

RIBA Conference on Architectural Education

Report by the Chairman, Sir Leslie Martin

The proposal to hold a Conference on Architectural Education had its origin in the Council of the RIBA. During discussions of particular reports from the Board of Architectural Education it became clear that there existed a general feeling that all the related aspects of the subject should be fully explored. This, it was suggested, might be done at a Conference and it was considered that it would be an advantage to the Council to have any views or ideas which such a Conference might produce. Consequently, a recommendation was made in 1956 that A Conference on Architectural Education should be held no later than the Spring of 1957. To allow time for adequate preparation, April 1958, was finally agreed.

A Conference Organising Committee was set up by the Board of Architectural Education. This Committee had several objectives. First it was considered that any Conference should draw together as much relevant factual information as possible. Second, that the discussion should bring out as much informed opinion as possible from people interested in widely different aspects of Architectural Education. Third, that the discussion should be frank, and finally, that if possible, some line of action should emerge.

In order to achieve these objectives the Committee decided to circulate preparatory papers giving a general background both of fact and opinion. In order to concentrate the discussion which was bound to be extensive it was felt that invitations to the Conference would have to be limited. Invitations were, therefore, sent to people inside and outside the profession who were known to have views to express. The Conference Committee was aware that in taking this selective action valuable contributions might be excluded. It hoped, however, that it had achieved in its selection an effective cross-section of opinion and interest. The range of subjects to be discussed formed another difficulty. These could certainly not be covered in any single session, but a limited number of people could perhaps spend longer periods together. It was, therefore, decided to hold a weekend conference at Magdalen College, Oxford, on April 11, 12 and 13.

An outline programme was drawn up in order to give some form to the debate. After an introductory session to discuss the programme, the conference was divided into three main sessions. These covered broadly:

1. The needs of the profession and the community and the desirable standards;
2. The means of education, the routes of entry into the profession and the standards that are being and could be achieved:
3. Developments of advanced training and research.

The Conference was attended by 50 members. They made their contributions as members of the profession with interests in public or private offices of various kinds. They represented industry and local authorities, the teaching institutions, building and the associated professions. Several visitors from abroad and from the Commonwealth also attended. Their discussion forms the basis of these notes.

The 1924 Congress

The last Congress on Architectural Education was held in 1924. At that Congress, Professor Budden gave an outline of the system and policy of Architectural Education in this country.* “The real qualifying work,” he says, “is to be done by the Schools which can offer a full-time course extending over a period of five years. Into this category come the principal University Schools, one Independent School and a School of Art. Though the pupilage system has practically passed in most of the larger centres of population it still lingers in certain localities. To meet the needs of these districts complementary courses are available.” These courses are given in Schools of Art and Technical Colleges and consist of part-time and evening training. Students taking these courses qualify by External Examination.

*** Book of Proceedings of the International Congress on Architectural Education 1924.**

The 1924 Congress clearly places the emphasis on full-time training in ‘Recognised Schools’. Training elsewhere exists to meet the needs of a dwindling minority. It can be carried out as and when the need arises in Institutions which differ from each other in origin and intention.

The general conception was reiterated in 1943, when the Special Committee on Architectural Education, in referring to the decline of pupilage and apprenticeship said: “In the meantime the RIBA must maintain its own system of qualifying examinations for the benefit of those who, for one reason or another, have not passed through a ‘Recognised School’.”*

*** Report of the Special Committee on Architectural Education 1943.**

What these statements recognise is that two main types of training have been set up – one inside a full-time School leading to exemption, the other outside these schools and designed to assist students to take the RIBA Examinations externally. But what these statements fail to recognise is that although pupilage may decline the numbers of students taking the external examinations may, for various reasons, continue to increase.

In fact, in 1957, 486 students qualified at Recognised Schools and as many as 417 took the RIBA External Examination. In the same year 3,764 students were attending Final and Intermediate Schools and 3,342 were taking courses in Listed and Facility Schools. This latter figure does not include those who prepared themselves for examination independently (for example, by correspondence courses).

Ways of Qualifying

Students of Architecture can, in fact, prepare for qualification in a number of different ways and in increasing numbers of institutions. There are now in the United Kingdom 21 Recognised Schools, 5 Intermediate Schools, 9 Listed Schools, 32 Facility Schools and a considerable number of institutions offering courses in Architecture. Numbers of students range from 500 in the larger schools to 7 at the other end of the scale. The aims of training and the standards reached in these schools differ widely. So do the standards of entry and the quality of instruction.

But all students taking these widely different courses have one object – to qualify and to become Registered Architects. Numbers have risen sharply since the war. Corporate membership of the RIBA stood at 8,218 in 1938. It had risen to 10,706 in 1948, and it now stands at 18,175. Over half the profession has probably qualified since the war. This increase may continue irregularly but on average at a rate of about 500 a year, which might lead to an ultimate total of something approaching 30,000 architects.

Factual evidence of this kind,* supported by a considerable amount of information on the structure of the profession, formed the background to discussion. This dealt with the development of Architecture as a Public Service and what the public expects of the architect. It touched the changing nature of architectural practice and the technical standards that are now required. These demands and standards were in turn related to the standards of entry and training and to the ultimate and desirable level of performance in the profession.

*** The Conference emphasised the importance of the statistical information which is now being gathered by the RIBA.**

The ultimate purpose was repeatedly stressed. It was that the profession should attempt to improve its standards of competence at all levels. Any move in this direction must start with the standard of entry. Although the level of entry to a course in a University School can be high, the normal minimum standard elsewhere (5 passes at 'O' level) is far too low. Plenty of evidence to illustrate the depressing effect of this low standard was forthcoming. In one county, for example, "a student at a grammar school who wishes to become an architect is advised to leave as soon as the 5 basic subjects at 'O' level have been obtained." The reason given for this is that he would be wasting his time and public money to stay on in the sixth form. Representatives of secondary and higher education pointed out that there are now plenty of competitors for the best boys from Grammar and Public Schools. At present the entry standard for architects is well below that required by other professions, for example, doctors, dentists, pharmacists, veterinary surgeons, metallurgists, not to mention undergraduate entry to a University and the entry standard for the Higher National Diploma in Building.

As one speaker quoted: "The question that arises is how far can a great profession, statutorily responsible for its own education, afford to have an entry standard below that which a good mind may nowadays be expected to attain. It is an issue which the profession may prefer to face sooner than later, for in the next few years (with an increase in the number of 18-year-olds available) it could seize the opportunity to select candidates rather than to accept what material presents itself." The architectural profession will need every artifice to catch anything like a fair share of this increase.

Raise Entry Standards

A sharp improvement in the standard of entry is urgent. This, in turn, would rapidly have repercussions throughout training and ultimately throughout the profession. The difference between an 'O' level pass at 16 and an 'A' level at 18 is not just a difference of educational standard. In the second case, as one speaker said, "the mind is two years older and more developed." "I cannot believe," he said, "that in one case a course of five years is long enough or in the other that five years is required."

Among the conditions that flow from a uniform and higher standard of entry are the following:

First, it makes possible at once a much higher standard of training in all practical and theoretical subjects.

Second, the higher standard and range of study replaces training for a common level by the possibility of developing diversified interests as the student moves through his course. If architects are to hold their own in a developing field of technology this is, in itself, highly important.

Third, the development of a higher standard in undergraduate study leads naturally to the important field of post-graduate study.

Fourth, experience confirms that a good mind absorbs knowledge extremely rapidly. This fact would have repercussions on the length of theoretical training that is necessary and might open the way to new developments in training.

One issue, however, cannot be avoided. The raising of the standard of entry for all students who intend to qualify as architects is likely to lead to a consideration of the desirability of other and complementary forms of training – not leading to Registration – but equipping the student to take his place as a valuable member of the building team.

Entry Level at 16 for Technologists

In the discussion on this matter the following points emerged. The fact is that there exists in the profession a demand for highly competent technical assistants. If we are to reach a higher standard of training for the architect and, at the same time, provide competent technologists then we should recognize this distinction in our training. If the entry level for the architect is to be an 'A' level at the age of 18, there is a case for an entry level at 16 for those who will train as supporting technologists.

The precise form of this training of the technologists will need careful study. The possibility of basic courses and combined forms of training with other building technicians may be considered. There is, in fact, interesting precedent: speakers from Denmark and Sweden gave comparisons, and reference was made to similar developments in other professions (engineering, for example). Although the 'A' level standard of entry for all intending architects was insistently pressed, several speakers mentioned the desirability of providing the opportunity for outstanding students who have started their training as technologists to move into an architect's course providing always that the required standard has been reached.

The Conference followed this discussion by a consideration of the means of education. This consideration centred on the types of school and the main objectives of training. Although the content and the curriculum were discussed, it was obvious that the Conference could not give this detailed consideration. Three types of school were discussed: the Independent School, the University School, and the Local Authority School of various kinds. These were considered from a number of points of view including standards of entry, facilities for training, opportunities for the development of training and post-graduate work, staffing and the development of links with actual practice.

The Major Schools

For the large Independent and University Schools it was stated that the qualification requirement at entry (judged either by examination standard or combined examination and probationary period) was high. A student taking a degree course, for instance, must reach 'A' level in two or more subjects. A student who fails to show promise in the early stages of his course can be excluded. (The probationary period should mean what it says. Consideration of exclusion from a course at Intermediate level is far too late.) Schools of this type are free to develop their courses well beyond the range of the RIBA syllabus, and within the Universities the opportunities for collaboration with other faculties can lift the content of the course to a very high level. This opportunity for the interchange of ideas between men of different interests and experience is of the greatest importance to both students and staff. This interchange can occur at undergraduate and post-graduate level. The background of the University influences the School: the School of Architecture, in turn, can influence the understanding of architecture in the University itself and in the minds of undergraduates who may well be its future patrons. A strong case can be made for the development of Schools of Architecture in Universities and for the transfer to Universities of Schools in other institutions. The characteristic feature of architectural education is that it involves widely different types of knowledge. From the point of view of the University this raises two considerations. If architecture is to take its proper place in the University and if the knowledge which it entails is to be taught at the highest standard, it will be necessary to establish a bridge between faculties: between the Arts and the Sciences, the Engineering Sciences, Sociology and Economics. Furthermore, the Universities will require something more than a study of techniques and parcels of this or that form of knowledge. They will expect and have a right to expect that knowledge will be guided and developed by principles: that is, by theory. "Theory," as one speaker said, "is the body of principles that explains and inter-relates all the facts of a subject." Research is the tool by which theory is advanced. Without it, teaching can have no direction and thought no cutting edge.

In spite of the strong arguments for University Schools, it was clearly recognized that several institutions out-side the Universities were capable of developing their training to a University level. Experimental development in schools of advanced technology would give these institutions the opportunity of advancing those aspects of architectural education which are proper to their framework and of adding to the variety of skills that are required of the architect.

In contrast with the standard that such courses can achieve there is the picture of training in a great many institutions offering tuition in architecture. There are, of course, good 'recognised schools' and bad 'recognised schools'. There are equally good 'unrecognised' schools and bad ones. The difference between the good schools in each category is, however, also a difference of opportunity. One is free to develop its courses, the other is restricted by the requirements of training for an external examination, and the whole concept of part time and evening training.

Facility Schools

The difficulty in the 'unrecognised' facility schools starts at the outset. The facility school can develop in any institution at which a reasonable number of candidates present themselves for part-time and evening training. This number is generally recognized as 10 but can be lower. There is an initial difficulty where students already engaged in offices arrive for training without even the necessary 'O' level

standard. Training takes the form of preparation of testimonies of study: 32 drawings have to be approved by RIBA examiners. If they are not approved the reason is not clear to the student. There is no time to develop courses beyond the level of the RIBA External Examination requirements. Immediately before the examination the students concentrate exclusively on revision. Although only 40 per cent, may pass, eventually, after repeated attempts, 90 per cent, may finally succeed. This, said one speaker. "is not education, it is cramming."

The very multiplicity of 'unrecognized' schools with different standards militates against the raising of the level of architectural education in these institutions. To this is added the confusion that comes from a lack of any clear indication of what is required by the profession. The raising of the standard of entry to a high level would be a welcome indication that the profession wishes to raise its standards of training for architects. The profession must decide whether anything approaching the desirable standard of architectural education can be achieved by part-time and evening tuition.* If not, then the profession should say so.

*** The 'sandwich' course which is developing in some schools is deliberately excluded and is discussed in paragraph 31.**

The freedom from the restrictions of training by testimonies would allow some schools to advance their training to the level required for architects. Where this is impossible or inappropriate a parallel policy of training in building technology would give some institutions the possibility of building up new and useful courses for this purpose. The ultimate object should be that all schools worthy of providing the improved standard of training required by the architect should be recognized schools. The unrecognized school is an anachronism.

Lead from Profession

A clear lead must come from the profession. It must not only give a lead. It must play its part in architectural education. It can do this in several ways:

First, staffing. The difficulties of staffing schools are of two kinds. On the one hand there is the danger that the promising student may find himself promoted to teacher without any really adequate period of practical or research experience or even any understanding of teaching. On the other hand, schools have also relied on young people who are starting practice and who may use a teaching salary as a basic income. These people may bring enthusiasm: but when their practice is established they go. What is necessary is an arrangement which brings into teaching, architects with creative ability and extensive practical or research experience so that they may add to the fund of knowledge that is available in a school. This can be assisted by the link with post graduate research. But it also requires a readiness on the part of able practitioners and specialists to take their place from time to time as teachers. It is simply no good for the profession to complain about the standard of education when those who have become skilled practitioners feel unable to collaborate.

Second. If the student's complete course of training is to have any realism this means that at some stage he must be brought into the closest possible touch with all the requirements of practical building. The best way to achieve this is for him to be associated with a building project and the profession must recognize this as a necessary step in architectural education. This can be done in two ways. It can be

achieved by the development of the 'live project' as a school subject. This has already been pioneered in one school and is in operation in others.*

*** Birmingham School of Architecture; R W A School of Architecture, Bristol; University of Cambridge School of Architecture.**

The other possible arrangement is through the operation of combined or 'sandwich' courses. These are being developed in several schools and are proposed in others. The 'sandwich' course is **not** part-time training. (One conclusion on which the Conference was emphatic was that the part-time course must go.) The sandwich course which is proposed in schools, which carry out full-time training, is a means of breaking down the barrier between training and practice. This is done by alternating periods of training in a school with periods of **training** in an office. The collaboration in training by the office itself is essential to the success of any scheme of this kind.

Advanced Training

In its consideration of the question of advanced training the Conference had before it a paper* which stated in its preface "Knowledge is the raw material for design." "It is not a substitute for architectural imagination: but it is necessary for the effective exercise of imagination and skill in design. Inadequate knowledge handicaps and trammels the architect, limits the achievements of even the most creative and depresses the general level of design."

*** Deeper Knowledge: Better Design. R Llewelyn Davies.**

The advancement of knowledge is not merely an ornament to a profession - it is its duty. This is the means by which the competence of the profession as a whole can be advanced. It is essential to improvement in both teaching and practice that a limited number of people should at some time devote themselves to advanced post-graduate study and research. Work of this kind is steadily increasing in volume. In addition to the main centres where it has developed, the BRS, the Ministry of Education and the Nuffield Foundation, important developments are now taking place in Universities in which this type of work may become progressively more established. The pioneering work of these centres of research has indicated the range of study that is required. In addition to the study of the space and functional requirements of building types, studies of building design in relation to daylighting and town planning, the prefabrication and industrialisation of building and the special problems of tropical building are now being followed up.*

*** The whole question of the architect's contribution to Town Planning needs special consideration.**

Work of this kind can be conducted as pure research but is more likely to take the form of investigations which involve inter-related studies: for example, the inter-relation between architecture and social needs, the physics of environment, etc. Studies at present being conducted in this country already involve extensive contact with other disciplines: on the side of the means of production architects are at work with structural engineers, mechanical engineers, production engineers, management and time study experts: on the side of the needs of buildings they co-operate with clients, sociologists, psychologists, physicists and physiologists.

The very nature of this pattern of co-operation makes post-graduate work in architecture a suitable subject for development in the Universities where, so far, the main developments of post-graduate study have largely concentrated on Historical Research which, indeed, they have carried out with distinction.

The evolution of post-graduate studies of this kind is a natural extension of higher standards of training within the schools. These studies are the means by which students of diversified interests extend their own minds and the boundaries of knowledge. They also build up the specialised knowledge which is always replacing and reinforcing the generalised knowledge of practice.

By the development of post-graduate study, the profession can provide itself with the higher technical ability and knowledge that it requires. Above all, it can advance and re-invigorate its teaching.

These discussions clearly led to a series of important considerations. Many of the matters discussed are issues which can only be effectively studied over a period of time but there were certain issues which the Conference considered to be urgent, critical and essential safeguards to the future of Architectural Education. These matters arose from many aspects of the discussion and eventually crystallised into the following recommendations for action:

Recommendations

1. The Conference unanimously agreed that the present minimum standard of entry into training (5 passes at 'O' level) is far too low and urged that this level should be raised to a minimum of 2 passes at 'A' level.
2. The Conference agreed that courses based on Testimonies of Study and the RIBA External Examinations are restricting to the development of a full training for the architect and that these courses should be progressively abolished.
3. Ultimately, all Schools capable of providing the high standard of training envisaged for the architect should be 'recognised' and situated in Universities or Institutions where courses of comparable standard can be conducted.
4. Courses followed by students intending to qualify as architects should be either full-time or, on an experimental basis, combined or sandwich courses in which periods of training in a school alternate with periods of training in an office.
5. It may be that these raised standards of education for the architect will make desirable other forms of training not leading to an architectural qualification, but which will provide an opportunity for transfer if the necessary educational standard is obtained.
6. The Conference regards post-graduate work as an essential part of architectural education. It endorses the policy of developing post-graduate courses which will enlarge the range of specialised knowledge, and will advance the standards of teaching and practice.