

# Conference report

An outline of the conference activities and brief details of inputs was reported in the July DATANEWS. What follows is:

- a. a report of Vic Greens' keynote input;
- b. the issues raised by the special interest groups (special needs, values, primary and ITE) following this input and wider discussions on design and technology;
- c. the recommendations they made to DATA at the end of the conference.

The inputs by Neil MacLean, SEAC and Mick Walker NCC are included on the National Curriculum Update page.

## ■ Vic Greens' Opening Keynote Speech

This speech offered a well-grounded mixture of updating, opportunity, reassurance and modest optimism for DATA members waking to difficult and uncertain times. The sense of confidence and purpose this engendered was evident throughout the remainder of the conference.

Listing the positive signs for Technology Vic Green included the following.

- a. The central place occupied by Technology in Sir Ron Dearing's current review of the National Curriculum.
- b. The continuing opportunity for teachers to influence the new orders and, in particular, the powerful role that DATA was able to play — building upon the strong position it had already achieved.
- c. A renewed concern for children with special education needs — now mandatory.
- d. The substantial funds now being made available for Technology in 220 schools under the Technology Schools Initiative, which is likely to be expanded.
- e. The large interest in in-service training — 64 colleges are providing 20 day specialist design and technology programmes under the GEST 11 programme.
- f. New school-based courses for initial training in design and technology teaching.
- g. The existence of three major development projects, all extensively funded:
  - i. The Nuffield project;
  - ii. The Royal Society of Arts project;
  - iii. The Technology Enhancement Programme.

In the light of the scenario of increased funding and resource generation Vic Green reminded DATA members of the key considerations that must be held as priorities. Chief of these is quality maintenance. This includes the following.

- a. High teacher expectations.
- b. Pupils exercising responsibility.
- c. Provision of motivating work possibly vocationally linked.
- d. Offering a real challenge to students.
- e. Availability of appropriate resources.

A lively question time and stimulating discussion were fitting conclusions to a valuable and much appreciated session.

## ■ Primary Issues

Discussion in these sessions focused around two main areas:

- the specific needs of primary colleagues whose agenda is different from secondary;
- how best DATA can meet these needs and so become more widely supported by the primary sector.

A number of points were offered to support these areas. Primary teachers are mainly non-specialist and would be particularly interested in:

- ideas for resources and classroom management;
- examples of schemes of work;
- defining the core needed to teach effective design and technology;
- packs to link areas of the curriculum;
- videos of real pupils in real classrooms;
- how to cope with the two year interim period.

## Recommendations

- A higher profile for Primary — more pro-active with a separate voice.
- A regional primary focus.
- An increased representation of primary members including early years representation.
- Target the 20 day course participants, provide a slot for them at next years conference, provide a DATA welcome pack.
- Print articles linking areas of the curriculum in *Primary DATA* to encourage institutions to join.
- Consider a lower subscription fee with only one journal included.
- Collate a bank of useful contacts/speakers/workshop organisers. Information could be provided by regional groups so that DATA members share their expertise in authorities other than their own.

The discussion in the final slot was very vigorous and free flowing. Unfortunately time ran out and the group had to be stopped from



continuing. That this happened so late on the Sunday afternoon after two days of intensive debate shows testimony to the importance delegates attached to this area.

### ■ Special Needs Issues

- Food is important in design and technology especially as a motivator for SEN pupils because it relates directly to an obvious personal need.
- The 'Human needs' aspect of DMTs needs to be explicit in the new proposals. It promotes a greater sense of ownership by the pupils of their project work and a direct relationship to their own needs and those of others immediately around them. This is relevant to all pupils but particularly those with special educational needs.
- There appears to be a shortage of Inspectors who have expertise both in SEN and design and technology to the detriment of our subject in this area.
- There is a need for clear definition and understanding of the range of SEN pupils in mainstream and special schools. The definition should be pursued to develop a co-ordinated approach to developing policy and practice for SEN pupils within the design and technology proposals.
- There is a need for access to other aspects of the conference whilst raising the profile of SEN in design and technology.
- We appreciate:
  - the opportunities within the conference for SEN in design and technology;
  - the remark of Vic Green with reference to SEN in design and technology;
  - the involvement of a Special School in the NCC research project on DMTs (Barnsley LEA).

We would, however, like to raise the profile of SEN further. We raise the question:

is there a conflict of interest for high-profile projects and design and technology leaders between the need to raise the profile of design and technology in the public, professional and political scenes with its related concept of quality (especially CTCs and high flyers) and SEN pupils in special and mainstream schools?

### Recommendations

- Special needs issues pervade the whole spectrum of the work and concerns of DATA. Bearing this in mind we recommend that a representative of the Special Needs Special Interest Group be co-opted on to each of the other working groups.
- To facilitate efficient dissemination of ideas information and resources. DATA needs to establish a network/database of those interested and active in the field of SEN. This could also encourage membership and reduce a sense of isolation for teachers involved with SEN.
- That DATA seeks to produce a significant publication on SEN and design and technology.
- That the language used within the new proposals and in assessment be reviewed, for the benefit of staff and pupils especially to improve access, involvement and a true sense of ownership.
- We would like to see written into the constitution a commitment by DATA to equal opportunities especially organisation, working practices and publications.

### ■ Values Issues

- Technological activity cannot and must not be divorced from its human and environmental context.
- A prescriptive curriculum undervalues the imagination, creativity and experience of pupils.
- There is clear evidence that students are excited and motivated by projects starting with real human needs and environmental issues.
- It is not only a breadth of materials and components that is needed but also breadth of criteria for evaluation which includes social, environmental, cultural, moral considerations.
- Difficult value conflicts need to be recognised. Pupils need help in making values explicit and in coming to informed decisions.

The group would wish to see the 'Mission statement for design and technology' modified to read...



*D&T involves creatively applying knowledge, skills and experience when designing making and evaluating appropriate and quality products with due regard for human and environmental implications.*

### Recommendations

- That teachers be given practical help to enable them to encourage pupils to recognise and address the values issues. This could be achieved through publications, conferences, etc.
- That DATA continue to lobby those responsible for developments in design and technology on behalf of all DATA members.
- That the Values Special Interest Group have a nominated representative to contribute to each area of DATA activity.
- That DATA continues to provide the much appreciated support in this vital area.

The ITE group had an additional input from Nick Green HMI on developments in Design and Technology in Initial Teacher Training. An outline of these developments and proposals is given below together with the group's conclusions.

### ■ Nick Green HMI

A task group is at present looking at the issues surrounding the most desirable future models for Technology ITT.

They feel that there is a need for change since all previous legislation has focused on schools, not ITT.

They wish to determine the minimum requirements and provide guidance for ITT in order to produce competent and confident teachers in the light of the increased demand for the provision of Technology.

The ITT curriculum is overcrowded, particularly the Secondary PGCE and Primary curriculum courses.

Standards are very variable and there is a need for clear goals.

There is a lack of appropriate quality assurance and students need to have a basic entitlement based upon levels of competence.

This will not entail identical training for all students, but a range of training models which may vary in content, competences and the level of training.

### Current situation

Primary ITT training is for curriculum leadership or class teachers, prior to NC only a few institutions offered Primary Technology (as CDT), with design and technology not featuring strongly until NC. Provision is variable, with time allocation from 9 to 60 hours and there is a wide variation in subject content and individual development of students' design and technology capability.

Primary training will need to encompass as wide a range of materials and processes as possible with opportunities for designing and making at adult level (i.e. one and a half years of degree-level study).

Secondary ITT Technology training is rooted in HEC, CDT, Art and BIS. These titles rarely appear in the course titles, but courses are generally based on these subjects. HMI allows specialism CDT/HEC to continue but with an increasing expectation that courses will include other aspects, e.g. IT (design and technology related) and BIS. HMI never qualified or determined the balance because of (a) resource implications, (b) watering down of courses, (c) the need for specialists in schools.

The new format for courses will be based on the new proposals, and although these are still in debate, are likely to form the core of the revised Order.

### ■ Nick Green presented several models for secondary and primary

#### Primary

- Generalist: with competency to teach the two core and five supporting Programmes of Study (PoS) up to KS 1 and 2.
- Semi-specialists: (i) with competency to teach two core and five supporting PoS up to a limited level of attainment (KS 1) and additionally two to four of the supporting PoS upto KS 2.
- Semi-specialist: (ii) take model one or two as one element of newly proposed six subject BEd in draft Circular for Primary IT.

#### Secondary

- Generalist: with competency to teach two core and five supporting PoS up to equally high levels of attainment, e.g. Level 5.
- Semi-specialist: with competency to teach two core and five supporting PoS up to a



limited level of attainment and additionally two supporting PoS to a higher level.

- c. Specialists: with a competency to teach two core and one or two supporting PoS up to and beyond a specified level of attainment.

#### Issues: Secondary/Primary

- a. Should students' previous experience be expected to match the model of training?
- b. Should food-based work range from domestic to commercial?
- c. Should course contents be as close as possible to NC or should contents be based on competence?
- d. Should the two be combined in ITT to reflect NC, what should be taught, attained? NSG for ITT?
- e. DMTs for ITT should be developed to reflect the needs of the training models, in particular, content in Primary Curriculum studies.
- f. Partnership schemes: these will provide access to the full range of Technology resources and staffing expertise in schools.
- g. The role of HE and schools in the teaching of subject studies (circular 9/92 — school lead in subject applications) requires a compatibility between theory and practical.
- h. Owing to the range of subject departments which contribute to design and technology there is a question over the choice of mentors for school-based training.

#### Issues raised by the monitoring of Articled Teachers Schemes and School-based ITT

Partnerships need the following.

- a. To define the roles of those involved.
- b. Realistic costing.
- c. Delegation of resources and responsibilities.
- d. Auditing of the use of money.
- e. Criteria for the selection (sic) of schools and departments.
- f. To agree competences and methods used to assess their development.
- h. Guidelines for the training of teachers involved in ITT to ensure comparability across institutions and opportunities for

teachers to acquire additional professional qualifications.

- i. The systematic involvement of trained mentors.

The discussion of these issues was inconclusive, although the general feeling seemed to be that primary teachers would need to be proficient in all of the PoS and Secondary teachers would need to have a specialism combined with an overview of the other aspects of the PoS.

There was concern expressed that:

- a. the way the PoS are divided in the proposals it would be difficult to divide them up in this manner as just teaching part of it would not be design and technology;
- b. there would be the probability that none of the above models would result in specialists in design and technology;
- c. there are implications for the implementation of GNVQ — without specialists, who will teach them? Without specialists who will teach the teachers?

#### Recommendations

- a. That DATA's ITE Working Group address the following issues:
  - difficulties with school-based training partnership for this subject;
  - HMI minimum output models;
  - clarification of terminology across phases;
  - variable resources in institutions;
  - (TSI) funding for ITE?
- b. That a network and communication system be established for ITE.