

Royal Institute of British Architects

**Report of the RIBA Visiting Board
to the University of Strathclyde**

Confirmed by the RIBA Education Committee on 27 September 2006

**Department of Architecture
Faculty of Engineering**

**Part One: BSc/BSc (Hons) Architectural
Studies
BSc/BSc (Hons) Architectural
Studies with European Studies
BEng (Hons) Building Design
Engineering**

**Part Two: PgDip/MArch Advanced
Architectural Design
PgDip/MSc in Integrated Building
Design**

Date of Visiting Board: 01 - 02 June 2006

1. Information About the Courses

1.1 Courses offered for validation:

Part One:

BSc Architectural Studies (3 years full-time)

BSc (Hons) Architectural Studies* (4 years full-time with a year in professional practice between years 3 and 4)

BSc Architectural Studies with European Studies (3 years full-time)

BSc (Hons) Architectural Studies with European Studies (4 years full-time with a year in professional practice between years 3 and 4)*

BEng (Hons) Building Design Engineering (with Architecture) (4 years full-time)*

** these degrees map the achievement of the Part One criteria onto the first three years of the course.*

Part Two:

PgDip/MArch in Advanced Architectural Design (9 months/12 months full-time)

Preceded by either the final (honours) year of one of the BSc (Hons) degrees or equivalent.

PGDip/MSc Integrated Building Design (9 months/12 months full-time)

Preceded by either the final (honours) year of one of the BSc (Hons) degrees, the final (honours) year of the BEng (Hons) degree or equivalent.

1.2 Address of the institution where the courses are delivered

Department of Architecture
131 Rottenrow
Glasgow G4 0NG

1.3 Name of Awarding Body

University of Strathclyde

1.4 Name of the Head of Architecture

Dr Michael Grant

1.5 Contact Details

Tel: 0141 548 3996

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2. Membership of the Visiting Board

The members of the RIBA Visiting Board for the visit on 01 and 02 June 2006 were:

James Soane	Chair
Graeme Jennings	Vice-Chair
Paul Harrison	
Kathy Gal	
Malcolm Macourt	Non-architect Member
Alice Fung	Graduate Member
Alan Dunlop	Regional Representative

Dr Chris Ellis (Acting Director of Education, RIBA) was in attendance as Secretary to the Board.

3. Procedures and Criteria for the Visit

The Visiting Board was carried out under the “RIBA Procedures for Validation of UK Courses and Examinations in Architecture”, published September 2003, effective from September 2003 and the “RIBA Criteria for Validation”, published March 2002, effective from September 2003.

For more information see www.architecture.com.

4. Recommendations of the Visiting Board

4.1 At its meeting on 27 September 2006 the Royal Institute of British Architects Education Committee confirmed:
Continued Validation of:

Part One

BSc Architectural Studies (3 years full-time)
BSc (Hons) Architectural Studies* (4 years full-time with a year in professional practice between years 3 and 4)
BSc Architectural Studies with European Studies (3 years full-time)
BSc (Hons) Architectural Studies with European Studies (4 years full-time with a year in professional practice between years 3 and 4)*

** these degrees map the achievement of the Part One criteria onto the first three years of the course.*

Part Two:

PgDip/MArch in Advanced Architectural Design (9 months/12 months full-time)
Preceded by the final (honours) year of one of the BSc (Hons) degrees or equivalent.

4.2 At its meeting on 27 September 2006 the Royal Institute of British Architects Education Committee confirmed:
Continued Validation with Conditions of:

Part One:

BEng (Hons) Building Design Engineering (with Architecture) (4 years full-time)*
** this degree maps the achievement of the Part One criteria onto the first three years of the course.*

4.3 At its meeting on 27 September 2006 the Royal Institute of British Architects Education Committee confirmed that the following course **not be validated:**

Part Two:

PGDip/MSc Integrated Building Design (9 months/12 months full-time)

4.4. The next Visiting Board should take place in 2010.

5. Recommendations of the Visiting Board to the Commonwealth Association of Architects, the Construction Industry Council and the EU Directive

5.1 The Visiting Board recommends to the Commonwealth Association of Architects that the CAA continue with their accreditation of the qualifications listed in 4.1 and that listed in 4.2 subject to the satisfactory discharge of the condition set out in 8.2.

5.2 The Visiting Board was satisfied that the Part One courses listed in 4.1 met the Construction Industry Council Common Learning Outcomes for Degree Courses in the Built Environment, as did that listed in 4.2 subject to the satisfactory discharge of the condition set out in 8.2.

5.3 The Visiting Board recommends to ARB that the Part One and Part Two courses listed in 4.1 met all points of the EU Directive, the course listed in 4.2 to be added to this list subject to the satisfactory discharge of the condition set out in 8.2.

6. Criteria

- 6.1 On the basis of the sample of academic portfolios examined, the Visiting Board was satisfied that all the students graduating from the courses and examinations listed in 4.1 above satisfied all the Criteria for Validation (which are held in common by the RIBA for validation and the ARB for prescription). The course listed in 4.2 should be added to this list subject to the satisfactory discharge of the condition set out in 8.2.

7. Standards

- 7.1 On the basis of the sample of academic portfolios examined, the work from the previous year of the courses listed in 4.1 was inspected during the visit and was found to meet the required standards. See also section 8.1 below.

8. Conditions of Validation

- 8.1 The Board was concerned about the quality of design work at threshold level in the BEng (Hons) Building Design Engineering (with Architecture) Part One programme. The Board was aware that this course was closed to new recruits, but to ensure that students continue to be appropriately supported and that standards of design work are at least maintained (and ideally enhanced) in the final year in which Part One is attained, the Board recommends the following condition:
- 8.2 A revisit by a sub-group, consisting of three members plus Secretary and providing continuity with the present Board will take place to coincide with the external examinations

of the final cohort of students from this programme attaining Part One in summer 2007. The sub-group will ascertain whether the minimum pass standards for design work have been set at an appropriate level and that all Part One validation criteria continue to be met by graduates from the programme.

9. Standard Requirements of Recognition

- 9.1 RIBA recognition of all courses/qualifications is dependent upon:
- i. external examiners being appointed for all the courses;
 - ii. any significant changes to the courses and examinations being submitted to the RIBA;
 - iii. any change of award title, and the effective date of the change, being reported to the RIBA so that, where appropriate, recognition may formally be transferred to the new title by the RIBA;
 - iv. submission to the RIBA of the names of students passing the courses/qualifications listed in 4.1 and 4.2.

10. Summary of Recommendations, Advice and Commentary Contained in the Full Report

10.1 Background

- 10.1.1 The Department of Architecture at Strathclyde University in its mission statement claims "The mission of the Department is to provide a stimulating and multidisciplinary environment that enables its students and staff to excel in architectural enquiry and design practice."

At the time of the visit the Department was emerging from a period of substantial change having been required by the University to substantially reduce costs, particularly staff costs, in part as a result of the 2001 RAE outcome. Since the last Visiting Board the Department has lost four professors and three other full-time staff, with no new staff recruits permitted. The loss of professorial staff has resulted in a loss of research income and a requirement to increase student numbers to compensate. There has been a substantial rationalisation of the Department's courses with the future built around the mainstream longstanding BSc/BSc (Hons) Architectural Studies (including the "with European Studies" variant) at Part One level and the PgDip/MArch in Advanced Architectural Studies Part Two course. Other validated provision has been, or is being, closed and new collaborative MSc courses are being developed which will not be put forward for validation. The Department believes its financial position has now stabilised and new staff appointments are being sanctioned. The Board was impressed by the efforts of the new Head of Department, who had come into post at an extremely difficult time and believes that under his direction there was a growing clarity of vision as to the future of the Department.

- 10.1.2 The Board judged that the particular strengths of the Strathclyde Department of Architecture included:
- the excellent staff-student relationships;
 - the real commitment by all members of the staff team to support students;
 - the leadership being provided by the new Head of Department;
 - the strong links with local practices and the contribution made by local practitioners to studio teaching in the Department;

- the balance in the curriculum between creative design and practical technology and "buildability";
- the excellent preparation for practice provided by the Department's courses;
- strong support from the Department's administrative, technical and library staff;
- the in-depth engagement with urban and social issues throughout the Department, but particularly in the PgDip/MArch programme.

10.2 Recommendations

The Board has made the following recommendations to the Institution. The RIBA expects the Institution to report on action taken or planned as a result of the recommendations in the annual monitoring returns submitted by the school and in the mid term review. Failure by an Institution to act on the recommendations, or provide the RIBA with a clear rationale for not doing so, may result in a course being conditioned by a future Visiting Board.

- 10.2.1 The Board was concerned that, although the Department maps Part One Validation Criteria as being met on completion of year three, the External Examiners for the BSc (Hons) focus primarily on fourth year work, only considering third year work in detail if a student has indicated that they will be leaving with a non-honours award. The Board thus recommends that the Department implement the proposal made by its Head that Part One External Examiners should in future sample a range of year three work to include the lowest pass portfolios with a view to confirming that the work demonstrates that all Part One Validation Criteria are being met by all students successfully completing year three.

10.2.2 The Board recognised that staff in the Department had been under substantial strain, admirably and wholeheartedly responding to the challenges of maintaining academic excellence in the face of staff losses and other financial challenges. The Board welcomed the commitment made by the Vice Chancellor to the ongoing development of architecture within the University and particularly to the appointment of a new professor in architecture to act as a "design champion" within the Department. The Board strongly recommends to the University and Faculty that the promised new appointment and appropriate future resourcing are vital if the quality of provision in the Department is not to suffer. The University needed to recognise that it will be very difficult for the staff team to generate new research activities and new research income to ensure a good outcome for the 2008 RAE exercise whilst maintaining teaching commitments unless additional staff appointments are made.

10.3 **Advice**

The Visiting Board offers the following advice to the institution on desirable, but not essential, improvements which it is felt would assist course developments and/or raise standards:

10.3.1 The Board was concerned about the apparent low student progression figures in the later years of the BSc/BSc(Hons) Architectural Studies programme. The Department is advised to further investigate progression rates on this programme and act on the findings in the

light of the University initiatives in this area as set out by the Vice Chancellor and the Head of QA.

10.3.2 The Board felt that the tone of some of the Department's documents did not do justice to its real strengths. With the recent financial problems on the way to being resolved, the Board felt that the Department should be doing more to make its strengths and achievements visible. The Department is thus advised to look for ways in which the real strengths of its activities might be promoted, building on the excellent example of the "paper space" year books, examples of which were provided to Board members.

10.3.3 The architecture building dates from 1967 and although still serviceable is beginning to show its age with a rather run-down feel and inadequate heating and ventilation. In its meeting with the Vice Chancellor, the Board learned that the University was embarking on a major upgrade of its built estate, but this was not likely to impact on the architecture building. The Board would encourage the University management to consider incorporating into the forthcoming building programme works to improve the thermal performance of the architecture building.

11. Summary of Previous Visiting Board Reports

11.1 The last full Visiting Board to the University of Strathclyde took place on 22/23 February 2001. The Visiting Board recommended **Continued Validation** of

- Part One: BSc Architectural Studies (3 years f/t)
- Part One: BSc Architectural Studies with European Studies (3 years f/t)

- Part One: BEng (Hons) Building Design Engineering (4 years f/t)
- Part Two: PgDip/MArch in Advanced Architectural Design (9months/12 months f/t)
- Part Two: PgDip/MSc in Computer Aided Building Design (9months/12 months f/t)
- Part Two: PgDip/MSc in Urban Design (9months/12 months f/t)

The Feb 2001 Visiting Board recommended **Conditional Continued Validation** of:

- Part Three: Professional Practice and Management Examination

The Visiting Board recommended **Candidate Course for Recognition** status for:

- Part Two: PgDip/MSc in Integrated Building Design (9 months/12 months f/t)

The report of the February 2001 Visiting Board had commented that the Department's strengths included a highly committed and supportive staff and a lively, bright and enthusiastic student body. It was noted that since the 1995 visit, a new Head of Department has been appointed and the Department had taken the decision to cease running one of the Part Two routes, the PgDip/MSc in Facilities Design and Planning. This had been replaced the PgDip/MSc in Integrated Building Design.

The 2001 Board noted that the Part One courses all met the appropriate Criteria for Validation. The BSc in Architectural Studies and the BSc in Architectural Studies with European Studies provided students with a good

range of design experiences and a thorough grounding in the non-design subjects. The Board recommended that the Department may wish to consider allowing students more time to reflect on the process and produce of their design work in the future which might result in even higher standards of achievement at this level. The Board were particularly impressed with the four-year BEng (Hons) in Building Design Engineering. The Board found that there had been a marked improvement in the standard of the design work and that the non-design subjects, particularly the architectural construction and technologies, were well integrated within the output. The 2001 Board found that the final year of the Honours course (which constituted the first year of the Part Two courses) was a strength of the Department. The course provided a comprehensive coverage of the Criteria for Validation which allowed students the flexibility of developing their design skills in Year Five to Part Two level through a number of routes. The Board noted that students were required to select a design option at the beginning of Year Four and commends the Department on achieving a very good standard of competent design in each of the options available. In Year Five, students follow one of four routes, PgDip/MArch in Advanced Architectural Design, PgDip/MSc in Computer Aided Building Design, PgDip/MSc in Urban Design and a newly developed route, PgDip/MSc Integrated Building Design. The Board found that the routes in Advanced Architectural Design, Computer Aided Design and Urban Design all met the appropriate Criteria for Validation. The Board was particularly impressed with the excellent standards of design achieved in the Advanced Architectural Design route. Although the routes in Computer Aided Design and Urban Design were valuable in the profile of the Departments courses, the Board

recommended that the Department may wish to consider updating the aims and aspirations of the courses in order to maximise their full potential. The Board was unable to recommend full recognition for the new route in Integrated Building Design as there was no work available from a graduating cohort. As a result the Board recommended that the course be granted 'Candidate Course for Recognition' status and that the Department invites a sub-group of the Visiting Board to examine the work of the first graduating cohort in due course.

- 11.2 A revisit to the Part Three programme on 9 May 2002 recommended that **Conditional Continued Validation** should remain, subject to a **full revalidation**, for:
Part Three: Professional Practice and Management Examination

The full revisit to Part Three at Strathclyde did not take place, because in 2005 responsibility for operating the Part Three examination in Scotland passed to the Architects Professional Examination Authority for Scotland (APEAS). The APEAS Part Three is the subject of a separate RIBA Validation.

- 11.3 An Initial Visiting Board to the PgDip/MSc Integrated Building Design was held on Thursday 4 September 2003. The Board was, however, suspended as it judged that insufficient evidence had been made available to allow a decision on validation to be made. The Department wrote to the RIBA to suggest that they did not wish the Visiting Board to be reconvened. They asked that the new course be considered alongside the rest of the Department's provision during the full Visiting Board that was scheduled for 2005 [note: this was subsequently rescheduled to 2006]. They requested an extension of their

Candidate Course Status for two years. The NCCCCG felt that this request was appropriate and that it would be helpful to look at the PgDip/MSc in the context of the rest of the Department's provision. The Department was notified that the two-year extension was the maximum that could be awarded.

12. Commentary

12.1 Self-Appraisal and Developments since the last visit

The Department's Critical Self Appraisal could have been a more helpful starting point for the Board's deliberations. Whilst the document was very open about the problems that the Department has faced, (possibly due to the constraints of the page-count) it was less forthcoming regarding the Department's vision and future plans. The Board found the Department's submission to the recent Faculty Review rather more helpful in this respect.

The Board felt that the tone of some of the Department's documents did not do justice to its real strengths. With the recent financial problems on their way to being resolved, the Board felt that the Department should be doing more to make its strengths and achievements visible. The Department is thus advised to look for ways in which the real strengths of its activities might be promoted, building on the excellent example of the "paper space" year books, examples of which were provided to Board members.

Changes to the Department's activities since the last full visiting Board in 2001 have included:

- During the 2003/4 academic year the Department changed its name from "Architecture & Building

Science" to "Architecture" reflecting a shift in emphasis of its activities

- Adopting a policy of "integrated diversity", the Department took the decision to close the dedicated Part Two programmes in Computer Aided Building Design and Urban Design; the last graduates were in summer 2005. Opportunities to pursue specialist interests in these areas are now made available through the Department's single Part Two award, the PgDip/MArch in Advanced Architectural Design.
- The Department has closed entry to the BEng (Hons) in Building Design Engineering (Part One) programme as of 2004/5. The last graduates from this four year course will emerge in summer 2008; the final cohort will complete their Part One studies in summer 2007.
- The Department has closed the PgDip/MSc in Integrated Building Design (Part Two Candidate Course). The last graduates were in summer 2006.
- The creation of the Architects' Professional Examinations Authority in Scotland (APEAS) Ltd to administer the Part Three examination for all six architecture schools in Scotland, means that the Department no longer offers a Part Three qualification, but now simply provides a refresher course to help prepare candidates for the APEAS qualification. Of all the six Scottish Schools of Architecture, Strathclyde prepares the largest number for the APEAS examination and has the highest percentage pass rate.
- In collaboration with the Departments of Civil Engineering & Mechanical Engineering, the Department has launched a new undergraduate degree in Architectural Engineering with a first intake in 2005. The Department is also collaborating with these

two departments to launch a new postgraduate programme in architectural engineering with a first intake in 2006. These programmes are not being put forward for RIBA validation.

- The Department is collaborating with the Department of Urban Studies at Glasgow University to launch a new masters course in urban design with a first intake in 2006.
- The Department is collaborating with the Department of Design Manufacturing & Engineering Management to launch a new postgraduate course in design computing with a first intake in 2006.

12.2 Documentation and Arrangements for the Visit

The School provided all the documentation required for the visit in timely fashion. The documentation provided the Board with all they needed for their deliberations. Some judicious editing might have reduced the burden of reading; a proportion of the supplementary information provided in advance could simply have been made available in the Baseroom. All requests for additional materials made during the visit were dealt with promptly and efficiently.

The programme for the meetings and activities required by the Board was well organised. The special arrangements to accommodate the availability of the External Examiners worked well. The Board welcomed the willingness of the members of the University to rearrange the location of meetings at short notice. The Board appreciated the effort that had gone into the organisation and presentation of both the exhibition and the student portfolios.

The Board particularly appreciated the support for the visit provided by the Departmental Administrator.

12.2.1 **Record of Academic Portfolios sampled during the Visit**

Part One: BSc/BSc (Hons) Architectural Studies

Part One: BSc/BSc (Hons) Architectural Studies with European Studies

Year One: 3 lowest, 2 middle and 2 high portfolios (from an original cohort of 107).

Year Two: 3 lowest, 2 middle and 2 high portfolios (from an original cohort of 73).

Year Three; 3 lowest, 2 middle and 2 high (from an original cohort of 54).

Part One: BEng/BEng (Hons) Building Design Engineering (with Architecture)

Year 3: The Board viewed the academic portfolios of all three students on the architecture stream (1 good/1 middle/1 fail).

Year 4: The Board viewed the academic portfolios of all 4 students on the architecture stream (the portfolios contained year 3 as well as year 4 work).

Part Two: PgDip/ MArch Advanced Architectural Design

The Board viewed 3 lowest, 2 middle and 2 high academic portfolios (in each case the academic portfolio including work from the BSc/BEng Honours year) from an initial cohort of 40.

Part Two: PgDip/MSc Integrated Building Design

The Board viewed work from the whole cohort of 7 students on this programme (in each case the academic portfolios included work from the honours year).

12.3 **Responses made to the previous Visiting Board report (and to reports of any revisits) and external examiner comments**

The main concerns raised by the RIBA/ARB Visiting Board in February 2001 related to the Part Three course which the Department was operating at that time. Since then APEAS (Architects Professional Examination Authority for Scotland Ltd.) has taken over responsibility for offering a Part Three Examination for candidates from across Scotland.

In its Critical Self Appraisal, the Department comments that the reports from external examiners have generally been positive, but also sets out the approach it had adopted to addressing concerns raised by External Examiners for the PgDip/MArch programme. The Department's external examiners confirmed that they did see actions in response to the points they raised in their reports although they did not always receive formal feedback.

12.4 **Context of the course within the wider provision of the School and the Faculty**

The academic activity of Strathclyde University is organised around five Faculties, one of which is the Faculty of Engineering. The Department of Architecture is one of ten departments making up the Faculty of Engineering. The Department has historically collaborated with others in the Faculty in delivering specialist Part One and Part Two programmes. Although these are now closed to new entrants, the Department has developed a series of collaborative undergraduate and MSc programmes, although these will not be put forward for RIBA validation.

12.5 **Detailed commentary on Part One**

programmes:

BSc Architectural Studies

BSc (Hons) Architectural Studies*

BSc Architectural Studies with European Studies

BSc (Hons) Architectural Studies with European Studies

Bachelor of Architectural Studies*

** these degrees map the achievement of the Part One criteria onto the first three years of the course, but Part One is awarded with the honours degree.*

These programmes are considered together as the "with European Studies" programmes have the same core elements as the Architectural Studies degrees. The only additions are language electives.

12.5.1 *Clarity, validity and achievement of course objectives*

The Course Handbook includes the vision statement and the mission statement for the Department, but no specific set of objectives for the course. Objectives are, however, provided for each of the three years of the Part One and these are set out in the Year Handbooks. The Board found these to be appropriate and clearly, if rather formally, expressed.

12.5.2 *Course design and content*

The course follows a standard pattern for each of the three years of the Part One with architectural studio work supported by courses in building technology and environment, media and communication and architecture, history and theory. In addition to this, the first year has an additional module in "Elements of Architecture" and the third year has a module in "Introduction to Practice". Students on the BSc/BSc (Hons) Architectural Studies course have the opportunity in years one, two and three to

take electives from across the whole University provision. These electives amount to 10 credits in each of years one and two and 20 credits in years three. Students on the BSc/BSc (Hons) Architectural Studies with European Studies take modules in their chosen language and have no electives. In order to progress to the next year of the programme students must pass all the compulsory courses, but are allowed to progress to the next year carrying a failure in their elective.

12.5.3 *Quality and coverage of the syllabus (including balance and integration between design/non-design work)*

- *Design*

The Board was satisfied that all the Part One Validation Criteria in the area of Design were being met by all graduates from the BSc/BSc (Hons) Architectural Studies and BSc/BSc (Hons) Architectural Studies with European Studies degrees. The Board felt that design teaching in the course was strong. Staff involved were clearly working towards a clear and coherent vision for the overall structure of the various design projects undertaken. A clear narrative underpinned the progression through the three years of the Part One and the staff team shared a common understanding of how they were building the confidence and skills of their students. The Board felt some innovative and experimental approaches to design teaching in year one were examples of good practice.

- *Technology and Environment*

The Board was satisfied that all the Part One Validation Criteria in the area of Technology and Environment were being met by all graduates from the BSc/BSc (Hons) Architectural Studies and BSc/BSc (Hons) Architectural Studies with European Studies degrees. The Board felt

that the course was achieving its aspirations of an appropriate balance between allowing design inspiration and achieving sound well-detailed "buildability". The six Building Technology & Environment modules running one in each of the first six semesters provided an excellent coverage of the criteria in this area. The Board also saw clear evidence of this knowledge being integrated into design project work and of technological thinking informing and driving design outcomes.

- Cultural Context

The Board was satisfied that all the Part One Validation Criteria in the area of Cultural Context were being met by all graduates from the BSc/BSc (Hons) Architectural Studies and BSc/BSc (Hons) Architectural Studies with European Studies degrees. The six Architecture History & Theory modules running one in each of the first six semesters of the course provided an excellent grounding in this area. The Board also saw clear evidence of precedent studies informing design outcome. A serious engagement with the city and urban agendas was well-embedded and integrated throughout the programme. The coherent and well-designed lecture programme was supported by excellent field trips. Students were really disappointed when the recent staff turnover meant that some promised field trips did not materialise. The Board was also impressed with the strong exchange programme operated by the Department. This involved 15 schools of architecture across 11 European countries. Strathclyde students can spend the second semester of the third year with one of the participating institutions. The presence of students from the overseas institutions working in the Strathclyde studios also helped bring new perspectives to the work of the home students.

- Communication

The Board was satisfied that all the Part One Validation Criteria in the area of Communication were being met by all graduates from the BSc/BSc (Hons) Architectural Studies and BSc/BSc (Hons) Architectural Studies with European Studies degrees. In their meeting with the students, the Board found them to be a strong articulate confident group. The Board was impressed by the excellent examples of model-making seen throughout the course; this included interesting development models. The graphic communication skills displayed were generally good, although the Board saw little hand-drawn work beyond year one. Written work was always of an adequate standard.

- Management, Practice and Law

The Board was satisfied that all the Part One Validation Criteria in the area of Management Practice and Law were being met by all graduates from the BSc/BSc (Hons) Architectural Studies and BSc/BSc (Hons) Architectural Studies with European Studies degrees. The Introduction to Practice module in the third year provided a good coverage of the Part One criteria in this area. This involves substantial contributions from local practitioners. The Board saw some interesting case studies produced by way of response to the excellent and challenging assessment set for this module.

- Preparation for Professional Experience

A formal introduction to Stage One Professional Experience is provided through the "Introduction to Practice" module. Students confirmed that they were well-prepared for practice. They particularly appreciated the input provided from the fifth year students.

12.5.4 *Progression within the course*

The Board struggled to understand the progression statistics provided for the BSc/BSc (Hons) programmes. Even when additional explanations were provided they still had concerns. Whilst the low progression figures for year one of the course were not out of line with those of other comparable programmes, the Board was surprised to find the figures for the second and third year were also low. The Board was particularly concerned to find progression rates as low as 67 - 75% at third year level although it was noted that this figure was possible influenced by the opportunity offered by the Strathclyde degree scheme to retake elements of year three whilst out on stage one professional experience. The Department is advised to further investigate progression rates on this programme and act on the findings in the light of the University initiatives in this area as set out by the Vice Chancellor and the Head of QA in their meetings with the Board.

12.5.5 *Assessment*

The Board saw a wide and appropriate range of assessment vehicles in use across the degree programme. Students confirmed that they had a clear understanding of what was expected of them in the various assessments they undertook. Their one complaint was that there had been occasions on which completed crit sheets had not been returned to them following formative assessment of design work.

12.5.6 *Admissions and arrangements for direct entry at a stage other than the start of the course*

The programmes recruit the majority of their students with Scottish Highers. Grades of ABBB or BBBBC are required including English, Maths or Physics plus at least a

standard grade at level 3 or better in a science subject. A Higher in Art, Art & Design, Craft & Design or Graphic Communication is strongly recommended. Candidates who have not taken a project-based Higher are required to attend for interview. Candidates for the "with European Studies" course need a pass in the language to be studied (at B grade for French). About 15% of the entrants to the programme are mature students with qualifications such as HNDs, HNCs or first degrees in other subjects.

12.6 **Detailed commentary on Part One programmes:**

BEng Building Design Engineering (with Architecture)(three years full-time)

BEng (Hons) Building Design Engineering (with Architecture)* (four years full-time)

**This degree maps the achievement of the Part One criteria onto the first three years of the course, but Part One is awarded with the honours degree.*

This programme is now closed to new entrants; the final cohort entered in October 2004. The students on the architecture stream will complete their Part One in summer 2007 and graduate in summer 2008.

12.6.1 *Clarity, validity and achievement of course objectives*

As with the BSc/BSc (Hons), the Course Handbook includes the vision statement and the mission statement for the Department, but no specific set of objectives for the course. Objectives are, however, provided for each of the three years of the Part One and these are set out in the Year handbooks. The Board found these to be clearly expressed and appropriate.

12.6.2 *Course design and content*

The course is based on the belief that the complexity of modern buildings demands a "design team" approach, but the traditional education of construction industry professionals provided little opportunity for interdisciplinarity. By educating architects and engineers together in a design studio environment, the Building Design Engineering (BDE) course aspires to produce well-rounded professionals who have acquired respect for each other's abilities and specialisms.

The first two years of this four-year course are common to all students. During the third and fourth years students elect to follow one of three professional routes: architecture, civil/structural engineering or environmental engineering. There is significant overlap with the BSc (Hons) Architectural Design curriculum. In the third year, for example, in addition to the 30 credits of Building Design Projects associated with the BDE course, students on the architecture stream will undertake an additional 30 credits of design studio work alongside the BSc students. They also take the same Architecture History & Theory and Building Technology & Environment units and Introduction to Practice unit as the BSc students.

12.6.3 *Quality and coverage of the syllabus (including balance and integration between design/ non-design work)*

- *Design*

The Board was satisfied that all the Part One Validation Criteria in the area of Design were being met by all graduates from the BEng/BEng (Hons) degree in Building Design Engineering (with Architecture). The Board was, however, concerned about the quality of design work at threshold level in this programme. The Board felt that

there was evidence of over-marking in the dedicated BDE elements. When students on the BEng undertook identical design work to that of the BSc students, the work of the BEng students was seen to be standard. There was also less evidence of process and development of design thinking than had been the case with the work of the BSc students. The Board was aware that this course was closed to new recruits, but to ensure that students continue to be appropriately supported and that standards of design work are at least maintained (and ideally enhanced) in the final year in which Part One is attained, the Board recommends the following condition be imposed. A revisit by a sub-group, consisting of three members plus Secretary and providing continuity with the present Board will take place to coincide with the external examinations of the final cohort of students from this programme attaining their Part One in summer 2007. The sub-group will ascertain whether the minimum pass standards for design work have been set at an appropriate level and that all Part One validation criteria continue to be met by graduates from the programme.

-*Technology and Environment*

The Board was satisfied that all the Part One Validation Criteria in the area of Technology and Environment were being met by all graduates from the BEng/BEng (Hons) degree in Building Design Engineering (with Architecture). The students on the architecture stream of the BDE programme study the same Building Technology & Environment units as the BSc Architectural Studies course. The taught material provides an excellent coverage of the criteria in this area and the assessed work of the BDE students was good. The Board found it difficult, however to see clear and demonstrable evidence of the integration of this knowledge into the design work. The

Board felt that more use might have been made of specialist facilities elsewhere in the Faculty.

- Cultural Context

The Board was satisfied that all the Part One Validation Criteria in the area of Cultural Context were being met by all graduates from the BEng/BEng (Hons) degree in Building Design Engineering (with Architecture), albeit at a rather minimal level. The formal studies in this area were undertaken alongside the BSc students. The Board again felt that although there was a good general coverage of the subject area in the formal teaching there was a lack of evidence of its integration into design work, certainly far less than was on view in the equivalent work of students on the BSc degree. There were many contemporary theories which were extremely relevant to the approach adopted in this programme. Whilst traditional precedent studies were evident in the portfolios, there was little or no evidence of engagement with theoretical perspectives.

- Communication

The Board was satisfied that all the Part One Validation Criteria in the area of Communication were being met by all graduates from the BEng/BEng (Hons) degree in Building Design Engineering (with Architecture). The written work of the students on this programme was good and the students from the programme present at the meeting with the Board were thoughtful and articulate. Graphic presentation skills were seen to be significantly weaker than those demonstrated by students on the BSc course and significantly fewer models were on view. The Board felt that animations/videos might have been a particularly appropriate way of representing some of the technology and environmental solutions being proposed.

- Management, Practice and Law

The Board was satisfied that all the Part One Validation Criteria in the area of Management Practice and Law were being met by all graduates from the BEng/BEng (Hons) degree in Building Design Engineering (with Architecture). BEng students take the same Introduction to Practice as the BSc students and the positive remarks in section 12.5.3 above also apply here, although the Board saw less evidence of engagement with the regulatory framework in the work of the BEng students.

- Preparation for Professional Experience

Students on this programme normally take a year out after completion of the four-year honours degree rather than between the third year and the honours year. A formal introduction to Stage One Professional Experience is provided through the "Introduction to Practice" module.

12.6.4 *Progression within the course*

The statistics provided to the Board for the BEng BDE programme revealed a very high withdrawal and transfer rate in year one. In 2002/3 12 out of 20 entrants transferred out or withdrew. In 2003/4 the figure was 10 out of 30 and in 2004/5 the figure was 20 out of 38. This suggests that students have not always been well advised as to their choice of course. However, of those students who pass year one, a commendably high proportion complete the four year course successfully.

12.6.5 *Assessment*

The Board saw a wide and appropriate range of assessment vehicles in use across the BEng programme. The dedicated units for this course included a good balance of individual and group assessments. The Board

thought the critical evaluations of group collaborative practice produced were an example of good practice.

12.6.6 *Admissions and arrangements for direct entry at a stage other than the start of the course*

The BEng programme is closed to new entrants.

12.7 Detailed Commentary on the Part Two course:

PgDip/MArch in Advanced Architectural Design (nine months/twelve months full-time)

Preceded by the final (honours) year of one of the BSc (Hons) degrees, the final (honours) year of the BEng (Hons) or equivalent.

12.7.1 *Clarity, validity and achievement of course objectives*

The PgDip/MArch handbook, copies of which were supplied to the Visiting Board, has no clear statement of the overall aims/objectives of the programme. It nevertheless provides clear and helpful statements of the aims and objectives of each of the units which make up the course. The Board found these to be clearly expressed and appropriately challenging.

12.7.2 *Course design and content*

The Part Two programme comprises the final (Honours) year of the BSc (Hons) degree (or equivalent) plus the PgDip or MA Advanced Architectural Design course. The PgDip course runs for nine months. Subject to the satisfactory completion of their PgDip assessments and with the approval of the Course Director, students have the opportunity to study for a further three months and complete a dissertation for the award of MArch. The PgDip/MArch year consists of:

- Three linked studio workshops in which students working in teams and alone conduct detailed research, develop methodologies, formulate strategies and report on outcomes. The basis of this work in 2005/6 was the new town of Cumbernauld.
- four linked studio activities together making up the thesis project. This comprises a development module, a study trip, the execution of the architectural; proposal and a reflective account of the whole activity.
- a compulsory module in "Design Management and Practice".
- Two units in "Mapping Architecture". The first of these would normally be studied in the honours year, but must be taken as a component of the PgDip/MArch by non- Strathclyde graduates. This starts with introductory lectures and case studies followed by student presentations. The second unit is focussed on lectures by guest speakers. Both units seek to focus on the impact of technological and environmental and historical and cultural influences on built form and urban design.

By mapping a proportion of the Part Two criteria onto the BSc honours year, the Department aims to provide students with the opportunity to specialise. The honours year includes optional and elective units in topics such as ecology and sustainability, urban design, project management, CAAD, environmental management systems etc. Optional units are also available in the PgDip/MArch in such topics as Generative Design, VR and Rapid Prototyping, Building Information Modelling, Internet Design etc.

12.7.3 *Quality and coverage of the syllabus (including balance and integration between design/ non-design work)*

- *Design*

The Board was satisfied that all the Part Two Validation Criteria in the area of Design were being met by all graduates from the PgDip/MArch in Advanced Architectural Design. The Board commends the breadth of design work undertaken across the two years of the Part Two. The range of issues being tackled in the Cumbernauld project was particularly impressive and included really difficult urban and social concerns. Other strengths of the programme were the field trip (to Germany in 2005/6) and the impressive range of individual design outcomes that followed. Although students were operating in different tutor groups the Board saw evidence of a clear central focus and shared objectives across both years of the programme. Students were clearly being encouraged and supported to develop their own individual styles and approaches.

- *Technology and Environment*

The Board was satisfied that all the Part Two Validation Criteria in the area of Technology and Environment were being met by all graduates from the PgDip/MArch in Advanced Architectural Design. The Board was impressed by the coverage of this area of the Criteria both in the Honours year through the Design Dissertation and the Mapping Architecture 1 module and in the design thesis work of the PgDip/MArch. The Board saw clear evidence of knowledge in this area being integrated into design project activities.

- *Cultural Context*

The Board was satisfied that all the Part Two Validation Criteria in the area of Cultural Context were being met by all graduates from the PgDip/MArch in Advanced Architectural Design. There was evidence across both years of the Part Two of serious engagement with a broad range of contextual issues, particularly in the honours year where the Board also saw clear evidence of precedent studies informing design outcomes. Urban and social agendas were to the fore in the PGDip/MArch year, especially in the Cumbernauld project. The Board was impressed by the range of topics being tackled in the honours year dissertation although it felt that possibly the best were being over-marked and the weakest were being under-marked.

- *Communication*

The Board was satisfied that all the Part Two Validation Criteria in the area of Communication were being met by all graduates from the PgDip/MArch in Advanced Architectural Design. The Board saw an impressive range of approaches to graphical representation across the two years of the Part Two with good quality computer generated materials and some interesting hand-drawn examples. Some very well crafted models were also on display. The written English, even in the weaker dissertations, was of a decent standard and, in their meeting with the Board, Part Two students were commendably articulate.

- *Management Practice and Law*

The Board was satisfied that all the Part Two Validation Criteria in the area of Management Practice and Law were being met by all graduates from the PgDip/MArch in Advanced Architectural Design. The Design, Management

and Practice module in the PgDip provided a good coverage of the Part Two criteria in this area. The Board saw some interesting group assignments from this module. Whilst it was clear that the taught professional practices courses throughout the Department were really strong, the Board didn't see as much evidence as it might have expected of learning from this area being integrated into design work.

12.7.4 *Progression within the course*

The Board had some difficulties in understanding the cohort analysis data presented for the PgDip/MArch. Although the programme is apparently only offered in full-time mode, in some years the majority of students were taking two years or more to complete. The Board understood that this probably reflected the time taken to complete masters dissertations by students who chose to do this. Final completion rates were, however good and around the 92 - 93% mark.

12.7.5 *Assessment*

An appropriate range of assessment vehicles were being used throughout the two years of the Part Two.

12.7.6 *Admissions and arrangements for direct entry at a stage other than the start of the course*

Over the last five years, the number of students admitted to the PgDip/MArch programme has varied from 18 to 39. The 2005 entry of 39 included 35 Strathclyde graduates and four from other schools. Graduates from three year English honours degrees who join the Part Two are required to enter the fourth year of the BSc (Hons) as the first year of study and are registered for a PGDip, transferring to the MArch on successful completion of the year. Applicants from other Scottish institutions who

have Part One awards and have completed four-year honours degrees are allowed to enter the PGDip year direct, but only following an interview with portfolio to establish the comparability of the applicants experience against that of a Strathclyde honours graduate.

12.8 Detailed Commentary on the Part Two course:

PgDip/MSc in Integrated Building Design (nine months/twelve months full-time)

Preceded by the final (honours) year of the BEng (Hons) or equivalent.

This course is now closed. The 2005/6 cohort was the last. The Board found it difficult to understand and assess the work displayed from this course in the exhibition and portfolios. Much of the work was undertaken in groups and was presented without names or attribution.

12.8.1 *Clarity, validity and achievement of course objectives*

The Course Handbook includes a clear statement of overall learning outcomes:

- Work and communicate effectively in multidisciplinary teams;
- Be cognisant with a variety of design methodologies
- Have a grasp of the basic tenets of professional practice as it relates to legal, managerial, financial and administrative issues
- Understand the principles required to produce a sustainable built environment
- Be able to write a dissertation structured around a cogent hypothesis.

The Board found these learning outcomes to be rather undemanding for a programme at Part Two level.

12.8.2 *Course design and content*

Students on the PgDip programme undertake two major integrated design projects undertaken in interdisciplinary teams (36 credits each), plus the same Design Management & Practice module and Mapping Architecture modules as students on the PgDip/MArch AAD programme. A wide range of elective is also available. For the MSc, students also present a dissertation.

12.8.3 *Quality and coverage of the syllabus (including balance and integration between design/non-design work)*

Even after assistance from staff, the Board found it very difficult to interpret the work they were presented with from this course. Much of the design work had been undertaken by groups of students and the work in the exhibition was frequently un-named.

- *Design*

The Board was **not** satisfied that all the Part Two Validation Criteria in the area of Design were being met by all graduates from the PgDip/MSc in Integrated Building Design. In semester one, students worked with structural engineers and environmental engineers on a project located on the central promenade site, Morecambe. The second semester involved Glasgow based projects with real clients e.g. the regeneration of SPT stations. The Board found the approach to design in both projects very conservative with a lack of challenge in the actual projects set. There was a lack of intellectual rigour in the design outcomes and the level of competence displayed in the final drawn outcomes was unconvincing.

- *Technology and Environment*

The Board was satisfied that all the Part Two Validation Criteria in the area of Technology and Environment were being met by all graduates from the PgDip/MSc in Integrated Building Design. Whilst the Board saw some really impressive background research undertaken by the various groups working on the projects it did not see the evidence they would have expected of this informing design outcomes. Despite the focus in this programme on integrating technology with design, the Board found that detailed construction drawings were better demonstrated in the submission by the PgDip/MArch AAD students

- *Cultural Context*

The Board was satisfied that all the Part Two Validation Criteria in the area of Cultural Context were being met by all graduates from the PgDip/MSc in Integrated Building Design. The Department maps cultural context criteria as being met across the two years of the Part Two, but particularly through the dissertation undertaken in the honours year and the two Mapping Architecture modules. The Board felt that whilst there was a decent coverage of the subject area in the formal teaching there was a lack of evidence of its integration into design work, certainly far less than was on view in the equivalent work of students on the PgDip/MArch AAD degree.

- *Communication*

The Board was satisfied that all the Part Two Validation Criteria in the area of Communication were being met by all graduates from the PgDip/MSc in Integrated Building Design. The Board felt that the students on this programme faced a substantial challenge in having to engage with real clients and develop an appropriate brief with very limited supporting material provided by the Department. The Board saw some good write ups of

research work, but the visual communication skills of the group as a whole were weak.

- Management Practice and Law

The Board was satisfied that all the Part Two Validation Criteria in the area of Management Practice and Law were being met by all graduates from the PgDip/MSc in Integrated Building Design. Students take the same Design, Management and Practice module as the PgDip/March AAD students. This provides a good coverage of the Part Two criteria in this area, but the Board did not see as much evidence as it might have expected of learning from this area being integrated into design work, particularly as several of the projects undertaken would have lent themselves to a detailed consideration of regulatory issues.

Given the difficulties the Board faced in understanding and assessing the work presented for this programme, concerns around the appointment and role of the external examiner for this course (see section 12.9) and the major concerns about the standards of design work, the Visiting Board recommends to the RIBA Education Committee that the course **not be validated**.

12.8.4 *Progression within the course*

Although numbers on the PgDip/MSc IBD programme have never been high over the course of its existence ranging from 4 to 13, completion rates have been good.

12.8.5 *Assessment*

The Board learned that key staff delivering this programme had been taking industrial action at the time of the 2006 assessment round. The Department explained that it was, however, able to apply its standard assessment

procedures whereby students present their work to a panel of tutors from throughout the Department together with guest practitioners. The Board did, however, have concerns that there was significant over-marking of certain projects.

A significant proportion of the work undertaken in this course took the form of group work. The Board found it difficult to assess the contribution of individuals to semester long group projects. The Board noted that the External Examiner reported that he was confident he could identify the work done by individuals and was satisfied that all graduates from the programme met all validation criteria.

12.8.6 *Admissions and arrangements for direct entry at a stage other than the start of the course*

This course is closed to new entrants.

12.9 **External examining arrangements**

The Board found that the Department's undergraduate programmes had appointed experienced and balanced teams of external examiners drawn from both academia and practice. The Board understood, however that it was the Department's normal approach to appoint Part Two external examiners from practice. The PgDip/MArch in Advanced Architectural Design had typically used two or three externals, all drawn from practice, but with significant experience of teaching and/or examining at other schools. The Board was concerned, however, that the single External Examiner appointed to the PgDip/MSc in Integrated Building Design from 2003 to date was a practitioner with apparently limited experience of teaching/externally examining. (Following receipt of the draft report, the Head of Department reported that

the examiner in question had examined other accredited courses, namely the Department's Computer Aided Building Design courses in 2001/2 - 2002/3 and that he was also an external examiner at Queens University, Belfast.)

The Board met personally:

- 2 of the 3 externals for the BSc programmes;
- 1 of the 2 externals for the BEng BDE degree;
- 2 of the 3 externals for the PgDip/MArch AAD degree.

The Board also had a telephone conversation with the sole external examiner for the PGDip/MSc IBD degree.

The Examiners confirmed that they engaged with all students expected to graduate from the awards they had responsibility for and that the department provided all necessary documents and support to allow their full involvement with the academic decision making process.

In their general discussions with the Board, external examiners commented that

- they had seen no reductions in standards to date, but they were concerned about the effects of increased student numbers and reduced staffing;
- they were surprised at the high drop-out rates on the BSc programme because they saw the Department as having a caring approach and being strongly supportive of its students;
- there was clear evidence that comments made by the external examiners in their reports resulted in actions although they did not always receive a formal reply;
- the Department continues to have an excellent reputation and continues to operate as a cohesive unit despite the lack of support from the Faculty. It is sustained by full-time and part-time staff operating beyond the call of duty;

- morale is the Department is holding up, but a prolonged hiatus in recruiting a new professor could have serious implications.

The external examiner for the BEng BDE programme commented that it was unfortunate that the course was being closed since it provided such a crucial opportunity for dialogue between disciplines and a serious engagement with issues of sustainability and technology.

The Board was concerned that, although the Department maps Part One Validation Criteria as being met on completion of year three, the External Examiners for the BSc (Hons) focus primarily on fourth year work, only considering third year work in detail if a student has indicated that they will be leaving with a non-honours award. The Board thus recommends that the Department implement the proposal made by its Head that Part One External Examiners should in future sample a range of year three work to include the lowest pass portfolios with a view to confirming that the work demonstrates that all Part One Validation Criteria are being met by all students successfully completing year three.

12.10 Arrangements for Monitoring Professional Experience

Students on the BSc (Hons) degrees are recommended to take a year out in practice between their third and fourth (honours) years. Students on the BEng (Hons) BDE programme are expected to undertake their year out in practice on conclusion of the four year course. Students on their stage one professional experience and graduates undertaking their stage two professional experience are required to complete either on-line pedr record forms or traditional RIAS logbooks. The Department has a

Practical Training Adviser (Part One) and a Professional Studies Adviser (Part Two) who countersign quarterly record sheets, provide advice to students/graduates and follows up any problems revealed. The BSc (Hons) Course Handbook and BSc Year Three Handbook provide students with helpful guidelines. These do not seem to be offered to students on the BEng course.

12.11 Students

On arrival the Visiting Board received copies of student comments on the Department's Critical Self-Appraisal, one each from representatives of the BSc/BSc (Hons), the PgDip/MSc IBD and the PgDip/MArch AAD courses. These reports generally commended the CSA for being fair and accurate. The Visiting Board also had a lively and productive meeting with 38 students drawn from all years of BSc/BSc (Hons) and BEng/BEng (Hons) courses together with representatives of the PgDip/MArch AAD and PgDip/MSc IBD course. The Board particularly appreciated the attendance of a number of students who were on their year out in practice.

Students were extremely positive about their experiences of the courses at Strathclyde, citing particularly:

- the good balance between the creative and technical content on the BSc/BSc (Hons) programme;
- the excellent staff-student relationships;
- the ready availability of additional help from academic staff, technicians and the librarian;
- the support received from fellow students both informally and through the peer mentoring scheme;
- the Personal Development Plans which students are required to produce and the encouragement by this means to develop skills of self-reflection;

- the strong support within the Department for students to develop their own architectural identity;
- the encouragement provided by staff to "think outside the box";
- the opportunity provided by the BDE and IBD courses to work alongside engineers;
- the opportunity on IBD projects to work for real clients such as the Strathclyde Passenger Transport Authority;
- the international exchange arrangements available through SOCRATES and other schemes;
- the strong links with local practices and the excellent input to studio teaching provided by local practitioners;
- the excellent preparation for practice provided by the Department's courses.

The Board gave students the opportunity to suggest aspects of the course that they might wish to see changed. The main issues raised in the meeting and through the students comments on the Critical Self Appraisal were:

- students felt that the recent change in the assessment regime for Honours year of the BSc meant that graduates had less knowledge of construction technology;
- better linkage might be achieved between the building technology teaching and the design project work in the second year of the BSc e.g. structural input could initially be linked to less complex building forms e.g. housing;
- the architecture building was too cold in winter and too hot in summer;
- the lack of drinking water supplies;

- students really appreciated the field trips organised for them, but with the recent staff turnover some promised field trips have not materialised;
- the loss of the specialist Part Two programmes has diminished choice;
- crits. and tutorials are generally excellent, but students do not always get completed crit. sheets returned to them;
- printing and plotting facilities are inadequate. Lengthy queues are common around review times and students often have to go outside to commercial suppliers. The lack of a large high capacity colour printer has been raised by student representatives at staff-student liaison group meetings for three years, but there has been no action.

The student:staff ratio at the time of the visit was 25.1:1. The staff figure included part-time staff and hourly paid studio design tutors, but excluding two members of staff, one on maternity leave and one on long term sick leave. This is expected to reduce for 2006/7 to 20.6:1 with the return of the two members of staff absent plus the appointment of the new professor and one staff member.

12.12 Staff

At the time of the visit the Department had a full-time staff complement of 15.5 fte's, but one member was away on long-term sick leave and another was on maternity leave giving an effective full-time fte of 13.5. Nearly forty local practitioners contribute to studio teaching on hourly paid contracts ranging from 3 to 6 hours per week. The Department also employs four hourly paid tutors contributing primarily to history and theory teaching. The Department has eight Visiting Professor appointments. The Department has a complement of 10 support staff

providing secretarial, administrative, technician, computing and library support.

The Board had a helpful and informative meeting with 29 members of full-time and part-time staff and studio tutors. Staff were open and honest about the challenges facing the Department. The Board was aware of certain tensions resulting from challenges to the vision of the former Head now that he had left. It was clear, however, that staff recognised the main challenge as being the financial imperatives which had resulted in the loss of four professorial staff members through retirements and resignations. Staff acknowledged that they had been challenged by the Faculty and University to do "more with less". The consensus amongst staff was that to date teaching had not suffered and that the major casualty was the loss of significant research earnings through the departure of the key professorial research leaders. Staff did, however, have some real concerns about the future, specifically:

- The need for an urgent professorial appointment to provide academic credibility for the discipline of architecture within the University. Staff reported that the vacancy had been confirmed in December, but the appointment had yet to be advertised.
- Concern that Faculty management had not consulted staff about proposed changes and that they had learned about them through public pronouncements.
- With a current SSR of over 25:1 it will be very difficult to generate new research activities and new research income to ensure a good outcome for the 2008 RAE exercise whilst maintaining teaching commitments unless additional staff appointments are made.

Despite the difficulties the Department had faced and the period of extensive change that it was undergoing, staff remained extremely positive in outlook and particularly commended:

- the tremendous support and commitment of the local practitioners who acted as studio tutors;
- the excellent job being done by the newly appointed Head in very difficult circumstances which had included a number of staff taking industrial action affecting assessment activity;
- although it might not have come across in the documentation the Board had received, there was a strongly held Departmental vision and ethos relating to encouraging a diversity of outcomes and balance between the practical and creative aspects of the discipline;
- the professional practice aspects of the Department's activities are strong. The Department is proud of preparing the largest number of candidates for the APEAS Part Three examinations and in having the highest pass rate of the six Scottish schools;
- The Board recognised that staff in the Department had been under substantial strain, admirably and wholeheartedly responding to the challenges of maintaining academic excellence in the face of staff losses and other financial challenges. The Board welcomed the commitment made by the Vice Chancellor to the ongoing development of architecture within the University and particularly to the appointment of a new professor in architecture to act as a "design champion" within the Department. The Board strongly recommends to the University and Faculty that the promised new appointment and appropriate future resourcing are vital if the quality of

provision in the Department is not to suffer. The University needed to recognise that it will be very difficult for the staff team to generate new research activities and new research income to ensure a good outcome for the 2008 RAE exercise whilst maintaining teaching commitments unless additional staff appointments are made.

12.13 Research

The Department prides itself on being research active and achieved a grade 4 in the 2001 RAE. At the time of the visit, the subject base and organisation of research activity in the Department was in a state of some flux following the departure of four professors, one of whom had been the Director of Research. There has been a shift from technology and management oriented research towards work with a history, theory and urban design. In its submission to the 2005 Faculty Review the Department described its active research areas as being:

- Computational approaches to visual impact analysis and aspects of design;
- Urban sustainability, social inclusion and participation and the history of urban typology;
- 20th century and contemporary European architecture;
- Cultural context of contemporary architecture;
- Pedagogy and creativity;
- Deleterious effects from buildings: causes and alternative design solutions;
- Health, safety and environmental management.

The Department is looking to form research partnerships with other Strathclyde departments and with other institutions, possibly linked to the establishment of new postgraduate degrees.

In its documentation, the Department stresses its commitment to develop links between research activity and teaching. The Board saw examples of design studio work which had derived from research projects undertaken and the close linkage of teaching and research had been the subject of a positive comment in the Department's QAA 2002 Subject Review. The Department has also been particularly active in pedagogic research undertaking a number of projects in collaboration with CEBE (The Centre for Education in the Built Environment - a Higher Education Academy Subject Centre).

12.14 **Equal Opportunities**

Strathclyde University has a clear statement of intent confirming its commitment to a policy of equal opportunities across the University. This is backed up by a set of general principles guiding its programme of action to eradicate unfair and discriminatory practices.

At the time of the visit, 35% of the students on the BSc (Hons) course were female. This is somewhat below the national average of 41%. The staff base is commendably international in its origins, but there are only three female members amongst the 16 strong full-time academic staff team in post at the time of the visit.

The Board was pleased to see the support that the Department had provided for one of its students who had suffered a substantial loss of vision during his time on the programme.

12.15 **Resourcing and Facilities**

- *General*

The Department of Architecture is based in a purpose designed building on Rottenrow at the heart of the University's John Anderson Campus in the centre of Glasgow. The building houses studio accommodation for the majority of the Department's students plus lecture rooms, seminar spaces, IT labs, the architecture library and staff offices. Adjacent to the main entrance is a large lecture theatre and an exhibition hall. The building dates from 1967 and although still serviceable is beginning to show its age with a rather run-down feel and inadequate heating and ventilation. In its meeting with the Vice Chancellor, the Board learned that the University was embarking on a major upgrade of its built estate, but this was not likely to impact on the architecture building. The Board would encourage the University management to consider incorporating into the forthcoming building programme works to improve the thermal performance of the architecture building.

- *Studios*

The main open-plan studio spaces are located on the first and second floors of the architecture building. The studio spaces are equipped with drawing boards, tables, chairs and lockers. Moveable screens allow spaces to be partitioned as crit spaces. With the recent increase in student numbers, there is a shortage of studio space although first year students continue to be allocated their own dedicated work area. The building is normally open from 0800 to 2200 Mondays to Fridays, but a "red card" system allows access outwith these hours. Students confirmed that they made good use of the studio accommodation and that there was an excellent studio

culture as a result. The open-plan spaces encouraged students from different years to interact. The 24-hour access was really appreciated, but students confirmed that the building was too cold in winter and too hot in summer. There were also too few sockets to allow all students who wanted to plug in their laptops to do so. Students also suggested that the studio spaces might be wireless networked.

- *IT*

There are two main computing laboratories on the ground floor of the architecture building. The main laboratory (G18) is maintained by the University IT Department and, although primarily used by architecture students, is open to students from across the University. It houses 36 networked PCs together with A4 colour and black-and-white printers and an A0 plotter. The lab is used for formal teaching sessions, but is generally available for students to use at other times. The adjacent laboratory (G18b) with 4 PCs is specifically dedicated for postgraduate students. A further IT lab in the Colville Building is primarily for the use of students on the BEng BDE course. This lab houses 10 PCs running AutoCAD, 3D Studio, Photoshop, plus Microsoft Office etc. Students commented that printing and plotting facilities were seriously inadequate. Lengthy queues were common around review times and students often had to go outside to commercial suppliers. The lack of a large high capacity colour printer had been raised by student representatives at staff-student liaison group meetings for three years, but there had been no action.

- *Workshops and laboratories*

The 2001 Board had regretted that at the time of their visit workshop facilities were not available to students. This

Board was pleased to note that the Department now does have a dedicated model-making workshop located in the basement of the architecture building and equipped with a good range of wood and metal working tools. The workshop can accommodate up to 16 students at a time and has a technician who trains and supports students in the use of the facilities. Students, particularly those on the BEng BDE and the PgDip/MSc IBD programmes, also have access to the extensive laboratory facilities of the engineering departments.

- *Library*

The Department of Architecture Library is based on the second floor of the architecture building in close proximity to the studio spaces. The library has an impressive and growing collection of books and journals plus technical materials, slides, videos, CDs, DVDs and the means to view them. The library is supported by a qualified specialist librarian and is open from 1000 to 1700. The Library primarily functions as a reference source for the staff and students of the Department although certain holdings are available for loan after 1630 to be returned by 1100 the next day. Students really appreciated the dedicated architectural library and its close proximity to the studio spaces. They also reported that the architectural librarian was extremely helpful and supportive. Students also have access to the main campus library, the Andersonian Library, approximately five minutes walk away. This has extensive stocks of materials in related subjects such as technology, environmental engineering and management. Full electronic access is available to a growing range of journals and indexes.

The Faculty Review of the Department of Architecture conducted in October 2005 requires the Department to

keep under review the added-value from continuing to maintain a separate library facility for its students suggesting that the facility might be combined with that of the main Andersonian Library. It was clear to the Board that the presence of the dedicated architecture library at the heart of the Department contributed substantially to the effective operation of the Department. The dedicated library was the subject of extremely positive comments at both staff and student meetings. The Board would strongly support its continued existence.

13. Attachments

13.1 Prior to the visit the Board was provided by the School with the following documentation:

- Critical Self Appraisal
- Response to Questionnaire
- Supplementary Information
- BSc Year One Handbook
- BSc Year Two Handbook
- BSc Year Three Handbook
- BSc Year Four Handbook
- BEng BDE Year Two Handbook
- BEng BDE Year Three Handbook
- BEng BDE Year Four Handbook
- PgDip/AAD Course Handbook
- PgDip/MSc IBD Course Handbook
- Department of Architecture Undergraduate Student Handbook: BSc/BSc (Hons) courses
- Department of Architecture Undergraduate Student Handbook: BEng/ BEng (Hons) BDE courses
- Department of Architecture: School Context

- Faculty Review of the Department of Architecture October 2005
- "Teaching & Learning" - A Guide to University Policies & Procedures
- Procedures and Guidelines for the Internal Review of Learning & Teaching
- University Policy Procedures and Guidelines - Summative Assessment
- QAA Enhancement-led Institutional Review Report
- Enhancement-led Institutional Review - University's Reflective Analysis key points
- Architectural Journal Holdings
- Department of Architecture - Financial Resources
- Department of Architecture Public Lecture Series and Guest Lectures
- External Examiner's CVs
- External Examiner's Reports 2002/3
- External Examiner's Reports 2003/4
- External Examiner's Reports 2004/5
- Guidelines for External Examiners of Instructional Courses

13.2 The Board was provided with the following additional information in the base room and during the visit:

University Documents

- University Strategic Plan 2001 - 2005
- Enhancement-led Institutional Review - Reflective Analysis
- University Procedures and Guidelines - Postgraduate Instructional Programmes
- University Procedures and Guidelines - Postgraduate Research Programmes
- University Procedures and Guidelines - Summative Assessment

- University Procedures and Guidelines - Dealing with Instances of Possible Academic Dishonesty by Students
- Teaching & Learning - A Guide to University Policy & Procedures
- Staff Handbook: Policies, General Information & Facilities
- Conditions of Service Handbook - Academic Staff
- Conditions of Service Handbook - Administrative, Library, Computing and Other Related Staff
- Conditions of Service Handbook - Secretarial, Clerical & Related Staff
- Conditions of Service Handbook - Technical & Related Staff
- University Risk Assessment Procedures
- Race Equality Policy
- Disability Discrimination Act - Guidance for Staff
- Equal Opportunities Policy Leaflet
- Practical Guide to the Academic Counselling Services

Departmental Documents

- CVs for Academic Staff
- Departmental Safety handbook
- Departmental Prize List
- Undergraduate and postgraduate Timetables
- Annual Review of Courses June 2005
- Year 1 BSc Handbook 2002 - 2004.
- "paper space 2005" - Departmental yearbook
- "paper space 2006" - Departmental yearbook

13.3 Board members also had the use of a networked PC allowing access to a wide range of additional University documentation. A list of useful Strathclyde website addresses was provided.