

The Challenge of Food Technology in a Multi-cultural School

Lynda Warne

Head of Food and Textiles, Regents Park Girls' School, Southampton

Abstract

A small-scale research study was undertaken in a girls' school in Southampton. The purpose of the study was to ascertain why so few girls opt to study food technology at GCSE level in this school. This is a school with a 19% minority ethnic mix. These pupils are from mainly Asian origin (referred to as the majority), but also Iran, Hong Kong and Nigeria (referred to as the minority). By comparison, large numbers of these pupils choose to study textiles at GCSE.

The research was based on data collected from Year 9 and Year 11 pupils at the school during the spring/summer terms in 1999. By asking pupils questions about their views on technology as an option, and their views about the different technologies, an overview was put together. This highlighted the following key areas:

- parents and their peers heavily influence pupils when making choices
- choices are seldom linked to career aspirations
- the image and status of food technology is a cause for concern:
 - pupils rank textiles above food
 - pupils rank systems and control at the top of the technology table.

Introduction

Over the past five years I have been puzzled by the uneven ratio of minority to majority ethnic pupils opting for food technology at GCSE. Very few minority ethnic pupils were opting into this curriculum area. The study focussed on a girls' secondary school in Southampton with a wide cultural mix of pupils. To discover the main factors which influence 14-year-old pupils to pursue a GCSE course in food technology. To discover why fewer pupils from minority ethnic groups choose to study food technology beyond the Key Stage 3 provision.

The 1997 analysis of ethnic groups showed that 19% of the total school population were of other ethnic origin. The range was very diverse.

Methodology

The main focus of the study was within the food technology department. Data was gathered from both Year 9 and Year 11 pupils. The views of a total of 52 Year 9 and 32 Year 11 pupils were sought using questionnaires. The views of a further 16 Year 9 pupils were gained through focus group interviews. Eleven Year 9 pupils also collected data through keeping diaries over the period of one week. The idea behind the diary was to see if the family structure might influence their technology option choices.

The food and textiles department also provided data. This was through the records of pupils opting for food and textiles over the past five years. The resulting data provided an overview of the number of pupils opting into the food and textiles curriculum from across the ethnic spectrum.

This chart shows that little change is evident over the past five years, despite the change in name from home economics to food technology and the nature of the study material. Two local schools were contacted who also reported similar findings. Very few pupils from minority ethnic groups were opting to study food technology at GCSE.

Choices at 14

As a result of Year 9 pupils making their option choices, considerable data was readily available. The data below is based on a total year group of 222 pupils. It has not been divided down into ethnic groups, but gives us an indication of the spread of choices being made.

The distribution of subject choices versus ethnic origin shows interesting trends for reflection and analysis.

It is interesting to note that the issue of gender does not appear to affect pupils opting for

Table 1: Ethnic origin of pupils in 1997.

Ethnic Origin	Number of Pupils	Percentage
Indian	91	8.7
Pakistani	62	5.8
Bangladeshi	24	2.2
Iranian	6	0.5
East African	6	0.5
Hong Kong	5	0.4
White	849	80

Table 2: Ethnic origin of pupils opting for food technology GCSE.

	1995	1996	1997	1998	1999
All pupils	34	13	21	35	30
Chinese	0	0	0	1	2
Asian	0	2	0	0	0
African-Car	0	0	0	0	0
Other	0	0	0	0	0

resistant materials. The figures show that overall it is more popular with the girls than both food and textiles.

Pupils were asked to identify factors which influence their choices at 14. The most popular reasons given for making a choice in technology across all ethnic groups were:

- it sounds interesting
- enjoyment of the subject
- wanting to learn more
- thought it would be easy.

Other significant factors which influence pupils from the ethnic majority group into making their choices were:

- their peers
- their teachers
- their parents.

For the minority ethnic group the significant factors were:

- their siblings
- their teachers.

It appears that while the parents in the majority ethnic group have a strong influence, this seems to be transferred to the siblings in the minority ethnic group. The sample groups were asked about languages spoken at home, since this is important for two main reasons. Firstly, the pupils may or may not be second generation to this country. If this is considered further it is likely that the values within the family are different to those of the host community and those of the school. This is of importance when looking into why pupils are making the option choices, how and by whom they are being influenced. Secondly, the language of the subject itself. Design and technology uses a lot of specialist language, some of which is not readily translated. We need to be aware of this and acknowledge that some words cannot be translated and subsequently have little meaning. Providing equality of opportunity can therefore sometimes be quite difficult. Such pupils need support from a language specialist to help them overcome these issues.

As the research suggested, for the minority ethnic group, siblings were taking on the role of informant. It is important to ensure that the information is also getting through to their parents. We must remember that the home-school link is important. We should never assume that parents' literacy levels are the same across the whole school population. Low literacy levels affect all ethnic groups, but may be more if English is the second language. We need to be aware that data being sent home to assist with option choices may not be reaching all groups effectively. The suggestion from the research that significant

Table 3: Technology options for Year 9 1999.

Technology Subject	Majority Group %	Minority Group %
Food	15	4
Textiles	10	8
Resistant Materials	23	4
Graphic Products	17	4
Ceramics	4	0
Business Studies	8	0

adults are influencing the pupils should be reassuring. However, these adults are only as good as the data they have access to. It can be quite biased, inaccurate or misleading. No doubt the parent will want what they perceive as the best for their daughter. Their perceptions of the status of the subject will no doubt come to bear when offering advice. The teacher should remain unbiased, looking objectively at the pupil's profile. With design and technology being awarded core status we are seeing pupils taking up courses from across the ability spectrum, without having to battle with the 'status' issue.

The status issue

The marketing of the subject becomes crucial to its success. For both year groups it was apparent that their parents had the single most influence over their final option choices. We need to ensure that we have adequately informed the parents. The change of name from home economics to food technology is sometimes seen as merely cosmetic by many parents. They may have limited access to the issues surrounding the very real changes that have taken place over the past 10 years. As the survey indicated, a significant number of minority ethnic group pupils have English as a second language. How are we to reach these parents successfully, since we have limited access to written documentation in the form of the options booklet? By providing the booklet in a translated format would immediately address equality of opportunity in terms of access to data.

Both year groups see the wider subject of design and technology quite favourably when taken together. Both samples were in favour of studying 'technology' (73%), while 27% of the sample felt that it was not a good idea. The current review of the National Curriculum may go some way towards catering for their needs. One of the key themes is to produce a more flexible curriculum at Key Stage 4 to help match the needs of all learners.

During the course of focus group interviews with both Year 9 and Year 11 pupils, the issue of subject status was raised. These pupils were

Postscript

Since the study was completed, it is pleasing to report that the current uptake of pupils into GCSE food technology overall has increased. More pleasing is that:

- 82% of pupils are from majority ethnic group
- 18% of pupils are from minority ethnic group.

The author hopes that it is in some way a direct result of raising awareness within the department and the school as a whole.

asked to reflect on the reasons for making their choices of either food or textiles at GCSE. Both groups had chosen primarily based on a keen interest in the subject. Food technology pupils were keen to learn to cook, while the textiles pupils wanted to learn to make garments. This serves to reinforce the perception that it remains a 'practical' subject, with pupils valuing this aspect of the course.

A small number of textiles pupils had linked their choices with their future career aspirations. It is not uncommon for teenage girls to opt for textiles at this school because they wish to pursue a career in the fashion industry. This was not evident in the food group. These pupils had not linked their choice with their career aspirations. They had based their choice on the desire to learn to cook simply because they liked food! They also pointed out that they wanted to learn to cook for the home, not for factory production.

Ranking of the technology subjects – pupils' perceptions

Both groups quite strongly ranked textiles above food. The reasons they gave were quite revealing. They felt that to have textiles listed on their CV looked much better than food technology. This was because they linked textiles to the fashion industry. This industry has a better image for this group than that of the food industry. Comments such as 'doing domestics' and 'everyone can cook, even if it's only beans on toast' was associated by these pupils with food. One pupil pointed out that she didn't know what food technology was all about, so it was likely that a future employer would not!

Pupils were asked to rank the technologies on offer at this school. This they did without any hesitation. Both groups put electronics at the top. This was because it was 'hard, like physics'. It was also seen as a boy's subject. Next on the list was graphics, because they felt it would look good to an employer. Specifically neither group mentioned resistant materials. Both groups were taken aback when they were told that the intention is that they have equal status.

One pupil felt that, if you were a boy, to have textiles on your CV would prove a talking point with a prospective employer. Another pupil pointed out that there were a lot of famous chefs.

The food group was asked why they thought so few pupils from ethnic minority groups were choosing to study food to GCSE. The reasons they gave were of interest. One pupil felt that cooking was generally a 'young' thing that you did with your mum when you were small. However, sewing was an activity

that you took up when you were older and more independent. This group also felt that fabric was more readily available in Asian households. They also felt that sewing was more part of their culture. Cooking was also seen as a chore. Asian girls do a lot of cooking at home with their mums. They were taught traditional dishes. The majority ethnic girls felt that cooking and sewing are more traditional in Asian households compared to their own.

It became apparent through questioning that food technology was seen as 'serving others' whether you want to or not. Textiles were seen as creating for you – a sense of ownership of the product.

The way forward

The study highlighted a number of key factors that influence the management of food technology in the National Curriculum at Key Stage 3 and Key Stage 4. In seeking to clarify factors that affect the rationale behind pupils' perception of the subject, it seems that these have links with people's perception of the subject of food in this country as a whole. The key issues that have been highlighted include:

- the influence of the family
- the influence of the school
- peer group pressure
- socio-economic factors
- cultural factors
- gender issues.

Whilst a lot of effort has been put into strengthening the image of the subject, food technology continues to suffer from a low status. Numerous initiatives and projects have been instigated at different levels that seek to promote better understanding of the subject. The recent introduction of the minimum wage may go some way to lessen the catering and hospitality's image of low pay, poor image and low status. The marketing of the subject within the school can readily be improved. An awareness raising exercise is needed, not only with pupils, but also with our teacher colleagues, parents, school governors and employers. Providing opportunities to teach about food which can be related to school policies. For example, personal, social and moral education.

Food touches everyone's life on a day to day basis. The school is in a unique position to influence the pupils' perception of food as a basic human need. The food industry, the hospitality business and the leisure and tourism industry need to work together to raise its profile and make it a profession. Only when this begins to occur can the food technology teacher hope to provide equality of opportunity to all pupils.