

Modular structuring in Art and Design; a comparison between British and American degree courses

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Higher Education in Britain is witnessing an increasing interest in the modular structuring of courses, with several institutions already committed to 'modularity' or 'unisation'. Birmingham Polytechnic has now converted most of its first degree provision to a unit-based structure with the aim of 'creating greater flexibility in courses so that they may more easily respond to the changing needs of students and society', and to introduce 'different pathways from combinations of existing, modified, and new units dependant upon perceived educational need and viability'.

Modular structuring of courses in Higher Education, particularly in Art and Design, has very few precedents in this country, whereas it is virtually universal in the USA. However, the work of the Open University, recent initiatives such as the CNAAs 'Credit Accumulation and Transfer Scheme', and the national trend towards greater provision for part-time modes of study, suggest that modular structuring to establish more flexibility and choice for students is likely to become a much more widely practised feature of Higher Education in Britain. In Art and Design,

During the academic year 1984/85, I participated in the UK/US Teacher Exchange Programme, teaching Graphic Design and Photography in the School of Design of the University of Kansas. I was also able to visit numerous other Universities and Art Colleges in a year which presented an ideal opportunity for me to study the teaching of Art and Design in a system which has been based on a modular structure for over a century. How does the American model operate? What advantages does it offer compared with the traditional British system — and what are its shortcomings? And in particular, what are the implications for the Design curriculum presented by modular structuring?

Credit; the structure of degree programmes in the USA

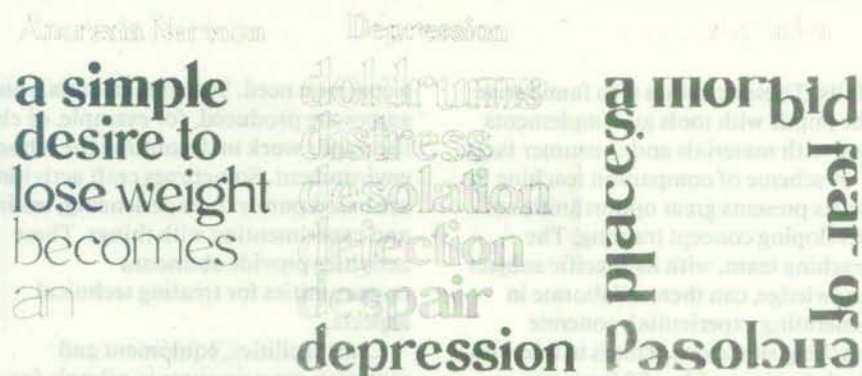
Higher Education institutions in the USA employ a modular structure whereby the curriculum is divided into discrete units, or 'courses'. Institutions offer a range of these courses every semester (a half-year session). Each of these courses has a 'credit' value which indicates the number of 'credit-hours' a student will be awarded on satisfactorily

which will require an average weekly workload of 45-54 hours of study including private and unsupervised study. Summer schools are more concentrated, requiring attendance on 4-5 days each week for a course taken over the 8 week session.

At the end of the semester, the tutor who taught the course awards a grade to each student. All pass grades earn the full credit value for the course, but certain courses are assessed solely on a 'Credit' or 'No Credit' basis. I found no examples where partial credit could be awarded, but an 'Incomplete' can be given which allows students to finish outstanding assignments and to be re-assessed at the end of the following semester. Where a particular course is a requirement for graduation, any student who fails must re-take the entire course in a subsequent semester. Tutors are responsible for the assessment of their own courses, both in terms of the form of the assessment, and the criteria employed to determine grades. There is no accountability to external monitoring bodies, and no use of external assessors or moderators. Indeed, the only challenge to the tutor's

judgement is likely to come from the students themselves. Their expectations, reinforced by alarming parental pressures, are high, and their concern and frustration is only fuelled by a system which does little to ensure that there is an acceptable level of consistency in the distribution of grades. As a general rule, only work required by the tutor of the course is assessed. Additional work produced by a student from his own motivation is not assessed in the way that a British student may include such work in periodic reviews or the final degree show where account may be taken of this extra work when determining the student's grade or classification of degree. I found that this led to a reluctance on the part of American students to produce work unless it would directly influence their grade.

To obtain a degree, a student must accumulate a specific number of credit-hours at various levels. This total varies from institution to institution, but 4 years is normally the minimum period required for a student to achieve this target. Summer Schools provide

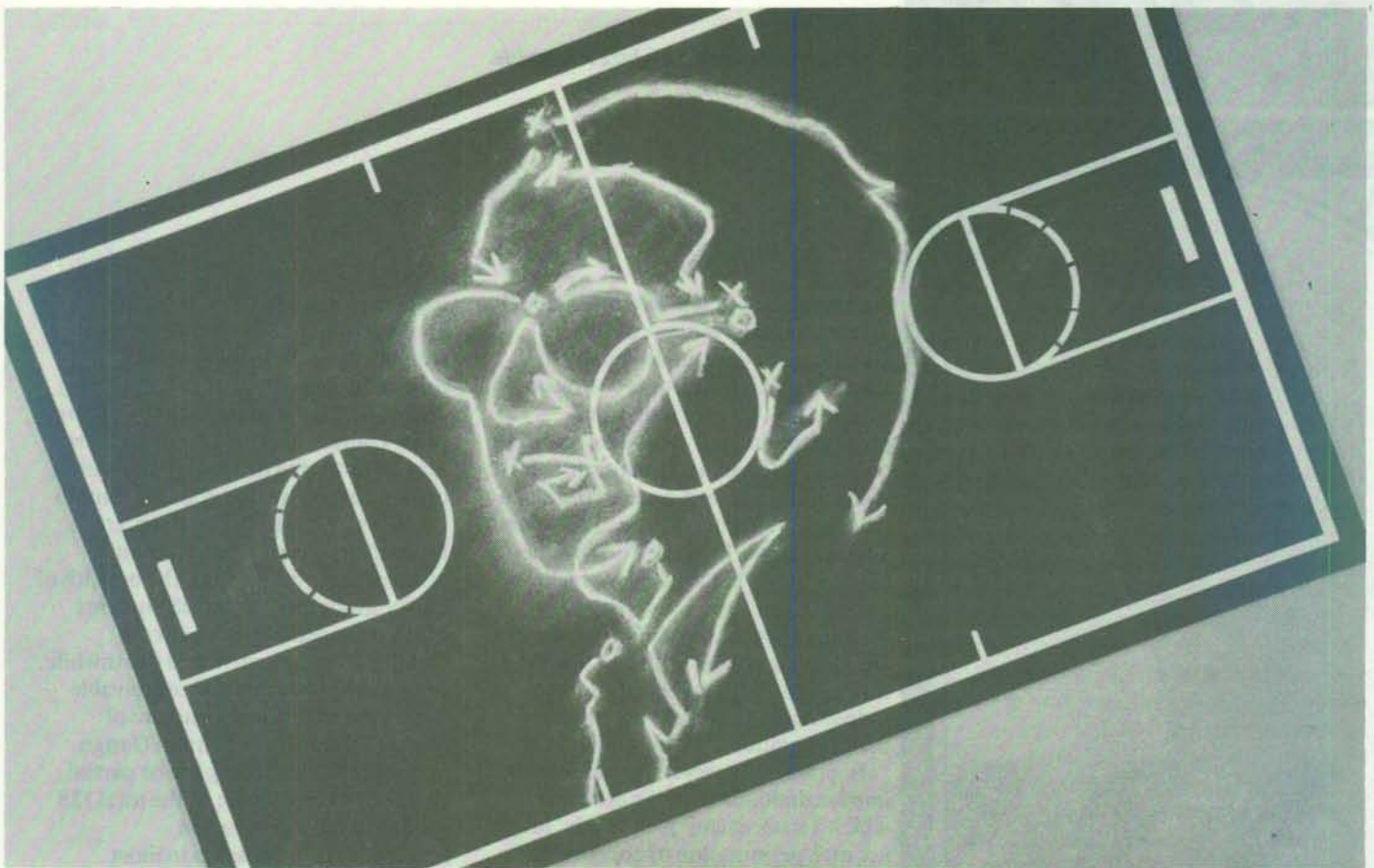


Roughs for covers of a series of booklets published by the University of Kansas Medical Center.

various factors have already enforced a re-appraisal of what and how we teach, and of the rigid division into areas of specialisation which no longer fully reflect the nature of professional practice where boundaries between traditional areas have become blurred. Artists and Designers are increasingly required to be conversant with new technologies, management techniques, business practice, etc., in addition to achieving high standards in technical and creative skills.

completing the course. Some advanced-level courses may be repeated for further credit in a subsequent semester, while certain tutorial-based courses may be taken for a credit value agreed between tutor and student at the time of enrolment.

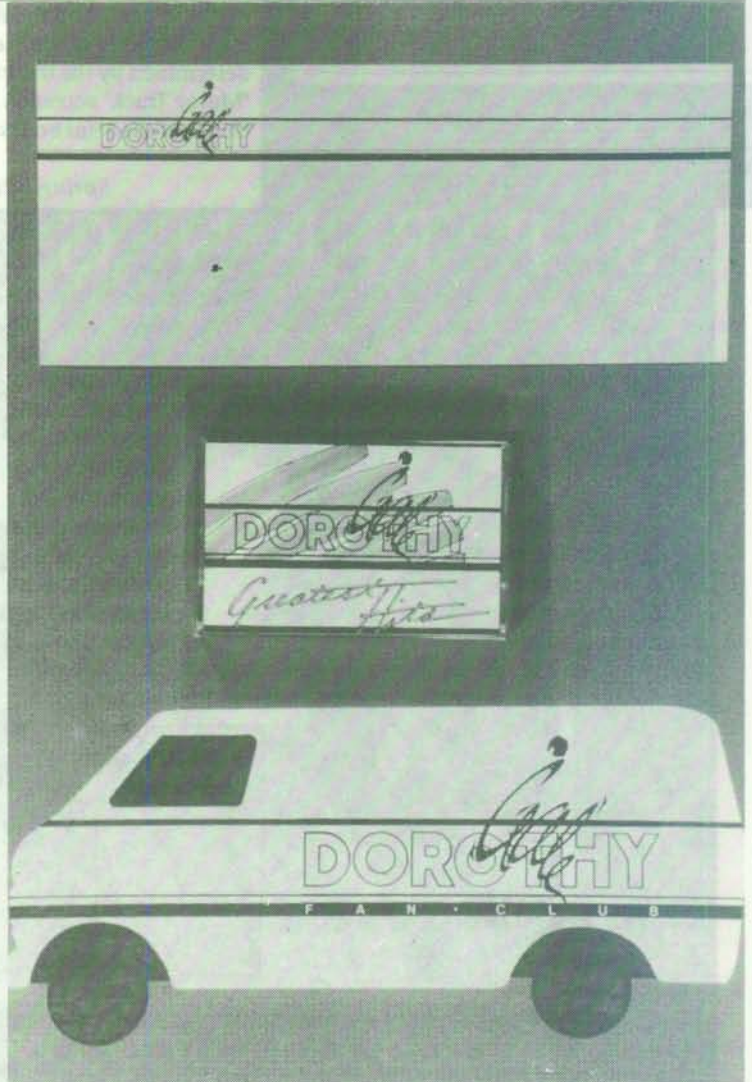
Having enrolled for a course, students are required to attend lectures or studio sessions at set times each week throughout the semester. A typical student studying full-time will enrol for 15-18 hours of credit each semester,



Portrait of Larry Brown, KU Basketball Coach.

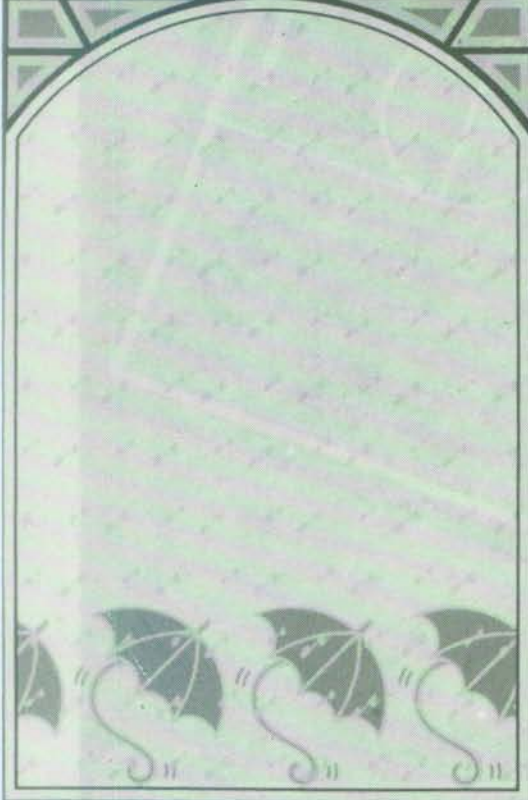
opportunities for students to make up any shortfall in maintaining progress towards graduation, or to take over-subscribed courses, or to re-take courses which they have failed. Students must also maintain a minimum 'Grade Point Average' to qualify for a degree, although this is usually conferred without classification.

Thus it is implicit in the credit system that degrees are awarded on the basis of cumulative performance over the entire period of study, and not on the level of achievement at the end of the programme of study. Indeed, there is no final assessment of the student's overall body of work comparable to the British Degree Shows. US students receive a 'Transcript' on graduating, a document which lists all the courses the student has completed together with the grades awarded. Transcripts provide a useful record for students and for potential employers by giving a breakdown of the entire degree programme (which of course will be different for each student). This system does penalise the late developer somewhat, as poor performance early in the programme is endorsed on the transcript, whereas his British counterpart could still earn a good honours degree regardless of low achievement during the first and even second years of his course.



Logotype for Dorothy Gale (ie Dorothy in 'The Wizard of Oz').

JAZZ ENSEMBLE



Poster for concert by Jazz Ensemble.

An assessment of the American model

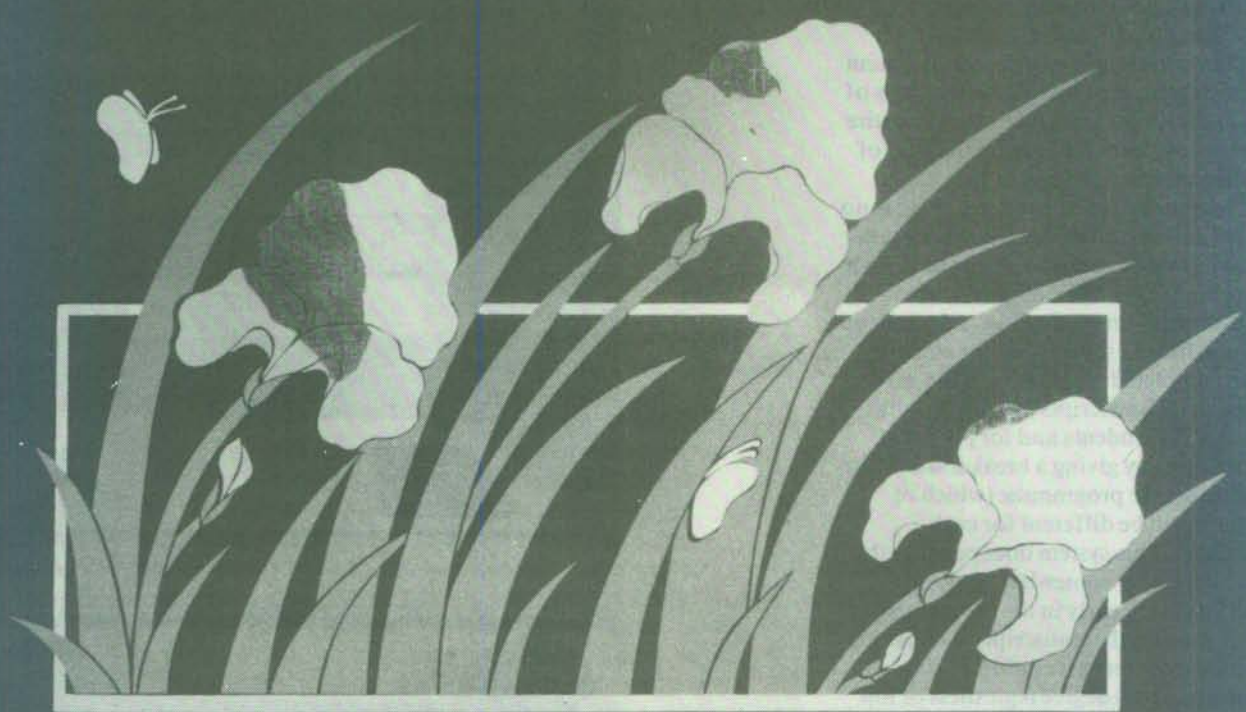
The principal advantage of the American model is undoubtedly the flexibility which it affords each student to select his/her own individual programme of study with due regard to personal interests and ambitions, and to study at his/her own pace according to personal preference and circumstances. The system works very effectively in the USA, where it has evolved over a long period of time (the University of Michigan began a modular structure in 1877) and is now used almost universally throughout Higher Education, and indeed many High Schools structure their programmes along similar lines.

In practice, however, several factors impose limitations on the extent to which a student can 'pick 'n mix' his or her own permutation of courses. To major in a particular subject, a student must complete specific courses as determined by the institution. This 'Major Track' accounts for about two-thirds of the total hours of credit

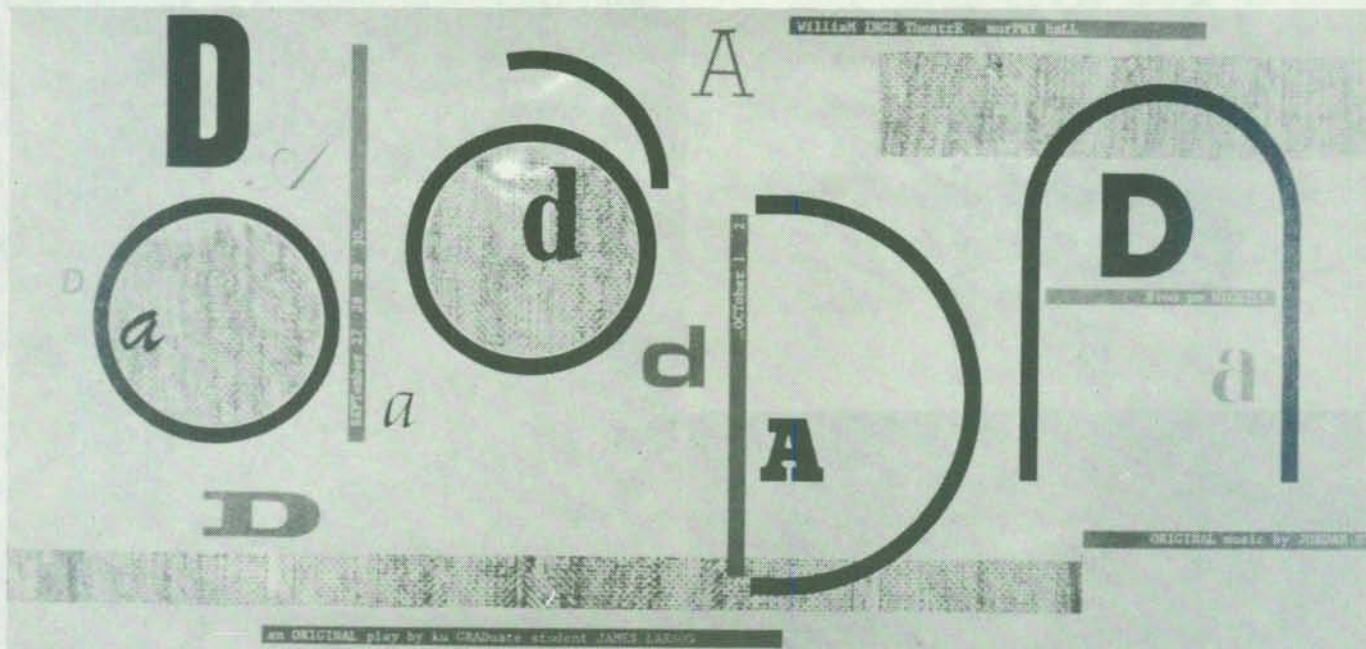
required for graduation. It is also common practice for institutions to stipulate specific requirements regarding some or all of the remaining credits which a student earns by taking other courses such as 'Electives'. These may be restricted to a maximum within certain categories, for example 'Studio Electives', 'Academic Electives', etc. Nevertheless, even when account is taken of these limitations, the breadth of choice available to most US students offers considerable scope for the creation of imaginative and worthwhile programmes which are inconceivable within the traditional structure of Higher Education in Britain. Design majors at KU had complete or partial choice of 45 credits out of the total 128 needed to meet graduation requirements. Admission to most courses, except those at Freshman (first year) level is dependant upon passing pre-requisite courses, but providing these requirements have been met, a student may take advanced level courses

Spring Winds. Poster for a concert by the University of Kansas Band.

S · P · R · I · N · G · W · I · N · D · S



THE 1984 UNIVERSITY BAND
 MONDAY, APRIL 9, 1984 8:00 PM CRAFTON-PREYER THEATRE JAMES BARNES, CONDUCTOR DR. WILLIAM A. GORA, GUEST CONDUCTOR



Dada. Poster for performance by experimental theatre group.

in any subjects, thus a Design major could enrol for advanced courses in, say, Business Studies, Computing, or a Foreign Language. Students can — and do — take additional classes over and above the minimum required for graduating if they so wish, while one student I taught intended to major in both Graphic Design and Business Studies by taking all the courses in both major tracks.

This flexibility does, however, bring with it a number of problems. Faced with such freedom of choice, some students — inevitably — select courses for the wrong or dubious reasons. Some courses provide a safe option, enabling students to ensure a good grade for relatively little effort by virtue of their previous experience in the subject, while other courses may be selected for self-indulgent purposes rather than as a valuable supplement to the major study. While most of the departments that I visited operated some form of advisory procedures to help students with their choices in the major subject area, there seemed to be little advice available regarding the rest of the student's programme beyond indicating what would be acceptable in fulfilling the requirements for graduating. I felt that departments could have given potential majors more guidelines as to which courses might subsequently prove to be of benefit to students who wished to pursue a professional career in their field.

The flexibility of the American model extends to the pace at which studies progress. While 4 years is the normal

period for a first degree programme, students can pursue their studies at a rate appropriate with their own wishes, their capacity for study, and their ability to finance their education. Most American students are paying their way through college, and a significant proportion need to find employment to pay fees, maintenance, etc. I visited only one institution, the School of the Art Institute of Chicago, where a maximum period was stipulated for the accumulation of sufficient credit for graduation (10 years).

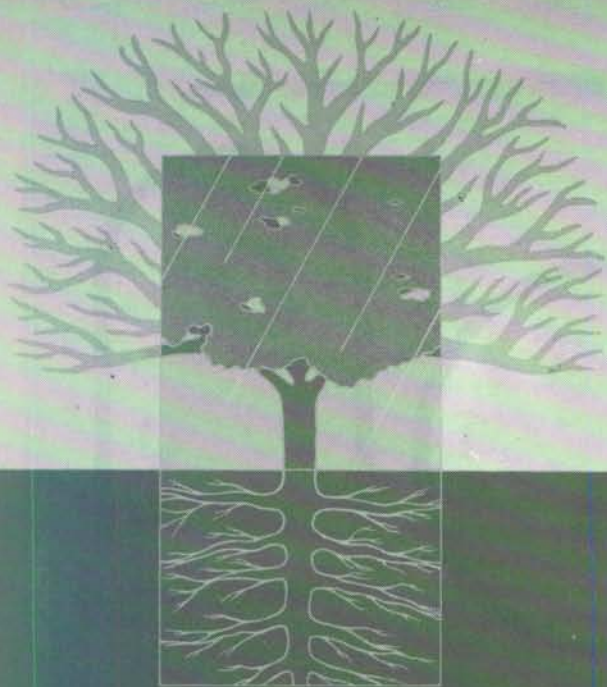
Credit earned at one centre is normally accepted by other institutions towards their degree. Many students start their study towards a degree at a local Community College or Junior College, transferring to a University after their Freshman or Sophomore year. Graduation requirements usually stipulate a minimum total of credit which must have been gained at the institution which confers the degree, but the Art Institutions are members of an alliance of colleges which operate a Student Mobility Programme whereby this maximum is waived for students transferring between the member colleges.

A distinct advantage of a system of credit accumulation is that at any given time a student has an accurate awareness of his progress towards graduation — how much credit he has earned (and therefore how much more he needs to achieve), and what his GPA (Grade Point Average) stands at. So different from his British counterpart who must rely on periodic assessments and

tutorials, and even then he may be awarded a degree of a higher or lower classification than predicted after the External Assessors have moderated the internal marks. In a credit system, a student may fail individual courses, but he can retake essential courses, and continue to do so until the requirements have been met. The structure also ensures that a student cannot progress to advanced level courses unless he has satisfactorily completed the specific pre-requisites, thus creating an effective filtering of students throughout the entire degree programme, but at the same time offering the student a reasonable opportunity to retrieve failure.

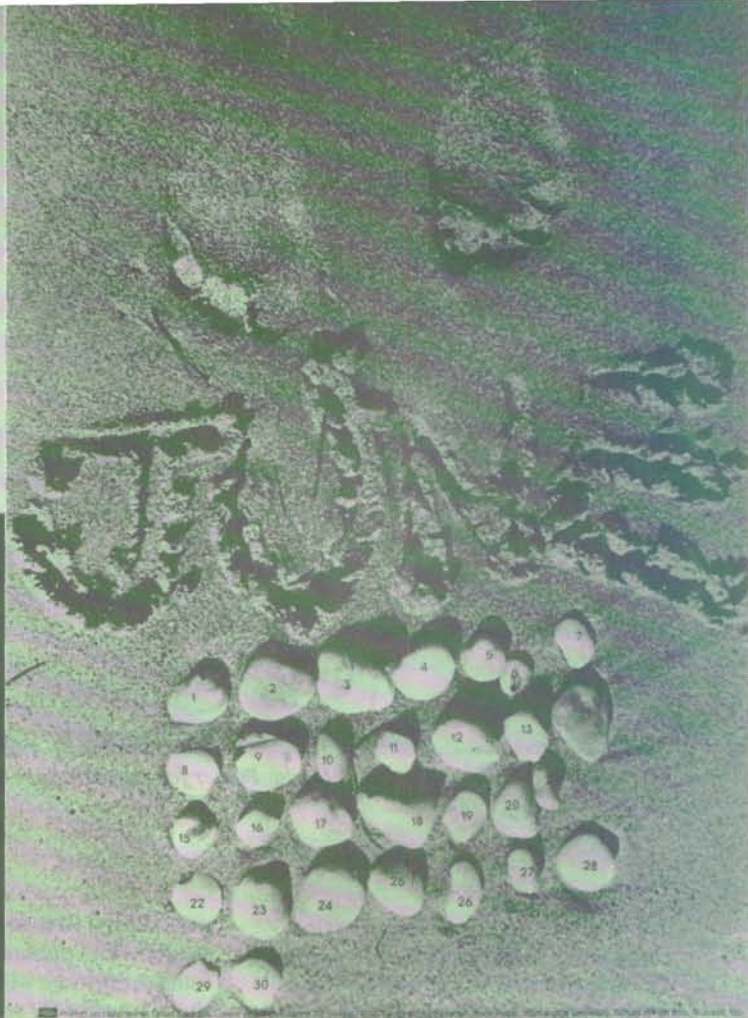
American Universities extend their educational opportunities to the whole community. Courses are open to anyone who has completed the pre-requisite course (where applicable), regardless of whether they are studying towards a degree. One of my classes included two professional designers with degrees in Graphic Design who wished to strengthen their portfolios for future job applications. Another student was a Fine Art graduate seeking to supplement her existing talent and skills with experience which might help her find employment in the visual communication field.

In common with many other observers, I would agree that, in general, a degree in Design from a British institution indicates a higher level of creative and technical achievement by the holder than a graduate of an American University or College.



APRIL

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April and June. Calender Posters to promote the products of a paper manufacturer.

However, such comparisons must be interpreted in the context of other relevant facts. In the USA, over half of all school-leavers will spend some time at college or university, with 30% of the population eventually obtaining a first degree, while in Britain less than 15% will attain graduate status. It follows, therefore, that the ability range of a class of US undergraduates is much wider than in the UK. While the best of the American students could hold their own in equivalent groups here, others fell short of the minimum standards required for degree level study in Britain.

On a comparison of standards of achievement in Design at degree level, the British system is unquestionably the stronger, but in terms of a philosophy for Higher Education it is the American model which deserves our attention and respect.

Unitisation of the Art and Design curriculum

American students are required to complete a number of basic or foundation courses before taking any of the more specialised options in Art and Design, and they are not usually identified as majors in any area until they have completed these introductory courses.

Although I found variations in the structuring of the Freshman courses for Art and Design, the content of the courses follows a very similar and traditional pattern. An exploration of the basic principles of drawing is offered in some form in all of the programmes; similarly Colour, Visual Perception, Basic 2D Design, 3D Design, and investigations into the nature of materials and processes are offered as required courses. Minneapolis provided the least traditional courses as part of its 'Visual Studies' programme for Freshman. This included 'Lens Media', 'Time, Rhythm, and Sequence' — 'a problem solving approach to issues which arise when dealing with time as a medium', 'Imaginary Architecture' which deals with Fine Art and functional design, and 'Near Environments' in which 'projects include the re-design of an existing "near-environment" to meet specific user needs'.

Where the American schools differ markedly from our own Foundation Courses is that the vital diagnostic role to which we attach considerable importance is of little consequence in the USA. While most schools offer some advice prior to a student entering a major track, my impressions were that these are only advisory and not selective.

Selection takes place to some extent through the need for students to pass pre-requisite courses, and the American system makes it relatively easy for a student to transfer to another major area — or another institution — if it becomes apparent that a wrong choice has been made.

By the first semester of the Junior (i.e. third) year, students majoring in a Design area will be pursuing the major track prescribed for that discipline, although they may continue to take studio and workshop courses in other Art and Design activities as part of their electives. Courses at this level are commonly directed at the basic materials and processes of the design area, for example 'Introduction to Typography', 'Model Construction', 'Fibre Properties', or 'Painting Materials and Techniques', or they focus upon the fundamental concepts of the discipline, as in 'Introduction to Graphic Communication', 'Human Factors in Design', 'Illustration Concepts', or 'Theory of Structure'.

Courses at the Senior year level can be divided into two principal groups. In the first group are courses which deal with the specific applications of skills, the end products which result from that design process. Graphic Design majors, for example, might be required to select



Hank Williams. Illustration for record sleeve of Country and Western music.

from courses such as 'Packaging', 'Corporate Industry', 'Publication and Editorial Design', 'Advertising Design', etc. while a student majoring in Industrial Design at Art Centre, Pasadena, for example would be choosing from options such as 'Transportation Design', 'Environmental Design', 'Product Design', or 'Exhibition Design'. This type of course can frequently be re-taken for additional credit, or the course may be offered at two or three levels to enable students to pursue the area of work in greater depth.

As the titles of these courses suggest, an inherent danger of a unitised curriculum is that it can result in a tidy but rigid packaging of knowledge and experience which pre-empts cross-disciplinary activity by reinforcing traditional boundaries and attitudes. Even within a particular discipline, one finds examples of this division of content into discrete components. This is frequently seen in the separation of courses dealing with materials, techniques, and processes from those which deal with the conceptual and problem-solving dimensions of the discipline. As for example at the Art Center College of Design where a Graphic Design major will take courses

in 'Lettering', 'Graphic Processes', and 'Marker Indication' as well as courses for 'Graphic Design', 'Advertising Design', and 'Package Design'.

In providing this wide range of choice for all students, courses are timetabled according to a common timetable which divides the week into short periods, although classes may be blocked for longer sessions. Even so, this does little to prepare students for the working conditions which they will encounter in professional practice — intensive periods of work on one project, continuity of activity, and the need to meet short term deadlines.

However, I did find instances of course structuring which allowed for greater flexibility in terms of content and timetabling. For example, at Washington University, Graphic Design majors must earn all their credit in the major subject from just 3 classes which carry an 8 or 10 credit value for each semester. This structuring brings all the Graphic Design majors into the department for a substantial part of the week, and enables the tutors to operate in a manner very similar to current practice in the British Polytechnics and Art Schools. Within the group, individual students may be working on a diverse range of assignments, and cross-



disciplinatory activity is encouraged through collaborative projects with Photography, Printmaking, Fashion, Architecture, and Business Studies. The working environment at St Louis is impressive; students have individual work-stations, but group identity is strong, helped by the weekly 'Business Meeting' where new projects are introduced, current ones reviewed, and matters of general interest or concern are aired. The department operates an in house design and production unit, 'Create Studio', which handles work from the University and outside clients. Tutors art-direct the assignments, but students meet clients for briefings and presentations as well as designing and supervising production of the commissioned material. KU has a similar unit, 'The Arts', which designs and prints publicity and other graphic materials for the University's programme of arts events. Students selected for The Arts are awarded credit as this is recognised as an 'internship'.

Internships — professional placements — could be undertaken for credit at all of the departments which I visited. This is usually restricted to students in their Junior or Senior years, but none of the institutions made internships a requirement for

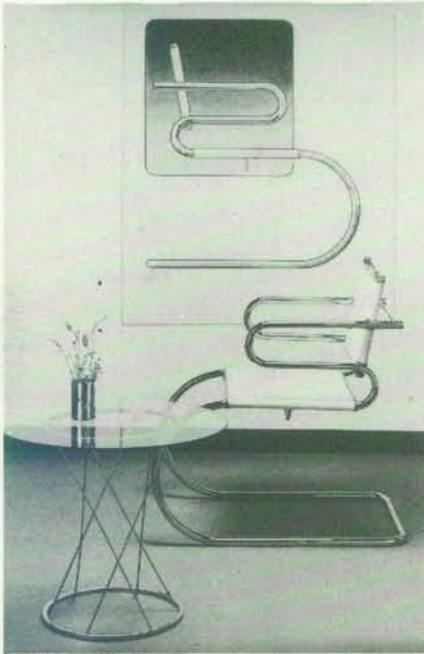


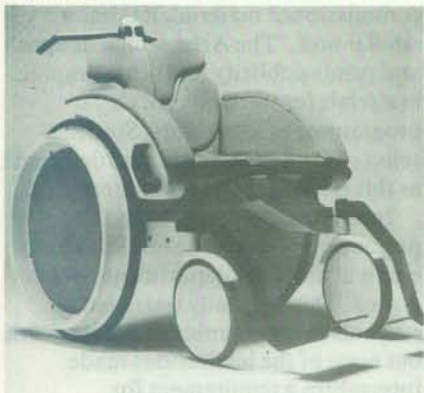
Table and Chair.

graduation. Students invariably had to arrange their own placement, but they could earn up to 12 credits for an internship, and I found that they were generally very keen to take advantage of this opportunity.

Each of the institutions which I visited offered some Design courses which appeared to be unique, and these helped to allay fears that a unitised structure imposes a straight jacket on the Art and Design curriculum. The Art Institute at Kansas City had introduced a series of half-semester workshops taught by local practising professionals, including 'Newspaper Design', 'Art Direction and Photography', and 'Calligraphy'. The intention was to develop a full programme of workshops to cover aspects of Design where expertise is perhaps not available from the full-time staff, and to give students 'state of the art' instruction in important areas where college facilities may have become outmoded.

Collaboration between departments had also led to interesting courses which bring together students from more than

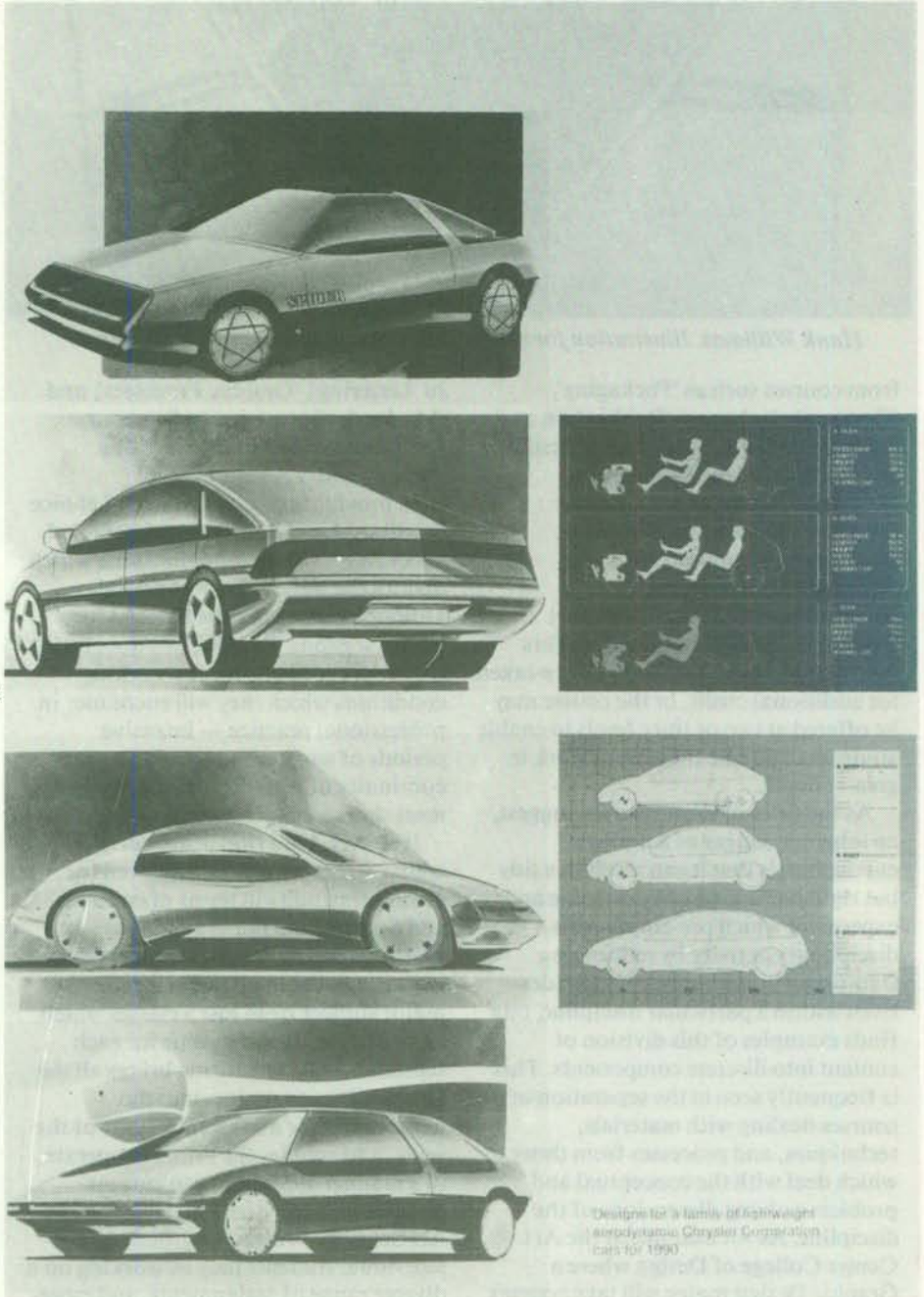
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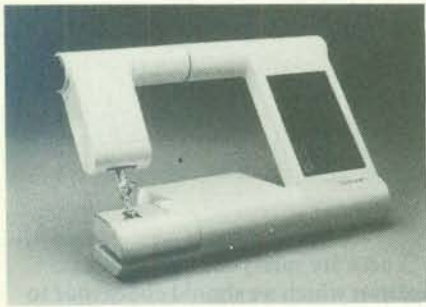
one discipline. At KU, the School of Journalism waives the normal pre-requisites for Graphic Design majors who wish to take 'Advertising Copy and Layout', while Journalism majors take Photography courses in the School of Design without the pre-requisite 12 credits in Art and Design. Negotiations were well underway at KU to provide basic drawing and basic design courses jointly with the School of Architecture. Washington University offered courses

in Advertising where Design majors worked in small groups with Business Studies students, each contributing their own expertise and interest towards the group projects. At Pasadena, close links had been forged between the departments of Graphic Design and Industrial Design to enable Graphic Design majors to undertake packaging projects with materials such as glass and plastics, thus becoming actively involved with the problems of design and

Designs for a family of lightweight aerodynamic Chrysler Corporation cars for the 1990's.



Designs for a family of lightweight aerodynamic Chrysler Corporation cars for 1990.



Sewing machines.



production of the actual container as well as surface information and decoration.

Students at KU could earn 0.5 credit each semester for attendance at the 'Hallmark Symposium Series' lectures. Speakers during my year at the University included some of the most prominent figures in the USA, namely Lou Dorfsman from CBS; Rudi Hogland, Art Director for 'Time' magazine; and Howard Paine, Art Director for 'National Geographic' magazine. In addition to the lectures, the visitors conduct weekend workshops for Seniors majoring in either Graphic Design or Illustration. Hallmark Cards, whose headquarters are in Kansas City, are generous sponsors of the department, paying the fees and expenses of these guest speakers — they also pay the salary of one full-time professor in Illustration.

At Minneapolis, the College of Art and Design places great emphasis on Design Theory and Design Method. Design majors must take at least 12 hours of credit in these courses. The philosophy of the department is that Design is not only learnt from the application of ideas and the practice of design in the studio, but also by an examination of the conceptual processes of designing and problem-solving, and the reasons for design in a cultural

context. In a similar vein, students at the Kansas City Art Institute are regarded as majors in Design first and foremost, with an 'emphasis' towards a particular area such as Graphic Design, Product Design, etc. Narrow specialisation is discouraged and majors are expected to aim at achieving competence in a range of design areas, albeit with strengths in one specific field. The legacy of Coldstream in Britain tends to hold to the traditional rigid distinction between various design areas, with the result that our students' perspectives of themselves as designers tend to be equally narrow.

Design History is still at its infancy as an academic discipline in the USA. Some colleges provide general survey courses in the History of Design, but these tend to focus on Architecture, Industrial Design, and the Decorative Arts. Some reference is made to Typography, Illustration, and Advertising, in the course 'International Design' at Art Center College of Design, and Graphic Design receives some limited coverage in 'History of Design' at the Kansas City Art Institute, but these were the only instances I found where a Graphic Design major could receive some instruction in the historical background of his major study, an ironical situation given that the same students have many opportunities to take courses in other aspects of the historical and contextual background of their culture.

Conclusions

As Higher Education in Britain moves towards new structures which will offer undergraduate students some of the flexibility and choice enjoyed by their American counterparts, it is of course essential that we do not throw the baby out with the bath water by sacrificing those features of our system which have contributed so much to the high professional standards achieved in the Polytechnics and Art Colleges of Britain.

We must give our students greater responsibility for their own education by providing more opportunities for exercising personal choice — within clearly defined parameters — to determine the precise composition of their programmes of study. These parameters will ensure that each area of study can continue to require students to

complete a specialist curriculum consisting of those areas of knowledge and experience which are essential — and in most cases, unique — to the specialism. This should include any History, Theory, Professional, and Contextual Studies which are regarded as essential underpinning of the main study.

The main study curriculum should account for some 75% of the total programme in most cases, the balance being identified under two categories. The first embraces further study within Art and Design, enabling students to pursue creative and theoretical study which extends and supplements their main study according to individual needs and aptitudes; that is, knowledge and experience which is relevant to their personal development as artists or designers, but which is not essential for all students pursuing the same main study. For example, an illustration student might opt to devote some of his time to a particular area of Printmaking, acquiring greater expertise in Photography, 3D work in clay or mixed media, Animation and Computer Graphics, Technical Drawing systems, or research into an aspect of the History of Illustration.

The second part of the supplementary curriculum would encompass any study outside of Art and Design which could be seen to support individual student's main study programme. Obvious possibilities include such subjects as Business Studies, Management, Computing, or a second language, but individual students might also present a sound case for taking less predictable options from the Arts or Sciences. Some form of counselling of student choice would be highly desirable for all parties concerned, but this would be relatively easy to establish and operate.

Art Schools have traditionally accommodated and encouraged a high level of flexibility such as I am advocating, but higher SSR's, greater student numbers, reductions in resources and facilities, even Health and Safety regulations are increasingly imposing constraints upon the informal movement of students between departments. Planned flexibility through modular structuring can offer students the same opportunities for developing individual interests in ways

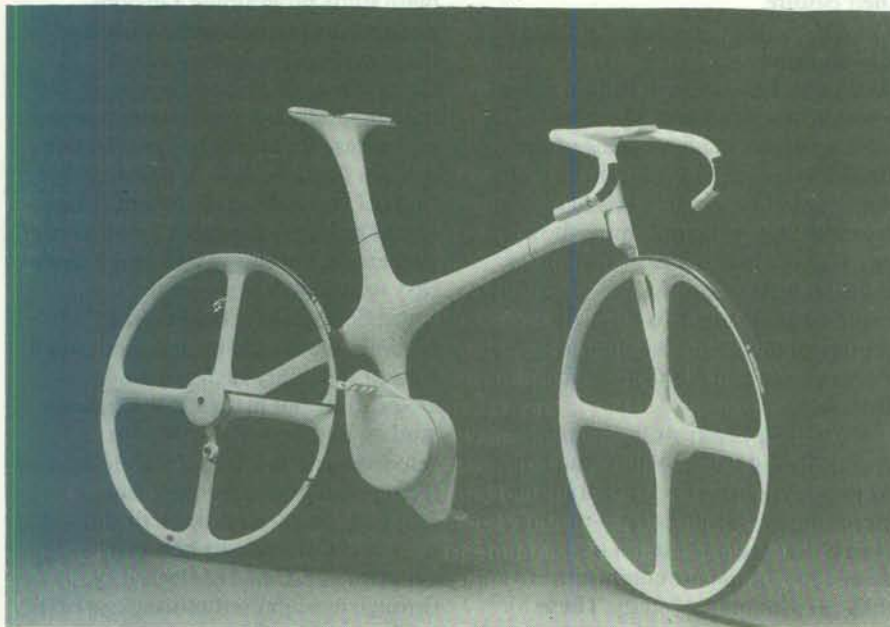
Fire Extinguishers.



which are no longer efficient or effective under 'ad-hoc' arrangements.

We should not, however, regard modular structures as merely offering cafeteria-style education. The American model provides flexible pathways to obtaining degrees which can accommodate a wider section of the community. In addition, each student has an accurate perspective of his

progress towards graduation at all stages of his studies, with clearly defined procedures to facilitate retrieval of failure, a change of main study, or study at different institutions. American students share their educational experiences with fellow students of similar interests, but also study alongside those from other disciplines, giving a broader context to the main study.



Bicycle.

These are surely commendable features which we should endeavour to incorporate within our own system of Higher Education.

The information and views expressed in this article are based on visits made during 1984/85 to the following institutions:—

- Art Center College of Design, Pasadena, California.
- Kansas City Art Institute, Kansas City, Missouri.
- University of Kansas, Lawrence, Kansas.
- Minneapolis College of Art and Design, Minneapolis, Minnesota.
- School of the Art Institute of Chicago, Chicago, Illinois.
- Washington University, St Louis, Missouri.

All of these centres are accredited by the National Association of Schools of Art and Design. I also visited the following centres:—

- Emporia State University.
- University of Missouri (where I taught 'Graphic Design II' during the Spring semester).
- University of Oklahoma.
- Pittsburg State University.
- Rochester Institute of Technology.
- Morningside College, Sioux City (where I was External Reviewer for the Graphic Arts programme).