## Going Back to the Future?

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Heads of Design, Leicestershire The importance of good design to industry and society is well documented but is the current Order for Technology helping or hindering the next generation of designers?

Over many years, teachers in Leicestershire have extended a vision of what they believed to be innovative practice in design education — a vision with few boundaries, which encompassed expanding technologies for the benefit of the designed world.

In 1963, the Fielden Report on Engineering
Design reported that criticism had been
levelled at British engineering products, saying
that they looked 'lumpish' and 'rough' and that
'almost always these offences to the eye could
be traced to deficiencies in engineering
design'. The report lists the following
deficiencies as contributing to the overall
problem.

- lack of knowledge of the properties of materials
- inattention to details
- requirements for maintenance
- convenience of the (manufacturing) operator.

Is it significant that ergonomic data — first used in the Second World War, and available since 1949 — appears to have been ignored by British engineering, in contrast to overseas competitors?

And yet, were not the creators of the inadequate solutions mentioned in the Fielden Report the product of a 'coherent' secondary design education based upon the unquestioned teaching and learning of traditional skills and values?

Nineteen years on, Margaret Thatcher repeated the same message:

'There are many ingredients for success in the market place. But I am convinced that British industry will never compete if it forgets the importance of good design. I do not just mean appearance. I mean all the engineering and industrial design that goes into a product from the idea stage to the production stage, and which is so important in ensuring that it works, that it is reliable, that it is good value and that it looks good. In short, it is good design which makes people buy products and which gives products a good name. It is essential to the future of industry.'

Did nobody listen, or did nobody understand? By the actions of this Government, it would seem that education is to blame and that industry has been co-opted to put this right!

In the early 70s, there were areas in the country where design education crossed boundaries, used live projects and made concrete sense of real needs. The statutory requirement for design and technology for all represented an exciting opportunity to build upon 20 years of experience gained within enlightened educational authorities. Why were these examples of 'current good practice' passed over? Why was design education considered to have failed? Indeed, has it failed, or is it being sacrificed in the search for quantifiable elements?

In 1965, J.C. Dancy, Master of Marlborough College, stated: 'In the teaching both of the sciences and of the arts, far too much attention is being paid to the analytical at the expense of the creative . . . There are understandable reasons for this: one is that we are much less adept at recognising and measuring the latter.'

Surely there was (and is) a sound argument for allowing design education to continue to evolve, taking advantage of new technologies and skills, including computer literacy when appropriate. The imposition of an inflexible and prescriptive National Curriculum (which forces many trained design educators to retrace their steps to their own inadequate secondary education) fuels the fear that yet again nothing has been leant. With the present Order comes loss of creativity, a gender imbalance, discrimination against slow learners, and an obsession with content. In our experience, evolution gave rise to interesting, creative solutions which were capable of fulfilling National Curriculum requirements and skills as and when appropriate. The imposed curriculum will arrest this process.

We need to keep moving forwards to educate and produce people capable of employing future technologies with confidence. Not all students will be product designers, but perhaps the experience of flexible thinking, creativity, initiative and intuition will prepare tomorrow's workforce to be self-motivating in the service of industry and life-long learning. Design education is an enlightening, expansive and enabling experience, encompassing aesthetic, ecological and functional considerations.

Stephen Bayley believes that Britain is paying the price for its absurd preoccupation with product rather than the process. Has the National Curriculum moved too far in the other direction? Quality outcomes might include a quality product, but that is not achievable with large class sizes, thin budgets and continuous changes in the Orders and ensuing syllabuses. The outcome is more than mere product - it should also be the experience, and the learning that has taken place. Unfortunately for assessors, aspects of this learning process are (and have always been) difficult to examine. There needs to be an understanding that creativity takes advantage of available technology.

Civilisations prosper when technology and creativity are allowed to mingle, then intuition can play its part and good design results. The overloaded bare-bones curriculum which the Orders represent will not provide sufficient depth and/or breadth of experience to allow intuition to be fostered within the individual or to make a significant contribution to our society.

Technological advancement in the manufacturing industries (food, textiles, ceramics, engineering) will be reliant on the abilities of the future design workforce. Not on abilities rooted in the past, but on those which focus upon the future. Design education supported by technology could provide the way forward. Technology without design will not

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