

Teach design

Last year was a very significant year for industrial design education: the year of DipAD's absorption into the all-disciplines degree structure administered by the Council for National Academic Awards; the year of the Gann report ('Vocational Courses in Art and Design'), recommending that vocational design courses should also be underpinned by a national 'validating' body.

These two events mark a design education watershed, a kind of academic laying on of hands to celebrate the end of a fourteen year novitiate. In 1960, the DipAD proposal purified the rabble of art schools, setting a national diploma standard for a superior minority of courses across the country (20 per cent) and leaving the remainder to suffer by comparison, and perhaps to die. This was an academicising operation underwriting the efforts of practising designers to break with the un-codified, unprofessional 'cowboy' heritage of the previous 30 years.

As it turned out, the residual non-DipAD courses did not fade away. They continued to attract students and turned their second class status into a special *raison d'être*, a difference of degree exchanged for a difference of kind. They acquired the faintly invidious 'technician' label and the more acceptable 'vocational' tag. Hand in hand with DipAD, they partook of the growing recognition of design as an acceptable career, supported by heavy education investment (£60m in DipAD's lifetime).

Now, DipAD is degree-worthy. It has achieved what in 1962 must have looked like the most honourable of all goals and, in tune with the spirit of the 'sixties, the most powerful entrée to upper-income employment on a wide scale. But, in tune with the spirit of the 'seventies, degrees are no longer so saleable. And, unlike other further education darlings of the 'sixties (say, sociology), degree-qualified designers do have powerful non-degree rivals: the 'vocational' certificate holders.

The two events of last year have fundamentally optimistic implications for both groups. But for the degree students, there is still the uncertainty of the 'two A-levels' question, a CNAA general requirement which may or may not be imposed on the design newcomers. And on the matter of subsequent employment, they must be worried by industry's increasing interest in the specialised, practically-based certificate-holding alternative, and this is reflected in the SIAD's attitude to vocational courses. For the vocational students, Gann's national-validation recommendation and its determination to build bridgeheads for upwards movement between vocational courses and degree courses are obviously hopeful, but the details of their application remain uncertain.

In recent years, both groups have done well in the marketplace: 80 per cent of the 1968 output found relevant jobs within six months of graduating. But both still suffer from ill-definition of the foggy terms 'design', 'designer' and, in a more universal sense, 'education.' Industry still does not know what to expect from designers or exactly how to use them.

Against a backdrop of educational change and industrial nervousness, the following interviews represent a range of differing viewpoints: Roger Denning for the employers; Malcolm Johnston for an intellectually-biased student viewpoint; Richard Hutchfield and Mark Gilbey for a practical (industrial) bias; David Carter with an elite engineering-biased proposition; and a Leeds Polytechnic staff group in support of the Polytechnic idea.

MUCH EFFORT HAS BEEN INVESTED IN IMPROVEMENTS TO THE BASIC DESIGN EDUCATION FRAMEWORK, BUT CAN IT EVER KEEP PACE WITH THE PRESSURES OF A DESPERATE SOCIETY? INTERVIEWS BY IDRIS WALTERS. PHOTOGRAPHS BY BRIAN GRIFFIN

ROGER DENNING/design director, Hamlyn Group

Roger Denning, design director of the Hamlyn Group, is shortly to become executive design director at Franklin Mint International. At the time of this interview he was responsible for everything published under Hamlyn's auspices, something like 300 new books and mail order products per year. He also operates as a freelance designer outside the publishing area, and his 'marginal' work as an educator includes examining for the SIAD, visiting duties and the governorship of a couple of colleges.

'It's an obligation on me to know what is happening and it is an obligation on practising designers to pass on information.'

Naturally enough, Roger Denning is worried about the state of design education in this country. His own training was RCA and Reading University. It was, in fact, at Reading that his own experience of multi-disciplinary education seemed to work for him. 'So it ought to work, this Poly bit - but it doesn't. Because as far as design is concerned, we are trying to run before we can walk and we are training too many people, many of whom are the wrong people.' He also doubts the abilities of the staff. 'I don't think that they are disciplining people enough. In the fine arts you do your own thing. I think that to allow people an over abundance of free-fall is wrong. You must tie them to reality.'

Does this mean that people who have come through vocational courses are more employable? 'Without any doubt at all. In 14 years of practice the best people I have found have come from the vocational, non self-adulation courses. A correct combination of original thinkers and doers is attainable, with the doers coming from the vocational side; but at the moment we are tending to train more original thinkers than industry and practice can readily absorb.' Obviously, to consider a 'second level' design citizen is dubious but it is a fact that there are plenty of people quite happy to carry out mechanical exercises in accordance with a thinker's creation.

As industrial requirements remain unclear, so college staff lack direction. And so do careers staff in the schools. 'In design, we are not talking about making pictures. We are talking about a



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whole world – architecture, product, inscape, landscape, all these things. These are all design in one way or another and I have yet to meet a careers officer in a school who knows anything about it.

'If people do a design course, it doesn't necessarily mean that they have to practise design at the end of it. Why shouldn't some of the buyers for the John Lewis Partnership, for instance, be design orientated people?'

Looking at it critically, it is clear that the whole field of design is ill-defined, that it is a victim of what Denning refers to as a 'jumbled vocabulary' and that some essentially static reference points need to be generated. Perhaps the CNA degree will become one of them? Denning: 'Neither the National Diploma nor the DipAD were going long enough. Raising the DipAD to a degree level, from the point of view of commercial and industrial acceptability, probably will work because it is *something*. A BA is a BA. I hope that it will be recognised as a quality of mental training. My primary consideration as an employer is not the applicant's portfolio but his attitude. Most important is the way he thinks. Does he think logically, for instance, constructively and so on?'

Denning feels that the DipAD was, however, a better description of what a person had done; the new degree structure will promote more direct-from-school entry into design courses, not a particularly useful after-effect. 'It would be good if people could have a year in a design office before they start their training. Or at least, there ought to be an RIBA situation with a year's practise between getting their academic qualification and getting their professional license to practice.'

Is there any case for taking design education back into primary schools? It seems that contemporary primary education relates very strongly to what design students undertake as a 'foundation course.' 'I'm reticent about the teaching of art. Why make everyone draw and paint when, in fact, 80 per cent of them will never be able to? But there is a lot that can be done in the teaching of appreciation, for want of a better word, of the world in which we live and the world which we create, the building up of a selective

background so that the adult child, the 16-plus, is not the mentally impoverished child it often is these days. What is a good chair and what is a bad chair? If you are doing that, you are serving the purpose of design because you are creating a greater demand for the well produced.'

With regard to the Gann recommendations, Denning is optimistic. As an SIAD examiner, filling in where educational bureaucracy failed to tread, he has noted a wide variety of standards, college to college. He feels that a centralised examination set-up will generate a standard which is 'nationally acceptable' and as 'even as one can make it.'

Denning emphasises a set of three inseparable elements in the education of a designer: creativity, technical ability and professional practice. 'Most colleges are reasonable creatively. But when you get into the technical area they start to go downhill.' And in professional practice, 'an awful lot of students can't even write a letter of contract. They don't know what their legal position is with regard to copyright. It must be categorically stated that all three aspects are equally important. Individually they are all employable elements provided that the students have enough cosmopolitan knowledge across the slice of the cake. But at the moment, the slice of the cake is very uneven.'

MALCOLM JOHNSTON/BA industrial design student

The contemporary student won't lie down. He is infected with a special kind of motivation, expressed in the introduction to *The Whole Earth Catalog*: 'We are as gods and might as well get good at it . . . a realm of intimate personal power is developing – the power of the individual to conduct his own education, find his own inspiration, shape his own environment and share his adventure with whoever is interested.'

Malcolm Johnston is a BA student of industrial design at the Central School of Art and Design in London. 'We have lost sight of why we are designing. Industrial designers still have the



Malcolm Johnston: 'It is vital that an industrial design student should be exposed not only to technical knowledge but also to the subtle waves of human understanding and perception which are generated within art schools'



Mark Gilbey left and Richard Hutchfield: 'If you want to become a teacher or an artist, then that's fine, but to come out of DipAD and to try and go into a furniture factory is a joke'

old yardstick of profit, sales and economy as a *raison d'être* but the increasing side effects of industrialisation are turning this crutch into a rod for their backs.'

The new BA courses, he feels, should include intensive intellectual content. 'How many design tutors actually believe that a designer's responsibility should begin *before* he accepts a brief (after all he doesn't *have* to accept it) and doesn't end with the production prototype? The large majority of design tutors I have met reject completely what Papanek is saying and haven't even heard of Schumacher. I suggest that no BA design course can honestly claim that it gives intellectual stimuli equal to its depth of practical education.'

As far as the Polys are concerned, Malcolm sees the art departments as fighting for their own slice of the cake. 'How much easier is it to substantiate a budget with a syllabus which shows the acquisition of concrete technical knowledge rather than one that dips into the humanities?'

Defining a designer as somebody 'who operates at an interface,' Malcolm sees the industrial designer working at the interface between the human-being consumer and the object. The engineering designer works between the industrial designer and the object. 'It is vital that an industrial design student should be exposed not only to technical knowledge but also to the subtle waves of human understanding and perception which are generated within art schools.'

Under CNAAs regulations, colleges will be able to accept direct-entry students straight from school with a couple of A-levels, without referring to a central body as before. 'It seems inevitable that this will lead to the foundation courses, which were originally intended as a filter, a sorting system for school leavers, finding themselves out of business, with potentially

disastrous consequences to the BA courses they feed. And how long will it be before the two academic A-levels are mandatory?'

And specialisation continues. Departmental isolation, not co-operation, is the norm, so that the influence of other disciplines is seldom felt as it should be. Doubtless, a free-flow of tutors and students from one department to another would create administrative problems, but the educational merit of so doing is surely unquestionable.

'I would like to see an industrial design course where the first year is devoted to experiencing many aspects of design: sculpture, graphics, ceramics, jewellery, textiles and perhaps even theatre, with specialist tutors available for each subject. I believe that basic craft experience provides a vital understanding of materials from which the application of manufacturing processes follows naturally. Running parallel with this would be instruction in the widest variety of design philosophies, and I would go further and suggest that it would be a healthy situation if departments had known philosophical identities which would provide an excellent starting point for student discussion.'

At present, student intake for industrial design is hampered by the lack of coherent motivation, the fault, no doubt, of information at school careers officer level and the general lack of definitions across the board. 'In an average year of an industrial design course, it is likely that 20 per cent of the students have strong motivations for studying the subject, 20 per cent do not and the remaining 60 per cent are uncertain and would gain far more from the course if they had a clearer idea of its relevance to them. Too many students have slipped into industrial design from a background of "motor car gadgetry" and are doomed to disappointment when they discover the paucity of jobs available for so limited an outlook. Training must be broader-based, and only

professional designers can promote this. What is a designer if not someone who has been trained to have an open mind which will absorb a variety of seemingly disparate facts and produce a solution?'

RICHARD HUTCHFIELD, MARK GILBEY/diploma students, London College of Furniture

The London College of Furniture is one of eight ILEA specialist colleges that were not absorbed into the Polytechnics. Its catchment area is as large as a Polytechnic's; it provides full-time, part-time and block-release courses and research facilities in the design and manufacture of furniture, furnishing and interior design, play equipment and musical instruments.

There are no DipAD (degree) courses but the unusual structure of the course programmes provides a 'vocational plus' education for the students who study there. There are close links with industry. A multi-disciplinary approach is theoretically applied and a 'vertical structuring' of courses ensures that students work at all levels, from craft to research.

There are three 'service' departments - general studies, science and visual research (art) - and, as a whole, the college can apply its 'modular' (multi-discipline) structure far more easily than can a large Poly.

Two furniture design students, Richard Hutchfield and Mark Gilbey, have managed to set up a commercially orientated workshop whilst completing their final college year. Richard came to furniture on abandoning a career in architecture, completing a pre-Dip course at Somerset School of Art and turning down a place at Leicester Art School for personal reasons. The workshop came about in response to the students' 'disappointment in the prospects offered within the furniture industry.' As far as job satisfaction is concerned, there seemed to be nothing available which attracted them. In industry they would have felt too restricted, too market-orientated and not allowed to use their own initiative.

Richard sees little value in a DipAD course. 'If you want to become a teacher or an artist, then that's fine, but to come out of DipAD and to try and go into a furniture factory is a joke. You are completely useless. This is why the furniture industry is very wary of taking on students for responsible positions because quite often they have to retrain people.'

And the CNA A degree? Richard compares this attempt at academic upgrading with upgrading in the nursing profession. 'At the moment they are thinking of turning the SRN into a degree course which is ridiculous; trying to make a nurse into an academic. But there is also the danger that colleges become factories for factories, directly feeding industry.' While this is categorically not London College of Furniture policy, it is unavoidable to a point.

'What I would like to see is the furniture industry coming to the college for its research and for its technology.' Real projects for colleges are a political contention. In this case, there are ILEA restrictions but the politics of bypassing them are diffuse. Opportunities do arise, naturally enough, out of the social chemistry of the place; 'real' projects are generally considered to be advantageous from an educational point of view.

Mark came to the college direct from the remedial section in a large comprehensive school. His qualifications were minimal. He couldn't have gone to DipAD even if he had wanted to. In this sense, he sees the Gann proposals as useful in that under-qualified people get more opportunities but he feels that a passage through a two-layer education should be seen 'as a flow' rather than as a stepping up process. On the other hand, 'I don't think that the standardisation of qualifications under a centralised national body will get us anywhere.'

A rationalised Gann system will not contribute to the identity of a college. Sadly, the only identifying feature of a Poly, for instance, is its *neutrality*, its similarity to other Polys; a healthy variety of standpoints gets lost in rationalisation procedures. Richard: 'Every college is going to aim for predetermined standards to get their students through: but those standards might be



David Carter: 'A lot of design talent is wasted in this country. We have to give engineering design, product design or whatever, prestige'

questionable. I would prefer to see colleges remaining as separate entities.'

The workshop is this particular pair of students' attempt to demonstrate a fairly prevalent notion that emerging designers should themselves be telling industry what to manufacture. It is an attempt to communicate by example. In industry the role of the newly qualified, highly energised designer is often merely as an expert on optimums, working with firmly established material supplies and market profiles, variations on saleable themes and, obviously, maximum returns.

DAVID CARTER/president of the Society of Industrial Artists and Designers

David Carter is a consultant industrial designer working out of Warwick. His clients include Stanley Tools, the GPO, handicapped people and people who have lots of money to spend on excessive, if stunning, hi-fi equipment. Carter has a proposal for a national, integrated post-graduate school of design which he tentatively refers to as a (Royal?) College of Design and Technology.

'A lot of design talent is wasted in this country. We have to give engineering design, product design or whatever, prestige. A college such as I envisage would encourage creative thinking in a wide number of disciplines: engineering, physics, electrics and so on. It would group together post-graduate students from an even wider background. The majority would have to be engineers but there would be some from the law, economics, the social sciences and visual arts. These students would be chosen for their ability to think creatively, intuitively and logically. They would work on a project basis, solving *real* problems; surrounded

as they *will* be, by protective legislation, labour pressures, strict financial planning and complex computer technology. They would work in multi-discipline groups, projects being chosen to suit their developing capabilities, perhaps culminating in their final year with paid work from industry.

'Projects would be connected predominantly with engineering problems from the industrial/technical to the broadly social – from dockside cranes to can-openers – and solutions would not necessarily be in the form of hardware. For example, legislation might be considered as a creative design tool, there being no merit in striving always to leave monuments to ingenuity.'

RCDT would not compete with RCA. It might accept some writers, architects, chemists and sociologists in addition to engineers, as a means of rising to meet the increasing complexities of design considered as a problem-solving process. As post graduates, most students would 'have their sums behind them.'

Surely this kind of multi-disciplinary approach is supposed to go on in the Polytechnics anyway? 'I don't think they come together in the Polys. It's rather difficult to imagine any great success at that scale. This (RCDT) is an élitist idea. There is a need for a core of people: 50 or maybe 100 per year. In a generation, that means 2000-odd: top-grade people, available to plan operations within industry that do not exist at present, with, and this seems to me very important, a knowledge of all the other disciplines. In order for it to work we have to be sure that it has sufficient glamour to attract the very best people.'

RCDT is aimed at national, continental and world-scale problems, in so far as they can be predicted over the next 50 years: high-speed transportation, high-performance structures, supply systems, fuel transmission networks. We have to create a body of people who can solve these problems even if the solution does not lie in a 'designed' product.

'I see RCDT as an educational ground for a group of technologists who will be aware of social, human and aesthetic problems.' Its élitism is essential to its concept. 'There is already a Royal College of Organists, a Royal College of Needlework; *we've* got the RCA which concerns itself with everything from fine art to industrial design. I would like to see it taken from there.'

RCDT has a potential for unpredictable inter-disciplinary creativity. 'For instance a team studying the whole problem of lighting roadways might find that the chemist amongst them had developed a breed of gently fluorescing bitumen, or something like that, solving the problem in a completely different way. Or they might decide that by changing the law we wouldn't need the roadway after all.' This concern for engineering design is not intended to be confused with industrial design. 'There will always be a need for the sort of people who are sensitive to aspects of form and colour. It may be, however, that the grey area between the roles of industrial design and engineering design will become more clearly defined as engineering design graduates are given greater opportunities to initiate a creative design approach.'

The élitism is reinforced by Carter's notion that 'there are not enough financial resources to run colleges like this all over the country and in any case the requirements of industry are not necessarily of that order. It seems to be a great opportunity. We have an economic crisis in this country: one could almost promote the idea on the emotion generated by that crisis alone. But it goes deeper than that. I think the establishment deserves an organisation which will produce a new generation of professionals, competent to solve technological problems for the benefit of people. These are not artists. They are people able to cope with extraordinarily complex amounts of information.'

LEEDS POLYTECHNIC/college director and senior staff, department of three dimensional design

Naturally enough the Polytechnics (uncomfortably large establishments often staffed by ex-students) are anxious to conserve their existence. But they seem to be resisting any kind of individuality of purpose, although this is just what the student body seems to be demanding. The multi-discipline credentials of the

Polys are well established on paper but not necessarily fulfilled. And yet nowhere is the search for new fundamental standards more apparent, which is as it should be.

Leeds Polytechnic is typical. Patrick Nuttgens is director; Frank Rubner is the head of the department of three dimensional design; Bill Challis is senior lecturer in the same department, specialising in design processes; Edward Wilcock is in charge of the furniture design courses.

The following are extracts from a lively discussion held in the director's office, the enthusiastic nerve centre of a particularly civilised Polytechnic.

EW: The disadvantages seem to be to do with the actual size of the place.

FR: The designer is involved with so many things that his relationships spread well beyond the Poly, to the university, to industry as well as to other departments. Absorption is the wrong word. We have retained our identity. In fact, it has become more intelligible since we were amalgamated.

BC: Other departments seem to have a more inflexible timetable than ours. It often becomes difficult to arrange substantial meetings.

EW: I think there have been fears about identity; design is so all-embracing, it has its fingers into everything. But, on the other hand, everything it has its fingers into looks like a part of somebody else's area. There is always the fear that, in rationalisation procedures, bits can be taken off all the time until eventually design disappears.

PN: To me one of the great surprises was that the college of art that we took over was not unified. I had naïvely imagined a great unity of 'Art and Environment,' but things were much more divided up than I had imagined. They still are. There is a fundamental managerial situation: as the overall thing gets bigger, so the units of which it is composed tend to become more disparate. You can't belong to an outfit of 8000 students and 1000 staff. Humanly, you belong to the units and if those units are themselves multi-disciplinary, which this department is, they automatically cover all sorts of fields anyway. I think Wilcock's point about size is a very important one. As these things get bigger and bigger, it will get dangerous.

FR: Designers are poised between the imaginative, intuitive process and the real life of industry and commerce – you have your feet on the ground and your head in the clouds.

EW: I'm sure the student leaves here with an idea of what design is and this idea is coloured by what he has seen here. Other Polytechnics have different possibilities emerging.

FR: We've had students from civil engineering in the University come into furniture design because they've had an idea for the construction of a chair. This is the place to come. This sort of thing goes on all the time. It's not in the timetables. The thing that dominates is the individual's freedom to develop.

EW: The good student will go out and find things to suit his own needs – it's self-generating.

BC: We have a great deal of freedom to work out what we consider to be a reasonable programme.

EW: This is perhaps the strength of the DipAD – that it hasn't really any strictly laid-down syllabuses.

BC: The DipAD programme said some very awkward things to begin with – curious, ambiguous things about fine art as the basis of the design business.

FR: What I did like was the 16 per cent of time to be given over to complementary studies. I'm glad that they have changed the emphasis from history of art to complementary studies.

BC: I would much rather see history and complementary studies as part of the course instead of something that is injected from time to time. It seems fundamental rather than additional.

PN: We've been five years at this business of putting together the Polytechnic and those five years are just a segment of history.



Left to right Patrick Nuttgens, Frank Rubner, Edward Wilcock and Bill Challis. Nuttgens: 'Theoretically the Polytechnic as a whole, given enough time and the right sort of motivation, could actually do a lot of the things David Carter is talking about'

FR: A Government School of Design was started in Leeds in 1846. It took 57 years to get a building and another 60 years to get a recognised degree status.

EW: The course changes with the staff. It has to be like that because you can't define what the student is at the end of the course. It depends on him. Design is such an enormously wide thing that there is plenty of room for lots of different types of people.

PN: But shouldn't one say, at the same time, that we actually know what kind of product comes out of this school, what kind of man?

EW: What we mainly hope to find is self-motivation and enthusiasm.

BC: The course is the views of the staff plus the views of the students which change from generation to generation.

EW: At present there seem to be empty places on DipAD Industrial Design courses.

BC: It's become unpopular recently, although certain aspects are not unpopular – interior design for instance.

EW: There is a big move towards craft attitudes.

BC: I think it's because there hasn't been as much writing about design in general as there has about, say, architecture, which people can read and discuss. There has been no academic approach of any consequence.

We have a member of staff here who was a student at the Bauhaus and he seems to feel that the most interesting thing was that the students and the staff believed that there was a revolution imminent which means that the driving force of the Bauhaus was not to do with design theory but with political and social questions. I would say the same thing applies now.

PN: Does that mean that you can't have a coherent design school unless it is politically motivated?

EW: One of the things we discussed a couple of years ago – it faded away through lack of resources – was the setting up of a

research centre within the department which could attract people who were not designers by trade but who had an interest. It would be a centre for the study of the nature of design as a whole because it is so apparent that we are not really certain what design is.

PN: It is arguable that almost everything the Poly does is design. It is a big argument in the town-planning profession as to whether it is a design profession or not. I think that a decision on this matter is probably very significant for all of us.

PN: There are three sides to an education. One is to give people a training so that they can earn a reasonable living. Another is to equip them to understand the nature of society so that they can take their places as citizens in a democracy and a third is to cultivate their own attitudes of mind and habits of the body to live the good life.

IW: And what do you think of Carter's idea for a Royal College of Design and Technology?

BC: A much more interesting possibility would be to establish contact between designers and their immediate community, make the community part of the design team. I've always felt that the Polytechnics could be superb centres for this kind of development. Polytechnics could develop a design team to deal with localised problems, problems that they know really well.

FR: An élitist institution would go against the grain with me. As part of our course we have group schemes with teams working on projects involving people with different skills from other departments. In my experience, there is a danger of creating a kind of platform. It might be all right while David Carter is there but . . . ? Money is tight and money will go to the élitist organisations.

PN: Theoretically the Polytechnic as a whole, given enough time and the right sort of motivation, could actually do a lot of the things David Carter is talking about.