

# The 1992 Struggle for Design and Technology

Ruth Wright, Engineering Council

This article seeks to illustrate that there is a need to collectively agree on the key purposes, nature, and value of design and technology. Transcribed press cuttings of the period are used to support this premise and also illustrate that D&T policy can be formed and challenged by people, not disembodied actors, on the outside of government policy-making machinery. In exploring a case of a policy-forming struggle it purposefully utilises a practice (what real people do) and narrative approach. Following a general introduction, including dimensions of research in policy fields, some other aspects of context – at theoretical and practice level – are discussed before moving to a story of a 1992-3 press debacle in England over the nature of D&T. A brief early diversion from the story provides further contextual background to one of the key protagonists in the 1992 debate – the Engineering Council. The paper then offers some further thoughts before proposing that there needs to be a renewed attempt at exploring the well-foundedness of policies relating to design and technology, discussing positions on a range of D&T matters, and establishing a collectively agreed, explicit, and internally consistent policy position for design and technology.

*Ruth Wright writes here in a purely personal capacity.*

## Key words

people, policy, design & technology, curriculum, 1992

## Introduction

The purpose of this paper is to illustrate, not to question, that there is a need for all those with an interest to collectively agree on the key purposes, nature, and value of design and technology (D&T). It does this through a narrative about a 1992 media debacle over the nature and future of D&T, utilising press cuttings of the period. This story illustrates that D&T policy can be formed and challenged by people on the outside of the formal, government, policy-making machinery.

*There is no single theory of policymaking that provides researchers and practitioners with adequate tools for analysing and understanding how policymaking currently takes place within...education and how to intervene as a researcher (Hodgson and Spours, 2004:1).*

Researching policy making, let alone how best to intervene as a researcher in the policy-forming process (cf Ball, 1991; Mickelson, 1994), remains open territory. Much has been written concerning issues of relationships between research, policy and practice (Power, 1992; Hargreaves, 1996; Ball, 1997; Ozga, 2000, 2005; Whitty, 2006) – a debate not confined to the UK (Rist, 1994).

Although histories of D&T preceding and surrounding the inclusion and exclusion of D&T in the National Curriculum for England and Wales in the early 1990s have been amply documented elsewhere, policy-memory should be a vital tool in all our conceptual toolkits (Higham and Yeomans, 2005). The first National Curriculum Order (DES and WO, 1990) for Technology was removed in 1992 and reinstated in 1995. There is no room to discuss it here, but D&T, as constituted in the English National Curriculum, continues to be subject to rapid and complex education, economic and social policy changes and remains under constant danger of dilution or fracture. D&T's future may much more easily be challenged if policy-influencers from within broad D&T fields hold disparate views about what D&T 'is' or 'should be' (Wright, 2006).

By the time education policy is even a consultation report or a pilot initiative most is already a firm implementation plan but, as Roberts (1999:7) notes, researchers tend to focus on implementation and that "the object of implementation is a match with specified policy objectives, not the questioning of the well-foundedness of policy". In looking at policy research in education, Ozga (2000:2) emphasises that real people, with their individual perspectives and values, not disembodied actors, form policy and suggests that policy is a "process rather than a product, involving negotiation, contestation or struggle" between different individuals or groups who may well be on the outside of formal policy-making processes. A practice approach to research looks at real people doing real things – "people living and acting within historically situated systems of meaning" (Collier and Yanagisako, 1989:36; cf Ortner, 1984) and this paper focuses on what a few people once did – wrote – in the cause of design and technology.

One reason why it may be difficult to write for a public audience about how policy is formed in practice is that it seems likely that few authors inside or outside of the academy but involved in policy matters wish to reveal or

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publicly contest the views expressed by contemporary policy-formers who may be powerful potential allies (Walford 1994; Ozga and Gewirtz, 1994; Ozga and Walker, 1999). That is not to say that critique does not continue unabated behind closed doors. For this reason, and because I feel that the source materials, press-cuttings, suit this genre, I chiefly adopt here a narrative approach, privileging the voices (writings) of individuals (Clifford, 1983; Cronon, 1992). The story is set in England, around 1992, just one of many possible stories – an acknowledged partial view (Clifford, 1983; Collier, and Yanagisako, 1989; Bryant, 2000). It is important to emphasise that a lot of water has gone under the policy bridge in England since 1992 – most notably, in this context, that the Engineering Council (UK) has since consistently fought for D&T in all its constituent facets (Kimbell and Perry, 2001; Kimbell, 2001). It should also be fully appreciated that individual views are held in time and partial placement.

I hope that transcribed newspaper cuttings which feature as figures later and which are not already published in the literature elsewhere may contribute to the historical D&T record data.

## Background

*Control of the school curriculum has always been a political issue (Sally Tomlinson, 2001:37).*

Paul Black (1998) suggests that, on an international platform, the subject of Technology struggles "between *instrumental* and *humanist* views of education" which include deeply held beliefs about the nature of knowledge and related societal issues (Black, 1998:28). Humanistic views are exemplified in John Eggleston's (1977) policy concerns and discussions of the nature and distribution of knowledge. In discussion of the latter (cf Bernstein, 1971) he suggests that "there are considerable indications to suggest that the critical decisions on high-status curriculum areas are still 'reserved'" (Eggleston, 1977:48). Eggleston (1992) posits that it was the 'intellectualising' of a practical curriculum, and making that available to *all* children – changing the social order (cf Bourdieu and Passeron, 1990) – that made the struggle for D&T hard: "the real issues...are political and ideological" (Eggleston, 1992:63-64).

In identifying some of the agents involved in policy-forming activity David Layton (1992) discusses value systems influencing policy-making in design and technology in the curriculum. Categories of lobby-groups include: economic functionalists (strongly instrumental view); sustainable developers (global responsibility);

The 'crime' of National Curriculum Technology is that it is trying to make these 'intellectual' and expressive aspects of technology available to all children. ...If the endeavour succeeds it may confuse the social order by producing too many chiefs and not enough Indians. And even worse because the emphasis on practical ability is relatively less the Indians may be less skilled and even less willing to be skilled than before.

**Figure 1: John Eggleston, *Times Education Supplement*, 12 June 1992:24**

women (reconstruct women's place in technological developments); and liberal educators – a humanistic view echoing Eggleston's concerns: "Liberal educators see the nature of the activity itself as providing its ultimate curriculum justification...all children have a right to experience this unique style of human activity" (Layton, 1992:7-8).

Another of Layton's (1992) categories is professional technologists – the engineering lobby. Although some might have expected engineers to appear firmly in an economic functionalist category, a more polar position to liberal educators, it may be that Layton was more specifically thinking of the Engineering Council – representing engineers – than, for example, engineering employer lobby groups – "The dominant value concern is one which reflects the need to overcome 'society's limited perception of engineering' and to enhance the professional image of technology (or, more precisely, engineering)" (Layton 1992:5).

*[M]ost innovations have strong implications for the internal politics of the school. The school has a hierarchy of status and power (Stenhouse, 1975:171).*

Three macro curriculum development influences in shaping policy in D&T were the Schools Council projects (1960s to 70s), the Technical and Vocational Initiative (TVEI) (1980s) and the Education for Capability movement (RSA, 1980s). The Schools Council and RSA projects sought to develop a curriculum for the comprehensive schools, and, in the case of all three projects, pressed for a stronger vocational learning element in the curriculum. The turn towards 'Technology' – with roots in mathematical sciences and engineering – was particularly influential. Alongside or in tension came a range of interventions from HMI, organisations, research groups and influential individuals. By the late 1970s there were over one hundred different courses in subjects that had emerged from the practical curriculum.

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In 1985, however, GCSE courses were approved in only two groupings – Craft, Design & Technology (CDT) and Home Economics.

Stephanie Atkinson (1990) suggests that two ‘camps’ formed within CDT, those who saw designing as the route forward, and those who “believed in a need for hard technology and a sound knowledge base” (Atkinson, 1990, unpaginated source). Those who highly valued craft skills might be an additional group (Shield, 1996) as might those who valued vocational learning in the curriculum. The process of struggle “was further accentuated at a grass roots level by the teaching staff of CDT, Technology, Art and Design attempting to protect what they perceived to be their individual subject boundaries” (Atkinson, 1990, unpaginated source) and conflict over hierarchy positions of CDT, technology education, design education, and other aspects.

The National Curriculum Design and Technology Working Group (DES and WO, 1988) envisaged that contributors to D&T would include art & design, mathematics, history, business education, CDT, information technology (IT), home economics and science (DES & WO, 1988). However, D&T began (1990) with five collaborating subjects (art, business, CDT, home economics, and IT) drawing on mathematics and science.

Carrie Paechter (1993) illustrates inter-subject struggles, focusing on the period around the introduction of the 1992 proposals and revised Order. Power struggles, particularly between CDT and Home Economics departments, and in relation to school managers, are described, highlighting advantage gained through different readings, and uses made, of the texts. Paechter also suggests that “the importance in power terms, of having a coherent interpretation of the new curriculum was exacerbated by teachers’ steadily increasing workload” (Paechter, 1993:1), and that many teachers never read much of the documentation. However, some did read the press articles and used them in their strategies to win their arguments.

The narrative that follows is drawn chiefly from press articles that I collected at the time. What I did not collect undoubtedly could form other stories, as do ethnographic accounts such as Paechter’s above and retrospective discussions. This is just one story amongst many possible stories (Cronon, 1992). It begins with an opening scene of success.

## Siren Voices

In June 1989 DES and the Welsh Office published Design and Technology for ages 5 to 16 – the proposals for statutory consultation (NCC, 1989). Following a summer consultation period, the statutory Order was brought into force on the 6th March 1990. Thus in 1990, Design and Technology appeared in the National Curriculum – for *all* Key Stages and *all* pupils (humanistic view), and as outlined earlier, a range of collaborating subject disciplines.

The public protagonists in the 1992 arena could be perceived to be from two groups – educators and industry. In the educators corner are Professors John Eggleston (Warwick) and Richard Kimbell (Goldsmiths College), and in the economically-driven corner, the Engineering Council. The State remains largely invisible in the public debate but the Design Council publicly supported the educators. The Engineering Council represented individual engineers, not employers, but, in this public struggle, was largely represented by two educators – Alan Smithers and Pamela Robinson. Whilst the literature reveals something about Eggleston’s and Kimbell’s ideological standpoints at this time, there is less to be readily found about the Engineering Council’s. A brief diversion outlines the perspectives which were then held.

## The Engineering Council

There is little extant evidence from before 1992 of the Engineering Council’s policy position or value placed upon craft, design or technology or home economics education at schools level. However, the Engineering Council was engaged at the time in various related projects and programmes with schools. A broad view of educational requirements was reflected in an Assistant Masters and Mistresses Association and Engineering Council sponsored conference in June 1988. Speakers included Paul Black, Geoffrey Harrison, David Layton and David Yeomans. The Black and Harrison presentation included the terms of reference of the National Curriculum D&T Working Group. Michael Harrison (chairing the plenary session) comments “We are beginning to understand that engineering and technology are rather different from the crude idea of something derived from a superior science” (AMMA and Engineering Council, 1988:114). Plenary discussion includes a call for a broader curriculum Post-16 – communications, less physics, a ‘different kind of maths’, more systems and economic understanding, a foreign language, and autonomy and ability to make judgements (ibid:117-118). Michael Harrison suggests that “The Engineering Council...is a powerful operation...It has behind it a body of nearly 200 very influential industrial affiliates...who are...determining the character of

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engineering degree provision in this country" (ibid:118-119). He goes on to say "[w]e are here involved with power and power structures in schools" (ibid:119).

It looks very much as though the Engineering Council was chiefly interested in the post-compulsory system, but generally supported a broad curriculum. The Council had been a member of the fairly small (13 member) National Curriculum Design and Technology Working Group and so enjoyed considerable opportunity to influence its policy forming deliberations. Perhaps it is therefore all the more surprising that the Council challenged the first National Curriculum Order so ferociously, and in public, through its report *Technology in National Curriculum: Getting it Right*. However, Porter (Brunel University), in a presentation to a colloquium of the Institution of Electrical Engineers after the 1992 public debate, indicates some internal background – notably, in context of this paper, an individual policy-influencer, not a disembodied actor or organisation:

*One of the original members of the Parkes' working group was Denis Filer, the Director General of the Engineering Council. He was becoming increasingly alarmed... about the development of school technology... Filer commissioned research... to investigate the development of the subject and to consider what should be done to put it right (Porter, 1994, unpaginated source).*

### Getting it Right

The *Getting it Right* series was commissioned and published in the early 1990s by the Engineering Council and sponsored by British Petroleum (BP). Eggleston (1992) reports, noting that pre-election downtime (an important temporal dimension in policy making) and leakage had afforded both time and information to policy-influencers:

*Events began to take a downward turn when HMI found that all was not well with National Curriculum Technology and that in many schools... it was not as well taught as that which had preceded it. Not so surprising, perhaps, that in the first year of a largely new product should not be being delivered quite as well as its long standing predecessor. But the pre-election delay in publication, the frequent revisions and the succession of leaks created a gathering cloud over the subject area. All this established an opportunity for the Engineering Council to commission Smithers and Robinson to a no nonsense investigation on the state of technology. They duly obliged, and their report Technology in National Curriculum – Getting it Right said it all with a list of bullet points of instant media readiness. (Eggleston, 1992:1)*

In *Technology in the National Curriculum: Getting it Right* the authors open with "Technology in the national curriculum is in a mess". The report sets out to "trace... how technology comes to be as it is and attempt to provide some pointers as to what might be done" (Smithers & Robinson, 1992:5). It is important to note that we do not know whether, or if so how, the final report was shaped by other than the authors.

The authors discuss Black and Harrison's *In Place of Confusion* (1985) suggesting that it attempted to "provide a theoretical underpinning... by operating at a high level of abstraction and generality" and that "[t]he original inspiration has become so attenuated that technology was no longer regarded as a subject but as a cross-curriculum theme" (ibid:11). The latter remark seems likely to have been directed at HMI and/or the Design Council as well as at Black and Harrison. In 1977 an HMI publication known as 'The Red Book', put forward a case for a common curriculum to age 16 constructed of areas of experience emphasising that "none of the areas listed should be simply equated with a subject or group of subjects" (HMI, 1977:6) – exemplifying the Bullock Report (DES, 1975) notion of 'language across the curriculum'. Influential Design Council publications (1980 and 1987) suggested similarly that design education is "found across the curriculum" (Design Council, 1987:6.2).

On the back of an illustration of a parental perception – where apparently the son had produced a GCSE folder about designing a desk tidy (research and so forth) but had not been required to make it – Smithers and Robinson suggest that:

*The attempt to improve Britain's economic performance through skill training has mushroomed into an all-embracing methodology with ambitions so diverse that they could only be brought together at a high level of generality. But, in practice, the brave intentions could amount to no more than writing about how to make a desk-tidy (Smithers & Robinson, 1992:11).*

If, indeed, the learner did only write about making a desk-tidy the point is well-enough made in the context of D&T. However, one case should be insufficient to sway policy-decisions. The authors argue that "technology as it has emerged" is not "delimited so we do not know what counts as technology" – and it is of interest that only the term 'technology' is used, not 'design and technology'. The National Curriculum D&T Working Group, of which the Engineering Council was a member, had discussed and agreed (it seemed) the concept of design and technology as a unitary term. The Order was entitled 'Technology'

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because it included information technology (IT) as well as design and technology, but *Getting it Right* is focused entirely on D&T. Furthermore, the authors note, that "an electronics solution cannot be applied unless electronics has been learned" (ibid:14) – which may flag up the still continuing debate within D&T about the nature of knowledge which the National Curriculum D&T Working Group had also discussed and come to at least an apparent partial settlement. Smithers and Robinson go on to suggest that "technology as a school subject should centre on technology as it is commonly understood and is represented in higher education and employment" (ibid:15-16). A clarification of what the authors mean by 'commonly understood', from an engineering, or more precisely from an electro-mechanical engineering, perspective, then follows:

*The 'language' of technology is essentially the knowledge areas (including materials, electronics, instrumentation, fluids, structures) and skills (including control, measurement, assembly, construction, project management) applied to a particular class of practical problems, improving or inventing products or systems (Smithers & Robinson, 1992:16).*

In getting towards policy recommendations, Smithers and Robinson suggest that "identifying needs and opportunities, generating a design proposal...and evaluating" had led to insufficient priority being given to planning and making, which, they argue "since technology is a practical subject should be pre-eminent" (ibid:17). In discussion about whether 'technology' should be available to all pupils – the authors feel it should – a humanistic-leaning view but only in respect to half of human-kind: "not with areas tossed in to bring in their supposed client groups as we suspect has happened with home economics and girls" (ibid:18). This assertion which aligns with the report's policy recommendation about distinguishing technology from "basic life skills and vocational education", implying no 'legitimate knowledge' place for Home Economics, no doubt fuelled the fires of inter-subject struggles described earlier.

The report policy recommendations, which call for revisions to the Order, also include that D&T "should be clearly established as a practical/technical subject concerned with the design and manufacture of products and systems" and "content should be specified as a practical organisation of knowledge and skills" (ibid:18-19).

## The media debate

If the press articles were to be taken at face value, the publication of *Getting it Right* brought the start of the media debate in May 1992, but as Eggleston notes (previous) there had been much leakage of an HMI investigation into the situation in schools. Indeed, it would seem likely that Smithers and Robinson were in a position draw on HMI findings. Whilst discussions in the literature rarely focus on whether or not the Order had got it right or wrong (cf Robert's, 1999, regarding lack of research into 'well foundedness', earlier), it is apposite to note that it seems that many schools were not, as Smithers and Robinson suggested, engaging in best practice in D&T, at least partly because they were not adequately prepared for implementation. Richard Kimbell and David Perry (2001) note that best practice was uncommon: "[t]he 1990 Order for Technology was visionary: based on the best practice that could be found around the country. But little account was taken of the fact that such good practice was not common practice and probably existed in 5-10% of schools" (Kimbell & Perry, 2001:3).

## Patten to Revise Technology Teaching as Standards Slide

The findings reinforce widespread criticism of the emphasis in school technology lessons on 'Blue-Peter' activities involving cardboard, paper and egg boxes. Academics warned this weekend that it was putting Britain's industrial future at risk.

Figure 2: *The Sunday Times*, 31 May 1992 (in Eggleston, 1992:1-2)

Action to improve technology teaching in schools will be ordered today by Education Secretary John Patten. His intervention follows severe criticism by Government inspectors of standards in a subject regarded as vital to Britain's economic future. It is feared thousands of youngsters are leaving school ill prepared to take on the Germans, French and Dutch in the highly-competitive European jobs market. Industrialists and engineers have warned that children are learning 'too much waffle'. Mr. Patten himself believes much of the current project work in classrooms is either too theoretical or irrelevant to the needs of modern manufacturing. Today he will demand an end to the 'Blue Peter technology' which sees pupils making cardboard cut-outs instead of real tools of modern manufacturing. The Minister will insist that, in future, lessons must get back to basics by being more practical and skill-based.

Figure 3: *Daily Mail*, Tuesday 2 June 1992 (in Eggleston, 1992:2)

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Once again woolly teaching methods are cheating our children, substituting an emphasis on talk and theory rather than developing real skills of use in the world of work outside the classroom. There has always been a streak in the educational establishment which finds practical things distasteful; teaching children how to earn their living as somehow wrong. Fortunately Education Secretary John Patten has shown these sniffy ivory-towered experts that he is just as tough as his doughty predecessor.

*Figure 4: Daily Mail, Leader, Tuesday 2 June 1992 (in Eggleston, 1992:2)*

Following the publication of the *Getting it Right* report, Eggleston, with a touch of cynicism, notes that "A few days later, by a remarkable coincidence, the HMI report was at last published and the evidence of low standards was there for all to see. The weekend journalists on 31 May had a ready made story" (Eggleston, 1992:1-2).

Eggleston (1992) reports that events then moved at speed:

*SEAC<sup>1</sup> produced an instant change of weighting, Attainment Target 3, the practical component was increased to 40%, the other Attainment Targets suitably reduced. The National Curriculum Council [NCC], with astonishing speed, produced a document National Curriculum Technology: The Case for Revising the Order – only weeks after strident officer denials that of any intention of revision. John Patten duly obliged, within hours of the Daily Mail call, and launched an urgent review of Technology in the National Curriculum (Eggleston, 1992:2).*

It was then that the, reported, Denis Filer remarks about technology (or D&T) as 'Mickey Mouse' and 'Blue Peter' technology reached the heart of the policy-making mechanism – notably placing the issue of D&T firmly within an economic policy agenda:

The Design Council – although possibly in a difficult position, being Department of Trade and Industry funded – joined the fray. This article is from the more measured education press so absolute sequence of submission may vary. Richard Shearman emphasises that successful implementation of curriculum innovation may take many years. He also challenges a shift towards an electro-mechanical curriculum and any possible reduction in entitlement to D&T for all pupils:

<sup>1</sup> Schools Examinations and Assessment Council

The Secretary of State has ordered an urgent review of technology in the national curriculum following the damning reports from Her Majesty's inspectorate and the Engineering Council. In the words of Denis Filer, the director of the Engineering Council, the review is intended, "to put an end to the Mickey Mouse technology that has manifested itself in schools. It seems that, not before time, Mickey is being sent back to the drawing board. Many of our newspapers have said that our children are being forced into a Blue Peter, paper and sticky-back plastic approach to technology. Perhaps some of the headlines are a little over the top, but comparisons with competitor countries are worrying.

*Figure 5: Hansard 11 June 1992 Columns 505-506 – Don Foster (Liberal-Democrat spokesperson for education) speaking to Waldegrave (Conservative).*

Sir – Your normally even-handed style of reporting has deserted you in your coverage of the review of national curriculum technology. Phrases such as 'curriculum nightmare' in your article of 5 June, and 'disaster' in your Briefcase feature of 12 June...are better suited to the tabloids than to the serious education press. No-one has ever pretended that implementation of the design and technology component of technology would be easy. Lady Parkes, when her working group reported, was quoted as saying it would take 15 years to realise fully the requirements of the report. ...the NCC explicitly supported the conceptual approach underpinning the Order...

It is necessary to make this point because there are siren voices around who would have us believe that all will be well if design and technology acquires a narrow focus based upon knowledge and applications in the fields of mechanical and electronic engineering. The recent report – quoted uncritically by you – from The Engineering council is a case in point. To have technology (including design) as a part of the entitlement of all children between five and 16 is a major advance; to seek now to limit that entitlement would throw away much of the ground that has been gained.

*Figure 6: Richard Shearman, Director Education, The Design Council, Education, 19 June 1992)*

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By the Autumn of 1992, it became clear that policy proposals following the review had leaked out in the non-public domain, earlier versions reflecting a close fit with possible readings of the *Getting it Right* recommendations, but perhaps at a more traditional and narrow level. A Times Education Supplement leader article by Richard Kimbell flags his perception that a key area of contestation involves differing perspectives of the nature of knowledge. UK vocational training models, familiar to the engineering community, adhere to a Bloom (1956) hierarchical model of learning which places 'knowledge' – seen as recall of previously learned material – as a first and separate step preceding comprehension and application. This issue was discussed by the National Curriculum Design and Technology Working Group.

## A problem of success

Technology in schools emerged at a quite astonishing rate over the past 30 years. But it grew from practice rather than from theory; from teachers in the classroom trying out innovative and often idiosyncratic activities and programmes rather than an academic analysis of a field of knowledge. And it was hugely successful. Pupils voted with their feet.... but... when it appeared in the extended core of the national curriculum policy documents... someone was going to have to decide what it was we were all doing so successfully. It had to be tamed and institutionalised.

There are... those who have a different view, the siren voices of a tradition that place knowledge at the heart of the curriculum. Among the leading exponents of this reactionary corpus sits the engineering fraternity, steeped in generations of mathematics and science and deeply sceptical of anything that cannot be explained on a slide rule. This is the body that produced a model of education that completely failed our industry. In grinding students through featureless plains of applied mathematics and science, they produced graduates utterly unfamiliar with concepts of design, manufacture and product placement, and, in particular, quite unaware of the fact that product development requires a detailed understanding of the needs and aspirations of the consumer. In report after report they were warned of the damage they were doing.... And they chose to ignore it all, pausing only to bemoan the lack of students coming forward to study engineering. Who could blame them?

And this is the body that has the gall to tell us all what we should be doing with technology in our schools.... Having failed in their field they now want to tell us how to organise ours. In my experience non-swimmers do not make good life-savers.

Figure 7: Richard Kimbell, *Times Education Supplement*, 16 October 1992, Special Report, p. 1

John Eggleston's reference (*Figure 8*) to 'making things which are predetermined' alongside predominance of pre-CDT wood and metal-work, has similar resonance as earlier with the UK's model of functionalist training, familiar to engineering manufacturers (for critique see e.g. Hyland, 1993; 1997). That the issue had become flagged as an aspect of UK economic interest may well have caused more manufacturing engineering employers, or their representatives, to act in influencing this policy agenda?

## Proposals 'echo Sixties'

Science and electronics are at the heart of the new school technology curriculum which marginalises food, textiles and business studies, a confidential document to the TES shows... John Eggleston... called the new Order 'horribly reminiscent of a previous age... it is almost pre-craft design and technology. Its back to the fifties and sixties – prescribed projects... making things which are predetermined. The thinking part is very minor and the whole emphasis is on making things.

Figure 8: Linda Blackburne, *Times Education Supplement*, 20 November 1992:2

Whilst in the Department for Education newsletter transcribed below there may not be any actual connection between technology-D&T as a subject (indeed, it may refer to IT), technology specialist schools, and vocational courses in schools, the implication of a vocational turn is apparent (for discussion of implications see Kimbell, 2006).

We are strongly committed to the importance of giving technology due prominence in the curriculum, and also to the establishment of high quality and respected vocational work in schools. An HMI report published recently shows that vocational courses are finding their place beside academic qualifications in our schools.... The government wants to see technology as a golden thread running through education.

Figure 9: DfE News 410/92, 15 December 1992 (Baroness Blatch (Education Minister) announces £23 million to develop more technology schools)

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By December 1992 policy proposals regarding the continuing status of home economics, textiles and business studies appear to have met with compromise – John Eggleston and the Engineering Council are reported as being satisfied – and design in some construction of the term appears to have re-entered the scene:

## 'Bold' technology review

The proposed Order for school technology is a 'bold compromise'...says John Eggleston.... Traditionalists, led by the Engineering Council, have failed to oust home economics, textiles and business studies completely, though their status has been reduced. A pressure group of influential experts in design and technology is meeting today to discuss the new Order. The eight-strong group ...includes Professor Eggleston, Professor Richard Kimbell...and Richard Shearman.... The Engineering Council said in a prepared statement yesterday "We are pleased that technology will now be clearly established in the national curriculum as a practical/technical subject concerned with the design and manufacture of products and systems".

Figure 10: Linda Blackburne, *Times Education Supplement*, 18 December 1992:2)

## Products will fail, warns design group

If the consumer does not want your product, it will not sell. And if designers do not understand the values and priorities of the user, the products will be failures.... The new Order should seek to train pupils to be entrepreneurial, understand advertising and marketing and recognise 'sustainable design'. It should also ensure they recognise the historical and cultural significance of design and technology in a multi cultural context.... The new Order has moved too far towards 'applied science problem-solving' and ignores the 'creative struggle' that differentiates design from other areas of the curriculum. ...The group welcomed many of the revisions...and was pleased that the HMI review team kept the notion that technology is about applying appropriate skills and techniques as opposed to rote-learning.

Figure 11: Linda Blackburne, *Times Education Supplement*, 1 January 1993:2

However, settlement had apparently not been reached – the group meeting that day (see above), or perhaps again, appear to have concluded otherwise. Two weeks later the same reporter drew attention to concern about a proposed shift of creative design towards "applied science problem-solving" (cf Layton, 1993; Barlex and Pitt, 2000; Kimbell, 2006 – and, regarding design in the education of engineers, Harrison, 2002):

The story, as voiced through the articles in my possession, then falls silent with a brief note in *The Guardian*:

Ministers may not lose sleep over the anguish they have caused English teachers, but upsetting technology teachers is serious. The Government seems to have achieved the feat of uniting the different strands in technology.

Figure 12: Francis Beckett, *The Guardian*, 16 February 1993

However, the voices of teachers themselves have not been heard in the press articles above so question may be legitimately raised about whether teachers' views were seen to be of policy-making interest, or whether teachers were in any way substantially involved in the discussions. In mirror image of not mentioning the protagonists in the debacle as 'upset' it is also reported that it is the government (disembodied), not people within government policy-making machinery or people outside that sphere, that has succeeded in drawing this particular policy disagreement to resolution and closure.

However, a revised Order for *Design and Technology* was not published until 1995 (DFE, 1995), and then implemented in staged phases. Ofsted (1998) report on the impact in schools of the hasty withdrawal of the 1990 Order:

During the years 1993-7, therefore, three versions of D&T could be found in schools: the...original Order; the new Order in Key Stage 3 from 1995 and Key Stage 4 from 1996; and some schools used the suspension of the mandatory status of D&T in Key Stage 4 to continue with GCSE syllabuses for craft, design and technology (CDT) and home economics (Ofsted, 1998: unpagged source).

This story, having started with what appeared to be a major success in policy-influencing terms, thus ends with what can be seen as disarray and fracture on the ground.

<sup>2</sup>This group of individuals was reported by Howard Chilvers in the same article as including himself (City Technology Trust); John Eggleston; Richard Kimbell; Richard Shearman; Steve Cushing (NDTEF); John Allum (Standing Conference on School Science and Technology); Martin Coleman (Salford University) and Roger Standen (Design Dimension Trust).

# The 1992 Struggle for Design and Technology

## Discussion

The purpose of this paper was to illustrate that there is a need to collectively agree on the key purposes, nature, and value of D&T and that D&T policy is formed and challenged by people on the outside of the formal, government, policy-making machinery.

In Cronon's narrative of the voices (stories) of the Great Plains dwellers, a Crow Indian chief, Plenty Coups, remarks "when the buffalo went away the hearts of my people fell to the ground, and they could not lift them up again. After this nothing happened" (Cronon, 1992:1366). Struggle against the environment, and against and between policy-makers and other human-beings towards the Plains' survival simply stopped – life after that, from Plenty Coup's perspective, was a separate story (ibid.).

In public platform policy-forming terms I do not recall another high-profile effort on behalf of D&T since 1992. After that, nothing happened. In a different story, collective policy-influencing on behalf of D&T does continue but is largely undertaken away from public gaze. Whether or not such efforts are successful, or to what degree if so, is open to question – chiefly because the degree of seriousness of the possibility being tackled is usually very hard to judge, and, similarly, the consequences of doing nothing.

## Conclusion

I hope that the story of the 1992 debacle is sufficient to underline the very real dangers to D&T of not collaborating on policy-influencing across *all* possible parties with an interest or stake in the D&T curriculum, and that policy is formed by people, each with their, often implicit, beliefs and value-systems. Furthermore, policy-forming requires active participation. The National Curriculum D&T Working Group report (1988) is the most recent substantive policy position document we have. The DfES D&T Strategy Group report, *Building on Success* (DfES/Barlex, 2003), *Design and Technology in a Knowledge Economy* (Kimbell and Perry, 2001), and the D&T Association/NSEAD paper on design education (Green and Steers, 2006) go some way towards setting down an agreed policy position at one level, but the contexts in which they were developed were perhaps more reactive than planned and time or resource was not available to discuss widely, or to agree upon explicit and fundamental value-positions. D&T is thus inadequately prepared to defend its corner on the basis of agreed, and explicit, value and policy positions.

Currently (2008) many of the policy-influencers in this field know one another and are versed in sharing what they consider to be key information and thinking in order

to present a united position in most situations. They also by-and-large hold similar beliefs about the nature and value of D&T, irrespective of the organisations for which they work (Wright, 2006). However, this situation is now changing and there is a real danger of not only loss of policy-memory but also of loss of a shared, and often implicit, understanding of the nature of D&T and why D&T is worth fighting for. There has not been a thorough review of what D&T 'is' or might become since the National Curriculum D&T Working Group reported in 1988. Such a deep conversation needs to urgently happen again, with as wide as possible involvement of all kinds of practitioners in D&T.

There needs to be a renewed attempt at exploring the well-foundedness of policies relating to design and technology, discussing positions on a range of D&T matters, and establishing a collectively agreed, explicit, and internally consistent policy position for design and technology.

[ruthwright2@mac.com](mailto:ruthwright2@mac.com)

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