

# An approach towards the integration of Business Studies in National Curriculum Technology

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As the delivery of National Curriculum Technology (NCT) evolves in schools, we are witnessing the emergence of a range of models and approaches which reflect each institution's attempts to deal with many varying and often conflicting factors. These factors can be broadly categorised under two headings; the *organisational* problems of staffing, timetabling, resourcing and accommodation and the *curricular* problems of content, delivery and assessment. Whilst the factors are, for the most part, common to all schools, individual responses to them are likely to vary considerably since the dynamics and physical constraints in each institution will be unique.

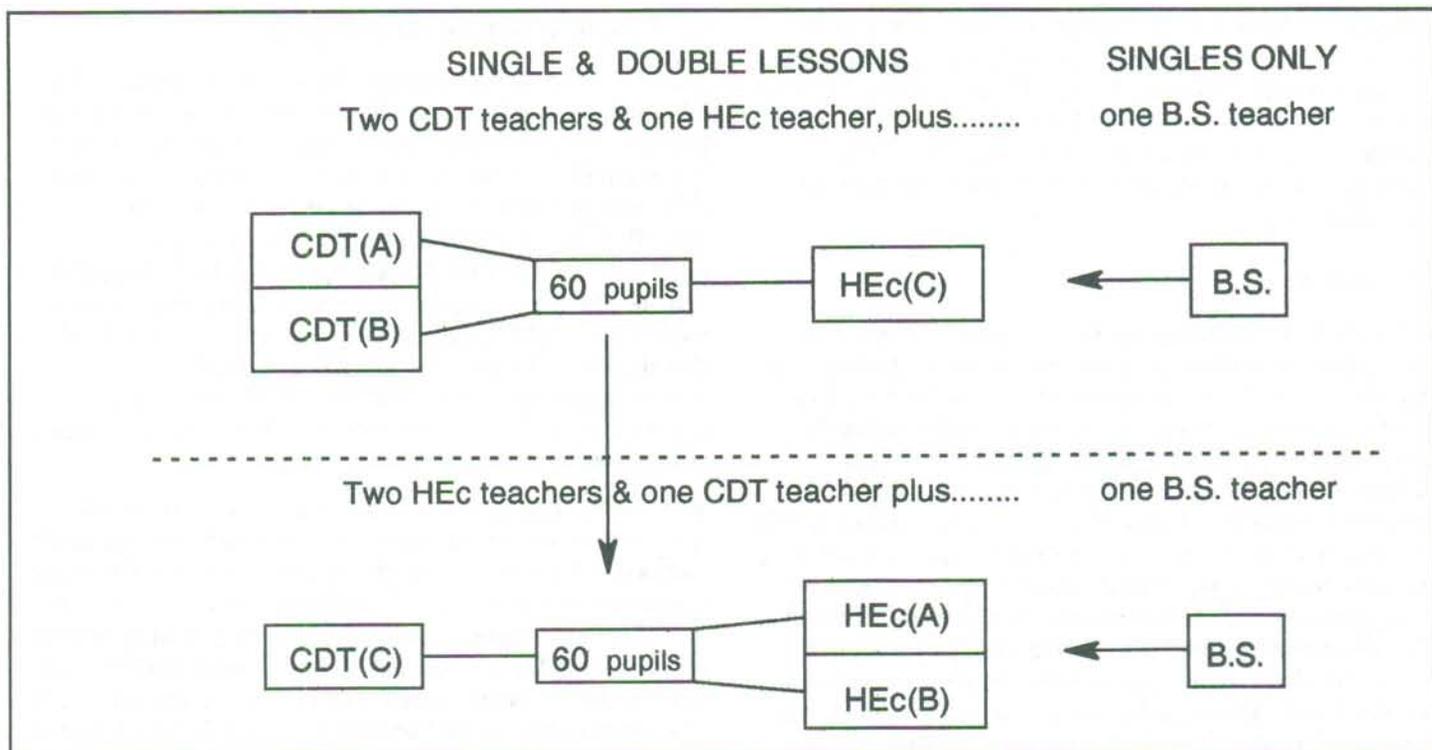
This paper is an attempt to describe how NCT has been implemented in one school, with particular reference to the organisational structure which has been adopted and the way in which a Business Studies dimension has been integrated.

## □ Organisational structure

The Technology Faculty at Shatin College comprises the Craft, Design & Technology, Home Economics and Information Technology Departments. The Technology Planning Team consists of representatives from these areas plus staff from Art and Business Studies. There has been strong senior management support for NCT and manifestations of this include an increase in time allowance from 4 to 5 periods per week and a generous teaching ration of 1:15 for the Business Studies element of the course. The cohort in each year group is 120 and the timetable is organised on a half-year-group basis (see Figure 1).

In common with many UK schools, Shatin College has adopted a 'federated approach' with CDT and HEc as the principal delivery team, each having an allocation of 2 ppw. IT is not timetabled but is taught and used by all staff in a fully integrated manner whilst the single lesson is used for a specific Business Studies input from specialist staff supported by the available CDT/HEc teacher. With just one BS teacher allocated to each half year group, the three classes move through this part of the course on a termly basis. When not receiving a BS input during the single lesson, the remaining two groups continue with CDT or HEc. Represented schematically, the delivery pattern for each year looks like this (see Figure 2).

The corner-stone of this approach is that it builds on existing good practice whilst giving staff and pupils the opportunity to familiarise themselves with, and gradually acquire the skills required to successfully operate an integrated approach. As these skills grow together with confidence in their use, the blocks of integrated work will hopefully be expanded in successive years. The model also acknowledges the value of teaching subject-specific skills and knowledge which pupils will be able to build into a resource base to draw upon in future integrated projects. Finally, in purely practical terms, this approach allows for a sensible utilisation of accommodation and facilities in buildings which were not designed for cross-curricular work.



Above: Figure 1

Right: Figure 2

2	<b>CDT</b> +IT	Subject-based teaching	Subject-based teaching
2	<b>HEc</b> +IT	Subject-based teaching	Subject-based teaching
1	<b>B.S.</b> +IT		

**Course content**

The first step towards establishing a Scheme of Work for Technology at KS3 was to examine the Programmes of Study (PoS) and group them into related, manageable blocks. Sixteen such blocks were established and from this list it became easier to identify those *general* statements which almost any D & T project might embrace and those more specialised statements which would require specific *targeting* to ensure proper coverage. It was then decided that 'Contexts' should be explored progressively starting with those most familiar to the Year 7 students. Finally, the Planning Team 'brainstormed' and researched a wide range of possible themes for the periods of integrated activity. The following topics were eventually chosen:

YR	CONTEXT	THEMES
7	Home & School	Storage Entertainment
8	Recreation & Community	Travel People
9	Business & Industry	Consumerism Business Enterprise

**The business studies dimension**

In the PoS grouping exercise, eighteen statements were identified as having a specific Business Studies/Economic Awareness emphasis (see Appendix). These were taken as the basis for establishing the nature and content of the BS contribution. An initial introduction to Business Studies was followed by a detailed treatment of each theme, using the targeted statements.

**Year 7**

In Year 7 the broad areas of study were *advertising, market research and costing*. Class-based activity revolved around a series of pupil worksheets for each of these three areas. The areas were given theoretical treatment by BS staff and then applied to the work being undertaken in other parts of the Technology curriculum during the 'Storage' theme. For example, the concept of advertising was linked to outcomes in CDT and HEc with the pupils having to promote their own products. Costs involved different types (eg. fixed and variable), calculating and displaying. Pupils were encouraged to recognise the existence of different kinds of markets, design questionnaires and implement basic market research.

Throughout the course, appropriate software was used to present and analyse data. Even basic pupil-centred tasks were frequently carried out using IT; spreadsheets, Draw, Presenter and First World Plus all proved invaluable. When themes changed (from Storage to Entertainment in Year 7) the teaching materials were adapted accordingly but the same areas were covered.

### □ Year 8

In Year 8 different statements were targeted and activities focused on *expenditure patterns*, *choice* and *budgeting*. The first theme was 'Travel & Transport' and the Year 8 course was based upon consumer decision-making involving the budgeting of income for potential holiday destinations. Students were divided into pairs and each pair adopted an imaginary domestic role (eg. married with two children) with a specific budget. As in Year 7, the theme was explored using Business Studies skills. This required the pupils to research costs, plan expenditure and select a 'best' holiday destination. The whole term's work led to a wide variety of outcomes which included videos, tapes, posters, booklets, storyboards and brochures. Although the course structure was fairly rigid in terms of the Business Studies element, the final results displayed its open-ended nature. The IT content was much the same as for Year 7, although hopefully at a higher level. Unlike Year 7 this course did not rely upon a pupil outcome from another subject area, although these were used where possible. Pupil experience was undoubtedly enhanced by the different approaches of the other NCT areas; in HEc, food and culture were studied whilst in CDT different forms of transport were examined. The acid test of pupil response was very encouraging.

### □ Year 9

Year 9 operated slightly differently as this was effectively a pilot for future years. A product-based Mini-Enterprise course was used to introduce pupils to the concepts underlying Business Studies. Although no PoS were specifically targeted, this should take place next year and the Year 9 component will hopefully reinforce and extend the experiences of Year 7 and 8. It is also hoped that the chosen product or service will be fully linked with the other NCT areas through groups marketing outcomes from CDT and HEc. The cross-curricular benefits should then become apparent.

Throughout these three years, the Business Studies component attempted to link in with much of the work being undertaken in other subject areas. This is clearly desirable to avoid subject isolation and is in keeping with the integrated approach which is advocated in the National Curriculum. For staff, NCT in Year 7-9 has undoubtedly given a valuable insight into cross-curricular links between subjects.

### □ Possible future development

The above course has been running for almost a year and is currently being refined for 1992/93. Whilst this structure has proved to be an excellent way to 'ease into' NCT, it is clear that if pupils are to be given a chance to synthesise learned skills and genuinely demonstrate their technological capability, then the themes which are adopted need to be more holistic. Members of the team have acknowledged this and are now much more willing to accept the idea after our twelve month period of transition. However, it is also likely that significant blocks of time will be retained for subject-based input in an attempt to retain high-quality practical work and avoid too much of the frequently criticised 'Blue Peter' approach to manufacturing.

Whilst it has been possible to retain the services of a BS specialist on the delivery team for the coming year, the model outlined in Fig.1 is undeniably expensive in terms of staffing. Consideration has therefore been given to this element of the course being *prepared* by specialists on the planning team but *delivered* by CDT or HEc staff in Year 7 and 8. Problems of 'ownership' are bound to be created by such a distinction but as cross-curricular work becomes more widely established in secondary schools, the trend seems likely to grow.

The structure and content outlined in this paper are an initial attempt to address the challenges of National Curriculum Technology through a phased introduction in an 11-18 secondary school. By an ongoing process of feedback, evaluation and modification the course will undoubtedly continue to evolve.

### □ Appendix

The Programme of Study which were identified as having a specific Business Studies content were:

- 15b, 17b.
- 4Ca, 4Cb, 4Cd, 4Ce.
- 44b, 44c.
- 45a, 45b, 45c.
- 46b, 46c, 46d, 46e.
- 47a, 47b, 47d.