

Women in CDT

The EOC has just published an important report entitled *Formal Investigation Report: Craft, Design and Technology Teacher Training* (prepared by Baroness Platt and Michael Fuller) in which the underrepresentation of women in CDT both as pupils and teachers is set out clearly. With permission we print the conclusions to the report which have fundamental implications for all readers of *Studies in Design Education, Craft and Technology*.

From the information received it is apparent that the problem of women's under-representation in CDT, both as pupils and as teachers, is recognised by all those involved in the recruitment and training of teachers of CDT. Such recognition is the first step in the resolution of the problem.

As the preceding chapter has shown, many institutions are already translating recognition into positive action, albeit with varying degrees of success. However, it is the opinion of the Commissioners that whilst these local initiatives are to be applauded, a more co-ordinated and cohesive approach is necessary in order to improve what is essentially a national problem. To this end, the Commissioners have, in the light of the information gathered during the course of the investigation, formed the following conclusions and attendant recommendations, which are addressed to the responsible bodies.

1. The Training Institutions

a) The institutions are aware that more could be done to encourage girls and women to become CDT teachers, principally through the promotion of CDT teaching as an appropriate and rewarding career for women.

Recommendation

Institutions should participate collectively in a national promotional campaign to further this aim. This might include an information pack and/or video, devised by the institutions, for use in schools.

b) Throughout the course of the investigation it has been clear that many women students have entered CDT teacher training by circuitous and haphazard entry routes.

Recommendation

Institutions should consider introducing, individually or collectively, a battery of publicity and recruitment strategies which might include one or more of the following elements:

- i) the systematic mailing of course publicity, and/or visits to secondary schools, including single-sex girls' schools;
- ii) the organisation of well publicised annual 'taster' courses (residential, where appropriate) in CDT for secondary pupils, with particular encouragement for girls to attend. An excellent model is the INSIGHT courses organised by the EITB;
- iii) the strengthening of links with local adult and

further education colleges, with a view to improving the access of mature students, particularly women, to teacher training in CDT;

c) Where links between institutions and local schools exist it appears that they have had a beneficial effect on girls' perceptions of CDT.

Recommendation

Formal links should be developed between all the institutions and the schools in their locality, on the same principle as schools/industry link schemes, whereby pupils may gain experience of CDT in a teacher training environment.

d) Very few women were found to be studying on PGCE courses at the time the questionnaires were completed. As the PGCE route is becoming increasingly important in the training of teachers there should be encouragement by the training institutions of women students pursuing design-related degree courses (e.g. industrial or production design), to consider teacher training in CDT.

Recommendation

Those institutions which offer relevant first degree and/or PGCE courses should establish a network whereby an institution's own undergraduates and/or those of neighbouring establishments are informed of the opportunities available in CDT teacher training.

e) A number of women students have been admitted to CDT departments after originally applying to undertake teacher training in a different, though related, subject (e.g. art and design). Many of them perceived CDT as still being purely woodwork and metal work and had therefore not considered the relevance of their own qualifications and background to the subject.

Recommendation

The institutions should effect arrangements whereby CDT departments may liaise formally with allied departments in order to inform suitable women applicants of the opportunities open to them in CDT teacher training. This may be achieved through, for example, multi-disciplinary selection interviews whereby prospective B.Ed. students who are unsure of their choice of course are made aware of the opportunities available in CDT teacher training. Institutions could also consider adopting an approach to B.Ed. course design which allows for a delayed choice of subject specialisation. If all students follow a broad-based course in the first year which includes mathematics and science/technology, it has been found that some students will then elect to specialise in subjects, such as CDT, which they had limited opportunities to study during their schooling.

f) The highest ratio of women students to men students is on the 1 year re-training course for

qualified teachers. This indicates that there is a ready-made pool of suitable women applicants in this area. A part-time course lasting up to 2 years would reduce the pressures on LEAs caused by releasing a large number of teachers for re-training at any one time. A part-time course might also attract a high number of applications from women teachers who are approaching the end of a career break taken for child-rearing purposes and who may wish to retrain in order to return to teaching as CDT teachers.

Recommendation

The institutions should consider inaugurating part-time re-training courses in CDT for teachers wishing to retrain in the subject. They could also consider allowing such teachers to attend existing part-time B.Ed. courses, which are currently restricted to employed non-graduate teachers seeking to enhance their initial teaching qualifications. With respect to women returners it is important that advertising of re-training courses should be placed where it will come to their attention and should positively encourage them to make further enquiries. Without such encouragement many women may not realise that they possess skills, interests and experiences which might well be of relevance and value for CDT teaching.

g) Despite the existence of flexible and generous admission policies for mature students, such policies have generally failed to attract mature women. As has been shown in the teachers' responses the geographical proximity of an institution is the vital factor in the students' choice of training course.

Recommendation

The institutions should positively encourage mature women to apply for admission by publicising their courses and admission policies in appropriate local venues, for example, libraries, adult and further education colleges, primary and secondary schools, women's training workshops, and local newspapers.

h) There is a consensus among the institutions that the study and teaching of CDT in the primary school could play an important role in the fostering of positive attitudes towards CDT. This is particularly relevant in the case of girls, who may otherwise receive very little technical or technological experience through their early play activities and education.

Recommendation

Those institutions which provide courses of training for primary and middle school teachers should offer CDT as a main or subsidiary subject, and as a module for all primary and middle school trainees.

j) Whilst most institutions include the topic of equal opportunities in their teacher training courses, more could be done to relate the topic specifically to the teaching of CDT.

Recommendation

Institutions should write into their syllabuses the topic of 'girls in CDT', as an essential aspect of teacher training in CDT.

2. The Local Education Authorities

a) There is a need for LEAs to take the responsibility for ensuring that all pupils study CDT at secondary level, and that girls, in particular, are informed of the opportunities afforded by teacher training in CDT.

Recommendation

LEAs should consider the organisation of INSET courses for subject and careers teachers on the topic of girls and CDT. The appointment or delegation of a peripatetic CDT teacher is recommended in order to encourage more girls to study the subject at all examination levels. A working party or curriculum development group could also prove valuable in promoting the method and content of CDT teaching which is as interesting to girls as it is to boys.

b) The majority of LEAs encourage the inclusion of CDT in the curriculum at primary and middle school stages.

Recommendation

LEAs should organise INSET courses for primary and middle school teachers with a view to their encouraging more girls to become involved in CDT at this stage of their schooling.

c) It has been found that visits to schools of women engineers and technologists at the start of their careers, can be most helpful in providing positive role models.

Recommendation

LEAs should use schools/industry link schemes, SATRO's, or should establish industrial or commercial contacts, to ensure that such women are invited into schools.

d) Not all LEAs which have single-sex girls' schools within their control at present make arrangements for pupils in these schools to study CDT.

Recommendation

All LEAs which maintain single-sex girls' schools should ensure that the full range of curriculum options is available in each school, or should make suitable provision by some other method (e.g. allowing girls to attend classes in boys' schools and vice versa). Alternative methods should be clearly defined and well publicised among the pupils' parents.

Note: LEAs are reminded that to differentiate in the courses provided in single sex girls' schools and single sex boys' schools may be unlawful under section 23 of the SDA.

e) Less than half of the LEAs give positive encouragement to women teachers to re-train for CDT teaching.

Recommendation

LEAs should take steps not only to ensure that women teachers are aware of the re-training opportunities available in CDT teaching, but also to provide INSET which would enable suitable women teachers to gain basic knowledge of and skills in CDT. This could be done either independently e.g. at a teachers' centre, or in conjunction with an appropriate training organisation e.g. a local Manpower Services Commission training centre, or an existing course at a local college of further education.

3. Other Responsible Bodies

3.1 Department of Education and Science

a) At 1(a) above it is noted that a national initiative is desirable if more women are to be encouraged into teacher training in CDT.

Recommendation

The DES should assume a stronger role in encouraging more women to apply for teacher training in CDT, not least as a strategy to alleviate the present and foreseeable teacher shortages in the subject. Recruitment literature should positively encourage women to train as CDT teachers, by, for example, portraying women CDT teachers in the illustrations, and should state that training institutions would particularly welcome more applications from women. It is also recommended that DES recruitment literature should provide detailed information concerning the possible routes into CDT teacher training which may be appropriate for all potential trainees not neglecting mature women approaching the end of a career break who may be restricted in terms of geographical mobility. In relation to this latter group of potential trainees, it may well be necessary for DES consideration to extend beyond the provision of encouraging recruitment literature. Since there are only 23 CDT teacher training institutions in England and Wales, and these leave large areas of the country without a local training institution, careful thought needs to be given to appropriate means of tapping this pool of potential trainees. Urgent consideration needs to be given, for example, to the provision of locally-based pre-experience courses, a modular approach to training, distance learning techniques for suitable elements of a training course, or the provision of shortened day courses.

b) A number of training institutions considered that women (and men) students, and teaching standards generally, would be better served by extending the duration of shortened courses.

Recommendation

The DES, in conjunction with the relevant training institutions, should consider the possibility of extending one year shortened courses into two year B.Ed. courses and/or supplementing one year re-training courses for teachers with a year of compulsory in-service training.

c) The experiences of many institutions confirmed the Commission's opinion that the shortage of mature women on shortened courses was partly attribute to the fact that very few women possessed the entrance qualifications stipulated by the DES.

Recommendation

The DES, in conjunction with the relevant institutions, should consider extending the list of approved and relevant vocational qualifications e.g. architecture or interior design B/TEC or DATEC qualifications, which are held by women as well as by men.

3.2 Schools

a) Throughout the investigation it has been apparent that all respondents considered it important to introduce all children — girls, as well as boys — to CDT related experiences and a basic understanding and knowledge of technology at an early age. In 1978 HMI in their survey of Primary Education commented on the lack of provisions in primary schools,

"The comparative neglect of three-dimensional construction is disappointing. Opportunities should be provided for . . . both boys and girls to undertake some work with wood and other resistant materials and to learn to handle the tools and techniques associated with them".
(*Primary Education in England*. A survey by HM Inspectors of Schools, HMSO, 1978).

The importance of CDT experience in primary schools was also emphasised by the EOC Working Party (*Equal Opportunities in Craft, Design and Technology* — EOC 1983),

"Much of the work in primary school can develop positive attitudes to designing and making activities of either an aesthetic and technological nature. Children are fascinated by things which work, but rarely are working models built as part of a topic or project. Model making in card and paper is quite common, but unfortunately the extension of this into work with more resistant materials is not often undertaken".

Recommendation

All primary and middle schools should provide CDT related experiences for all pupils. Although CDT will probably not appear as a separate subject on the primary school timetable, the problem-solving approach which is the basis of CDT, together with experience of simple design method and constructional skills, and a basic knowledge and understanding of technology can and should be

HRH The Duke of Edinburgh is pictured examining Jonathan Kempster's (left) senior winning project following the final awards presentation of the Young Electronics Designer Awards organised by Studies in Design Education, Craft & Technology on 29th May at Westminster School. Also pictured looking on are Christopher Sawyer, Chief Executive of Cirkit Holdings PLC (far right), international singing star Miss Petula Clark (3rd right) and Jonathan's teacher, Mr Cockburn from the Ashcombe School in Dorking, Surrey.



fostered in all primary and middle schools. Those involved in primary education are advised to consult *Equal Opportunities in Craft, Design and Technology*.

b) Many of the questionnaire respondents shared the Commission's view that the organisation and presentation of CDT in secondary schools made an important contribution to the take up of CDT by girls.

Recommendation

Schools should consult *Equal Opportunities in Craft, Design and Technology*, which contains many positive and practical suggestions for the encouragement of girls to study CDT (see Appendix A for further details).

3.3 Examination Boards

a) The content of the CDT syllabuses in schools is largely determined by the requirements of various examination boards.

Recommendation

Examination boards should ensure that syllabuses and examination papers reflect the experiences and interests of both sexes by realising the full educational potential of the subject; this includes the understanding and resolving of human and environmental problems.

In making the above recommendations the Commission is aware that there is no simple answer to the problem of women's under-representation in CDT teaching, the causes of which are deeply rooted in the history of our education system. The report reflects the consensus of opinion among educationalists throughout the education system that *CDT is an important aspect of girls' and boys' education*. It is hoped that:

1. The dissemination of good practices in CDT and the associated recommendations contained in this

report will lead to an appreciable increase in the number of women CDT teachers.

2. Those involved in the provision of both primary and secondary education will do all in their power to ensure that both girls and boys study CDT on equal terms and are made fully aware of the relevance of the subject for post-16 training and employment opportunities, including teaching.

In order to modify the unfortunate and outdated image of CDT which many girls perceive, changes are needed to both course content and teaching method; the emphasis in CDT, for all pupils, is most appropriately placed on design and technology rather than upon the teaching of basic practical skill in wood and metal.

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