

Editorial

With the publication of the Interim Report of the Design and Technology Working Group of the National Curriculum, it is possible to see how far the subject has come and what challenges lie ahead. Over the last decade and a half, the craft skills model has been altered almost beyond recognition to a design and technology problem-solving approach. This is not to say that everyone agrees on what design and technology is or how it ought to be taught but progress has been made on these questions. Girls have come to study the subject and we are aware of the need to make the subject more 'girl-friendly'. Others outside of the area have become more conscious of the importance of design and technology both for the economic life of the nation and for the essential understanding of the educated citizen. Hence the recommendation that design and technology be part of the 5-16 national curriculum. The Interim Report has proposed a cross-curricular model, the features of which need discussion, clarification and experimentation. CDT though only one of several elements of the new area of learning, has the opportunity to take up the challenge and set down the pattern of responsibility and study for design and technology within each individual school.

The challenge is great for teacher training with which this issue is largely concerned. There is a desperate shortage of the CDT teachers required to teach this part of the national curriculum, yet in just over a year all children from the age of 5 years of age will need to study the area. Many primary school teachers will require in service training to help them cope with what may be a new subject area for the school. The various teachers training departments will need to work with LEAs to ensure that any new subject staff arriving into teaching by alternative routes are trained to cope with the sophisticated methods of the modern school. At the same time the departments have to be able to offer new ways of attracting many more students, particularly females, into CDT teaching courses. Besides the problems of numbers, the departments have to be able to meet the requirements of industry by providing a realistic context for design work without undervaluing

the breadth of education required by a cross-curricular approach. If we stand still we will be overtaken by events.

The articles of this journal endeavour to touch on some of these problems. They tell us of experiments in courses as well as moves towards new emphases in learning. There are also reflections on the American scene and questions about the cross-curricular model as well as considerations about changes in teacher appraisal.

According to the Platt report on equal opportunities and teacher training two major sources of women in CDT are retraining courses and access courses. There are two articles on these types of course, with Brian Tait discussing the access courses for women only at Wolverhampton polytechnic and Roger Elmer offering an interesting view of the retraining course at St Alfred's Winchester, where there are two certificated levels of competency. George Shield offers a picture of Sunderland Polytechnic's apparently successful attempt at increasing student numbers through course mixing and an integrated approach to initial training and inservice work. Fred Adamson, from the same institute, analyses some of their research on teaching practice, pointing out students' concern that they confront different models of CDT in schools and polytechnic. We are still not speaking in unison. The article by Duncan Harris and Trevor Sampson both argues the need for team work in CDT and shows with detailed practical examples how it is built up. We are also shown how schools can use industrial links to enhance group projects and to provide a realistic context for the resultant activity. Bill Goddard follows another strand of this theme by showing how Thames Polytechnic students engage in their group projects through working with external institutions on particular design problems. A different but equally fascinating aspect of group work is discussed by Jose Chambers a DTI research fellow situated at St Alfred's Winchester. She analyses student talk when engaged in design work raising for us certain important questions at the end of her paper.

There are three more general papers. One by John Matthias and Jeff Jones takes as its starting point the fact that

shortly LEAs will have to introduce appraisal schemes for all their teachers. The paper offers an authoritative account of the likely features of such a programme. Bob Booth from Wolverhampton Polytechnic provides an interesting insight into American technological education. It is valuable for us to know something of the practices of other educational systems, and the American system is particularly important in the light of the frequent references made to it by the present Secretary of State. The article concludes by emphasizing the thoroughness and depth of the American research and philosophy, which is contrasted with the narrower attitudes of school staff who are reluctant to change. The issue of change also features in Bernard Down's article on technology across the curriculum. Some of the practical difficulties of implementing such a programme are raised and different models of organizing a cross-curricular technology are analyzed within a broad framework, produced by reports and observations.

Bernard Down

Special Notice

Annual Studies in Design Education Craft & Technology Conference, Warwick University.

This year's conference on The National Curriculum in Design & Technology with Lady Parkes and Professor John Tomlinson was hugely over-subscribed. A repeat, with the same speakers will be held in the Autumn after the release of the final report of the Working Group on Design and Technology.

Details in the next issue.