarah

- LINKS:
- Phase 1 schools
  - School website

Published: January 2007



[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

[Curriculum](#)[Case studies](#)[IP](#)[Teaching snapshots](#)[Student showcase](#)[For parents](#)[GIF Technology](#)[Technology news](#)

## CASE STUDIES

[Classroom Practice](#)[Materials](#)[Food and Bio-related](#)[Unlocking the secrets of Food Technology](#)[Healthy, funky, saleable lunches](#)[Extreme makeover](#)[Cool food](#)[Space nuggets](#)[Memory catchers](#)[Kiwi bread](#)[Links with a practicing food technologist](#)[Batters in a bottle](#)[Food Hawke's Bay](#)[Value-added noodles](#)[Tararua chocolates](#)[Digital Technology](#)[Electronics](#)[Teaching Practice](#)[Graphics](#)[Older Case Studies](#)[Technologists' Practice](#)[Enterprise Links](#)

## Case Study BP622: Batters in a Bottle

## Background

Tararua College is a decile 5 school in Pahiatua with a roll of 470 pupils; predominantly Pakeha with 15% Māori, 1% Pasifika and 1% Asian.

Technology is a compulsory subject at Year 9 where, for the last nine years, each of four classes has done a rotation of the Technologies – ICT, Food, Materials, Electronics, Structures and Mechanisms – with four hours over six days.

In Year 10 Technology is offered as an option (with three hours over six days) in Food, Materials and Information & Communication Technology plus a Textiles option.

Food and Materials Technology is offered at Year 11 and senior Technology at Years 12-13. A Food and Nutrition course is also available at Year 11.

The Year 10 class currently starts term 1 with a nutrition unit then moves on to a project designing a gourmet burger to be entered in the national [Beef and Lamb Marketing Board](#) competition, in which they have had considerable success at a regional level.

Diana Eagle began her teaching career in Home Economics at Tararua College and taught for three years before leaving to raise a family. When her youngest child was three Diana was approached to return to the school, where she worked part time for a while before moving back into full time teaching in Food Technology.



**Diana Eagle:** "There's a lack of knowledge about food – where it comes from and how one can change it. In Food Technology cooking is almost secondary – it is important for students to understand how to change products on the market to suit taste, nutritional and other consumer needs."

## Study BP622

[Abstract](#)  
[Background](#)  
[Pre-planning](#)  
[Delivery](#)  
[Outcomes](#)  
[What next?](#)  
[Two years later...](#)  
[Using the unit in another school](#)

GALLERIES:  
[Project gallery](#)  
[Workbooks](#)  
[Jessie](#)  
[Sarah](#)

LINKS:  
[Phase 1 schools](#)  
[School website](#)

Published:  
 January 2007

[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

[About Techlink](#) | [Order Pamphlets](#) | [Events calendar](#) | [Useful Websites](#) | [Search Techlink](#) | [Feedback Survey](#)

[Curriculum](#)[Case studies](#)[IP](#)[Teaching snapshots](#)[Student showcase](#)[For parents](#)[GIF Technology](#)[Technology news](#)

## CASE STUDIES

## Classroom Practice

## Materials

## Food and Bio-related

[Unlocking the secrets of Food Technology](#)[Healthy, funky, saleable lunches](#)[Extreme makeover](#)[Cool food](#)[Space nuggets](#)[Memory catchers](#)[Kiwi bread](#)[Links with a practicing food technologist](#)[Batters in a bottle](#)[Food Hawke's Bay](#)[Value-added noodles](#)[Tararua chocolates](#)

## Digital Technology

## Electronics

## Teaching Practice

## Graphics

## Older Case Studies

## Technologists' Practice

## Enterprise Links

## Case Study BP622: Batters in a Bottle

## Pre-planning

Batters in a Bottle was first delivered in 2005. Diana's aim was to bring some of the content which had become established at Year 11 down into Year 10. She wanted a project that all the students could manage, where they could get a stakeholder and which would not be too expensive.

Diana wanted to initiate learning about Food Technology by giving students hands-on experience with foods and food formulation.

By trying out basic recipes such as pikelets, students learn from their own mistakes.

This unit would bring in sensory and storage testing and give students their first experience of working with a stakeholder.

*Diana Eagle: "I wanted to come up with a Year 10 project that could build from a given brief; which was constraining enough to be manageable from a teaching perspective but gave the students enough of a chance to show their creativity and to do it in a way which would lead them into the approach we would be taking in Year 11."*

**Diana Eagle:** "A lot of students will cook and make a 'moosh' and they don't care because it's their 'moosh' and they'll eat it. They don't tend to look back at what they've made and analyse what happened. They just go on to the next practical lesson and make another 'moosh'. Then a few years later they have to make rice or whatever again and can't remember how they made it."

## Study BP622

[Abstract](#)[Background](#)[Pre-planning](#)[Delivery](#)[Outcomes](#)[What next?](#)[Two years later...](#)[Using the unit in another school](#)

## GALLERIES:

[Project gallery](#)[Workbooks](#)[Jessie](#)[Sarah](#)

## LINKS:

[Phase 1 schools](#)[School website](#)

Published:  
January 2007



[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

[About Techlink](#) | [Order Pamphlets](#) | [Events calendar](#) | [Useful Websites](#) | [Search Techlink](#) | [Feedback Survey](#)

© 2003-2010 IPENZ - Engineers New Zealand



[newzealand.govt.nz](http://www.newzealand.govt.nz)

[Curriculum](#)[Case studies](#)[IP](#)[Teaching snapshots](#)[Student showcase](#)[For parents](#)[GIF Technology](#)[Technology news](#)

## CASE STUDIES

[Classroom Practice](#)[Materials](#)[Food and Bio-related](#)[Unlocking the secrets of Food Technology](#)[Healthy, funky, saleable lunches](#)[Extreme makeover](#)[Cool food](#)[Space nuggets](#)[Memory catchers](#)[Kiwi bread](#)[Links with a practicing food technologist](#)[Batters in a bottle](#)[Food Hawke's Bay](#)[Value-added noodles](#)[Tararua chocolates](#)[Digital Technology](#)[Electronics](#)[Teaching Practice](#)[Graphics](#)[Older Case Studies](#)[Technologists' Practice](#)[Enterprise Links](#)

## Case Study BP622: Batters in a Bottle

## Study BP622

## Delivery

With their initial brief the class was given the conceptual statement "You are to develop and make a gift for someone special within the context of 'Batters in a Bottle.'" Most of the class chose a parent or other family member as the stakeholder for their project. The final product would be the ingredients for a particular batter, presented in jars.

The cooking focused on basic recipes. The class all made pikelets, scones, pancakes and muffins to identify the desirable key attributes for each and apply these to their product investigations. Diana encouraged the class to connect what they were doing with the conceptual statements and terminology they had been introduced to at the beginning of the unit.

Students made profiles establishing a need or opportunity related to their stakeholders and established their preferences for the basic recipes through a survey.

Storage tests were done in groups using recycled jars. While this is not a big part of the unit, it introduced testing for storage – knowledge required for future projects. Various samples were put into small containers: a control sample of flour, baking powder and sugar plus one of layered ingredients; one with water; one with milk; and some with added ingredients such as chocolate chips or nuts. When asked "What about cream?" Diana got them to test this as well. The samples were described on the storage test chart before labelling and storing, with weekly checks made over the following month. At the completion of the test students analysed the results and decided what containers to use for their product development.

In the Materials workroom the class was given a demonstration of how to make a shaper or cutter if they decided to use this in their project. Time was also spent discussing the benefits of labelling and its usefulness for product presentation.

Moving on from investigation to brief refinement had the class identifying key factors they needed to consider: stakeholder needs, costs, hygienic and safe production of the product, packaging and labelling.

As they worked on their concept development students were guiding their own practice with stakeholder consultations – each time they made a product they got stakeholder opinion of a sample.

Students trialled recipes before deciding which they preferred and thought most suitable for a product in a bottle, and determining their stakeholder's preferences established through sensory testing (using the **hedonic scale**) as well as delete 'the' feedback comments. A ranking test was also used to get stakeholder opinion on ingredients.

After making their choice of shaper or cutter the class worked in the materials room to make them. Those who were making muffins, and therefore didn't need a shaper, were able to do this activity as an extra.

Students then did a final revision of the constraints and performance specifications of the product for their stakeholder. They made their selected products, with variations, and asked stakeholders to comment on their preferences.

After presenting their finished product to their client, each student did a small



**Diana Eagle:** "With pikelets, scones and muffins you can see what's gone wrong quite easily and there are ways to fix it quite easily. There's a wide range of recipes they can choose from when they want to experiment and change things, so it's a good starting point."



[Abstract](#)  
[Background](#)  
[Pre-planning](#)  
[Delivery](#)  
[Outcomes](#)  
[What next?](#)  
[Two years later...](#)  
[Using the unit in another school](#)

GALLERIES:  
[Project gallery](#)  
[Workbooks](#)  
[Jessie](#)  
[Sarah](#)

LINKS:  
[Phase 1 schools](#)  
[School website](#)

Published:  
 January 2007

presentation to the class about their product.

Students received written feedback from their stakeholders about the presentation and the product, and then evaluated how the outcome matched the requirements of the brief. Students concluded their work by evaluating their technological practice. They compared it with their practice from earlier projects and discussed any improvements they could have made to Batters in a Bottle if given more time.

[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

---

[About Techlink](#) | [Order Pamphlets](#) | [Events calendar](#) | [Useful Websites](#) | [Search Techlink](#) | [Feedback Survey](#)

© 2003-2010 IPENZ - Engineers New Zealand



[Curriculum](#)[Case studies](#)[IP](#)[Teaching snapshots](#)[Student showcase](#)[For parents](#)[GIF Technology](#)[Technology news](#)

## CASE STUDIES

[Classroom Practice](#)[Materials](#)[Food and Bio-related](#)[Unlocking the secrets of Food Technology](#)[Healthy, funky, saleable lunches](#)[Extreme makeover](#)[Cool food](#)[Space nuggets](#)[Memory catchers](#)[Kiwi bread](#)[Links with a practicing food technologist](#)[Batters in a bottle](#)[Food Hawke's Bay](#)[Value-added noodles](#)[Tararua chocolates](#)[Digital Technology](#)[Electronics](#)[Teaching Practice](#)[Graphics](#)[Older Case Studies](#)[Technologists' Practice](#)[Enterprise Links](#)

## Case Study BP622: Batters in a Bottle

## Outcomes

Diana sees this as a unit that anyone can do or easily expand upon.

Batters in a Bottle was kept as an internal unit, with no visitors or class trips, to keep things simple and focused (students had had the experience of visitors during the Beef and Lamb unit when some chefs were brought into the classroom to talk with them).



**Diana Eagle:** "We're trying to cover the basics in food formulation and give students a range of skills. We want them to understand that it's the underlying part that helps them towards their goal; that it's not about cooking. It's changing the "well, that'll do" attitude when serving up food. We shouldn't have to teach them how to cook everything because we can't."

## Study BP622

[Abstract](#)[Background](#)[Pre-planning](#)[Delivery](#)[Outcomes](#)[What next?](#)[Two years later...](#)[Using the unit in another school](#)

## GALLERIES:

[Project gallery](#)[Workbooks](#)[Jessie](#)[Sarah](#)

## LINKS:

[Phase 1 schools](#)[School website](#)

Published:  
January 2007



[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

[About Techlink](#) | [Order Pamphlets](#) | [Events calendar](#) | [Useful Websites](#) | [Search Techlink](#) | [Feedback Survey](#)

© 2003-2010 IPENZ - Engineers New Zealand



[newzealand.govt.nz](http://www.newzealand.govt.nz)

CASE STUDIES

Case Study BP622: Batters in a Bottle

Study BP622

- Classroom Practice
- Materials
- Food and Bio-related
  - Unlocking the secrets of Food Technology
  - Healthy, funky, saleable lunches
  - Extreme makeover
  - Cool food
  - Space nuggets
  - Memory catchers
  - Kiwi bread
  - Links with a practicing food technologist
  - Batters in a bottle
  - Food Hawke's Bay
  - Value-added noodles
  - Tararua chocolates
- Digital Technology
  - Electronics
  - Teaching Practice
  - Graphics
  - Older Case Studies
  - Technologists' Practice
  - Enterprise Links

### What Next?

Diana plans to drop the Year 10 nutrition unit in 2007 and extend the Beef and Lamb into a longer unit for terms 1 and 2 – students will move on to Batters in a Bottle in terms 3 and 4. The Year 10 class will still focus on basic cooking skills but Diana will emphasise the food formulation aspects and ensure better progression of technological practice within the programme.



Batters in a Bottle could be used at Year 11 (Diana has had one Year 11 student working on this unit).

Diana notes that recycling of containers is something that could be extended in the unit if desired. She has discussed other packaging ideas with the class and some students have decided to use alternative types of packaging

The Year 9 programme will also be changed in 2007. There will be two six-month projects – two classes will work on one project and two on the other, then swap at mid-year. In this new programme students will be taught in four Technology areas and ICT will be incorporated within Technology.

In one project, with a Food/Graphics focus, students will make an ice cream product and create a presentation for it. This will involve Diana, the Graphics and ICT teachers and possibly some Electronics ICT. (This was still in the planning stage in October 2006).

The other project will be a Novelty Items unit, with a Materials/Electronics/Graphics focus, also involving team teaching – this unit was successfully trialled in 2006.

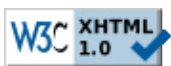
Diana is conscious of the shared aim, with the Bush Primary Schools' Technology Centre, that the Year 7/8 programme should be a seamless transition to Year 9, and will work with [Jacquy Neilson](#) and chat with Carol Pound, food technologist, about what should be in the Year 9 course.

- [Abstract](#)
- [Background](#)
- [Pre-planning](#)
- [Delivery](#)
- [Outcomes](#)
- [What next?](#)
- [Two years later...](#)
- [Using the unit in another school](#)

- GALLERIES:
- [Project gallery](#)
  - [Workbooks](#)
  - [Jessie](#)
  - [Sarah](#)

- LINKS:
- [Phase 1 schools](#)
  - [School website](#)

Published:  
January 2007



[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

[Curriculum](#)[Case studies](#)[IP](#)[Teaching snapshots](#)[Student showcase](#)[For parents](#)[GIF Technology](#)[Technology news](#)

## CASE STUDIES

[Classroom Practice](#)[Materials](#)[Food and Bio-related](#)[Unlocking the secrets of Food Technology](#)[Healthy, funky, saleable lunches](#)[Extreme makeover](#)[Cool food](#)[Space nuggets](#)[Memory catchers](#)[Kiwi bread](#)[Links with a practicing food technologist](#)[Batters in a bottle](#)[Food Hawke's Bay](#)[Value-added noodles](#)[Tararua chocolates](#)[Digital Technology](#)[Electronics](#)[Teaching Practice](#)[Graphics](#)[Older Case Studies](#)[Technologists' Practice](#)[Enterprise Links](#)

## Case Study BP622: Batters in a Bottle

## Study BP622

**Two years later...**

Diana took a break from teaching at the end of 2007 although she is still involved with education – through her educational contract work.

In May 2009, two years after this case study was published, Diana was asked to comment on developments.

**What factors contributed to the success of the unit?**

Diana says that Batters in a Bottle is a useful unit for teachers wanting to introduce more technological practice into their programmes, and that the variety of activities is a key factor in making it successful. She points out that it's not just about making pikelets and muffins, that there is a lot of Food Technology knowledge and skills involved – sensory testing, storage testing, and quality assurance. It also provides an opportunity to look at packaging and labelling, and students have the option to make a cutter in the Hard Materials workshop.

The unit is popular with students because of the large practical component, and because they come in equipped with an existing knowledge/skills base as they are already familiar with making pikelets, scones and muffins. The aim of the unit, to perfect a product, is achievable because students can make these items easily and therefore find it a straight-forward process to develop a quality version. They are encouraged by seeing the improvement in their own work, and creating an end-product focuses students on their own success at the end of the unit.

Ensuring students covered aspects of technological practice, such as planning, was a major focus of the unit. The class was assigned, as a task, the requirement to plan/review/reflect/revise. Some students were able to do this really, really well, Diana says, while others just wanted to "cook". However, being able to record their practice in workbooks (another focus of the unit) helped students "step up" into Year 11. "It gives them a feeling of 'If I do stuff like this, I can achieve' and feeds their success, so they don't feel they're stepping into the unknown at Year 11".

**How has the unit evolved?**

Diana taught Batters in a Bottle three times (2005-2007) and says that it hasn't evolved much, any changes have depended more on the students she had in front of her and what they had to bring to the unit. In the first year she concentrated on students developing a good product but in the second year, when her own confidence had increased, she incorporated more labelling work, making use of her ICT skills and computer software. Not much changed otherwise, she says, as it was a pretty good unit.

**What have you learnt from this unit that has influenced future planning and delivery/ongoing teacher practice?**

Diana says that the unit supported her own progress in teaching Food Technology, by helping her recognise what stage the Year 10 students were at in their learning and how this related to her other classes. She could clearly see what stage her Year 9s should be at by the end of the year and where the Year 11s would be starting in the following year. As part of their ongoing collaboration, Diana discussed her programme with Jacquy Neilson (Bush Primary Schools' Technology Centre) who, in turn, was then clear about the level she wanted her Year 7/8 students to be by the end of the year. See the [Links with a practicing food technologist](#) case study.

The unit also helped Diana and Carol Pound develop their Food Technology Toolbox. They divided the Food Technology knowledge outlined in the Toolbox into three levels of progression – Years 7/8, 9/10, and 11/12. Carol and Diana decided that the knowledge covered in Batters in a Bottle was best taught within the Years 9/10 level. This contributed to their understanding of where Food Technology knowledge should be covered through Years 7-12. See the [Food technology toolbox](#) case study.

**Any comment for other people using this unit?**

Diana comments that this is one unit she feels she wouldn't tire of teaching, because it can be changed depending on the students in the class. Students could be

[Abstract](#)  
[Background](#)  
[Pre-planning](#)  
[Delivery](#)  
[Outcomes](#)  
[What next?](#)  
[Two years later...](#)  
[Using the unit in another school](#)

## GALLERIES:

[Project gallery](#)  
[Workbooks](#)  
[Jessie](#)  
[Sarah](#)

## LINKS:

[Phase 1 schools](#)  
[School website](#)

Published:  
 January 2007

extended by, for example, developing a biscuit mixture (which is more complex than a batter), or by looking at sauces. Diana says she didn't have the opportunity to do development on this and relied on the more able students to take the initiative and do it themselves. However, she did do jam-making with one class, and those who wanted to could use that in their batter development.

If the unit appears too complicated for a class or group of students, the teacher could restrict the range and have students concentrate on one aspect, such as making pikelets and developing their own mixture

The unit would work equally well with other types of food if a teacher wanted something different, although Diana notes that batters work particularly well at Year 10 because they fit neatly into a one-hour format, whereas cakes or biscuits require more time for baking and testing. And the product doesn't need to be a gift; it could instead be developed for a target market, for example, to meet the nutritional needs of a particular group.

Students could do parts of the unit, rather than the whole thing – says Diana. The teacher could look at the Technology Toolbox, to see what could be done, and then at the unit to see how it would work for the students in their class and with the resources in their school. Based on this, they could decide which sections of the unit would move their students forward in the knowledge, skills and technological practice appropriate for them.

[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

---

[About Techlink](#) | [Order Pamphlets](#) | [Events calendar](#) | [Useful Websites](#) | [Search Techlink](#) | [Feedback Survey](#)

© 2003-2010 IPENZ - Engineers New Zealand



[newzealand.govt.nz](http://www.newzealand.govt.nz)

[Curriculum](#)[Case studies](#)[IP](#)[Teaching snapshots](#)[Student showcase](#)[For parents](#)[GIF Technology](#)[Technology news](#)

## CASE STUDIES

[Classroom Practice](#)[Materials](#)[Food and Bio-related](#)[Unlocking the secrets of Food Technology](#)[Healthy, funky, saleable lunches](#)[Extreme makeover](#)[Cool food](#)[Space nuggets](#)[Memory catchers](#)[Kiwi bread](#)[Links with a practicing food technologist](#)[Batters in a bottle](#)[Food Hawke's Bay](#)[Value-added noodles](#)[Tatarua chocolates](#)[Digital Technology](#)[Electronics](#)[Teaching Practice](#)[Graphics](#)[Older Case Studies](#)[Technologists' Practice](#)[Enterprise Links](#)

## Case Study BP622: Batters in a Bottle

## Using the unit in another school...

Food Technology teacher Jillian Tran Van, [Katikati College](#), has used Batters in a Bottle with her students since 2007. Jillian teaches Years 8-13, and says she was conscious that although she was teaching to the curriculum, she wasn't covering everything so there were certain aspects missing in her students' technological practice. Jillian notes that Diana does this well and that her Batters unit covers the whole technological process very successfully. "There are a lot of Home Economics trained teachers who have hesitated to do senior Food Technology, but a unit like this is invaluable in bridging that gap in knowledge".

Using the unit enabled Gillian to extend her students' practice. "Over the years I have done some really good work but with gaps in the technological process – a disadvantage to students if I didn't understand this knowledge myself and therefore didn't pass it on to them".

Jillian didn't teach the entire unit, but adapted the ideas and templates to fit her own themes or issues. Her Year 10 class worked on a Cakes unit, in which they designed and developed a product, although due to time constraints she didn't include the preservation aspect. Another Year 10 class worked on a modified unit in which they developed muffins, while a Year 11 class developed a pasta sauce in the unit.

Jillian notes that her Year 13 class is comprised of students who enjoyed their Year 11 Pasta Sauce unit so much that they have kept coming back to Food Technology in subsequent years. "They're really eager and it's because of that unit, which was improved through using the Batters unit – I get comments about how they wish they could do Food Technology every day".

Jillian says sharing work "is a real buzz" and that her students have enjoyed looking at student workbooks from Diana's classes and seeing examples of how they could approach their work. Jillian builds on this by discussing particular aspects of technological practice, such as planning, which students could choose to do in different ways. The books provided an insight for students who hadn't done Food Technology before – "Oh, that's what you mean" was a typical response. Jillian also directs students to Techlink so that they can see what other students have done, saying it helps get them up to speed and scaffolds their work.

Jillian is enthusiastic about the [Food Technology Toolbox](#) which she says is fantastic. She started using the Toolbox in her planning in 2009, and says that when she streamlines her use of it next year her teaching will only get better.

[Abstract](#) | [Background](#) | [Pre-planning](#) | [Delivery](#) | [Outcomes](#) | [What next?](#)

## Study BP622

[Abstract](#)  
[Background](#)  
[Pre-planning](#)  
[Delivery](#)  
[Outcomes](#)  
[What next?](#)  
[Two years later...](#)  
[Using the unit in another school](#)

## GALLERIES:

[Project gallery](#)  
[Workbooks](#)  
[Jessie](#)  
[Sarah](#)

## LINKS:

[Phase 1 schools](#)  
[School website](#)

Published:  
 January 2007

[About Techlink](#) | [Order Pamphlets](#) | [Events calendar](#) | [Useful Websites](#) | [Search Techlink](#) | [Feedback Survey](#)