Recognising: 'A' Levels in Design and Technology: A Correspondence

Orange Hill Junior and High Schools
30th January, 1981

Dear Prime Minister,

You recently met one of our pupils, Howard Calvert, who had designed a Portable Gymnasium.

It may be of further interest to you that Howard is, in fact, our third Design Council Schools Competition Prizewinner, and that the projects concerned all stem from a course at this school that leads to an Oxford 'A' level qualification in design.

In 1977 the prize was won by another 6th form pupil, Graham Smith, with his project 'A Conceptual Study of Safety in Childrens' Playgrounds', featured at the time in the 'Tomorrow's World' programme.

In 1978 the prize went to a girl pupil of ours, Wendy Allen, who was concerned initially with the design of teaching schemes and visual aids for music in schools. Her considerations led her to design a 'Calculator for Music Notation'; this later developed into an electronic Sound Visualiser which featured in Young Scientists of the Year 1979 and still later into a computer-linked 'Programmed Learning Aid for Music' – in this form the project was one of five from the school to reach the National Finals of the Young Engineer for Britain Competition in 1979, and was placed third in the senior section in competition with industrial undergraduates from Rolls-Royce and the Darlington College of Technology, we were, therefore, the only school to be placed in this section; – another girl from the school was awarded the prize for the best project overall by a girl in the competition.

These achievements and others including a second appearance in Young Scientists of the Year in 1980 (by another team from the school studying 'Human gait in post-operative situations' for which they were awarded £100 and a gold medal by Professor Finklestein of the Institute of Measurement and Control) are the results of a course in Design and Technology which pupils follow from the first year, and which some (boys and girls) continue until their seventh year. Wendy, whom I mentioned earlier, is now at University where she is studying Psychology (a course having a very strong design element) and is soon to have books (again stemming from her major project) published in a number of countries by the Cambridge University Press; – a Midlands firm is considering the manufacture of her calculator.

I mention these achievements to stress the importance and future potential of this subject in all our schools Nationally both Primary and Secondary.

However, there are certain difficulties that prevent rapid expansion of the subject in our schools, not the least of these being the failure of Universities generally to include Design and Technology 'A' levels on their 'good additional 'A' level lists'. It is the experience of pupils that we send to University interviews, that in many instances they find their interviewers uninformed of the existence of these 'A' levels, let alone able to appreciate their significance – they are, however, often surprised at the standard of pupils' 'A' level project reports!

Many professors have rejected the subject as one of a matriculation grouping, on the grounds that the academic content of the course cannot be accurately measured as can subjects like physics and mathematics. To an extent, I can see their point, but tend to think that Universities should at least be prepared to accept Design and Technology as possible additional qualifications, to be assessed on individual merit and with particular attention to major 'A' level design projects.

Having said this, some Universities *are* apparently aware of the potential of students undertaking advanced level project work in design and technology in schools, despite deficiencies in matriculation groupings – for example, Wendy was interviewed at Oxford from their interest in her design project, rather than in her grouping of 'A' level subjects, Psychology, Music and Design; she was told in fact at interview that the standard of her work on the project approximated to that they would expect from their second year undergraduates!

Until this 'acceptability' problem is solved on a National scale, departments like mine will continually lose potentially excellent pupils, as they will naturally opt for those subejcts clearly listed by our Universities as acceptable for entry.

While I would not argue the case unduly for general comparability within the traditional matriculation grouping, I would voice an opinion most strongly that the subject should, at the very least, be clearly stated by Universities as a good additional or even preferred additional subject.

Investment is needed in this important area of Craft, Design & Technology. As we have invested in the encouragement and development of the sciences, let us now invest in this comparatively new area of education where the sciences are being inventively and creatively applied.

Yours sincerely,
Maldwyn Evans
Head of Design and Technical Studies

10 Downing Street
16th March, 1981

Dear Mr. Evans,

Thank you for your letter of 30th January about the work of the Design and Technical Studies Department at Orange Hill School. I was most impressed by the achievements of the young people you mention; both they, and you and your staff, deserve much credit.

I was less happy to hear of the problems encountered by those of your pupils who offer 'A' levels in Design and Technology for University admission. I find your account of their difficulties particularly disquieting since I know that able youngsters are increasingly attracted by the challenge of studies in this field and by their relevance to the 'new technologies' on which our industrial regeneration must be based. I do not think there is any quick or easy answer to the problem. Universities are, of course, autonomous by virtue of their Royal Charters and there is no way in which I or my colleagues can intervene in their affairs; the question of admission procedures is a particularly sensitive area and one moreover, in which individual universities and colleges enjoy absolute discretion. I think you will know that the Standing Conference on Universities Entrance recommended that design-based 'A' levels should be given full recognition in terms of university entrance requirements; but ultimately decisions about the admission of individual candidates rest with the institutions themselves. It is probably true that some admission tutors continue to attach undue weight to traditional academic disciplines and are reluctant to give sufficient credit to the very demanding project work which forms part of the syllabus for advance level design and technology; nevertheless, there are signs of fresh thinking within the university sector and I am told that available evidence suggests that able students are not now generally handicapped by offering a design-based 'A' level – as one of three – when applying for a University place.

National and regional design competitions for young people (for example, the Department of industry's 'Young Engineer for Britain' competition, and that for the Design Council's 'School Design Prize') have done much to secure wider recognition of the importance of craft, design and technology studies in schools; and I understand that the Schools Council have recently set up a small working party to examine the present range of 'A' levels and to propose criteria on which they might be judged. For the Government's part, we fully recognise the important role of craft, design and technology, bot as part of the preparation of pupils for working life and for its wider educational value.

I very much hope that these and other initiative will lead to a more general recognition, at all levels of education, of the importance of design and technology work and go at least some way towards solving the problem of 'acceptability'. I am very grateful to you for having brought this issue to my attention.

Yours sincerely,

Margaret Thatcher