



Cranfield University

Institutional audit

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Annex to the report

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Introduction

A team of auditors from the Quality Assurance Agency for Higher Education (QAA) visited Cranfield University (the University) from 21 to 25 June 2010 to carry out an Institutional audit. The purpose of the audit was to provide public information on the quality of the learning opportunities available to students and on the academic standards of the awards the University offers.

Outcomes of the Institutional audit

As a result of its investigations, the audit team's view of Cranfield University is that:

- confidence can reasonably be placed in the soundness of the institution's present and likely future management of the academic standards of the awards that it offers
- confidence can reasonably be placed in the soundness of the institution's present and likely future management of the quality of the learning opportunities available to students.

Institutional approach to quality enhancement

In its Briefing Paper, the University stated its view that quality enhancement is 'inextricably linked' to quality assurance and good day-to-day management of teaching provision. Three key areas were identified in the Briefing Paper as encompassing the University's approach: its quality assurance and enhancement systems; staff development; and the dissemination of good practice. Many of the examples cited under quality assurance and enhancement systems refer to the provision of clear and concise documentation and information for various audiences.

The Briefing Paper noted that the University recognised that 'there is still a debate to be had about how a university the size and diversity of Cranfield best approaches the identification and dissemination of good practice.' The audit team agrees that systematic procedures for identifying and sharing good practice on a university-wide basis are currently under-developed and would encourage the University as it engages in this debate to consider the further development of such processes.

Institutional arrangements for postgraduate research students

In the view of the audit team the arrangements that support postgraduate research students are generally comprehensive and well-implemented. The Senate Code of Practice provides a coherent framework and its various elements are being followed in the faculties. The support for students is generally sound, and notably there is a well-developed and supportive system for the regular monitoring of student progress. The University has taken appropriate action in response to the report of the QAA review of research degree programmes, although regular monitoring of information about its research degree programmes against internal and external indicators is not well developed and does not yet fully meet the expectations of the QAA *Code of practice for the assurance of academic quality and standards in higher education (Code of practice), Section 1: Postgraduate research programmes*.

Published information

The audit team found that reliance could reasonably be placed on the accuracy and completeness of the information the University publishes about the quality of its educational provision and the standards of its awards.

Features of good practice

The audit team identified the following areas of good practice:

- the integration of all students into the research and industry-linked culture and activities of the University (paragraphs 42 and 69)
- the access to a wide range of high-quality resources which significantly enhance student learning opportunities (paragraphs 73 and 131)
- the proactive and responsive approach of the library service to user needs (paragraphs 73, 74 and 131)
- the thorough and well-monitored arrangements for the regular review of postgraduate research students (paragraphs 126 and 133)
- the clear, comprehensive and effective Senate 'Guide to Courses' (paragraphs 21 and 52).

Recommendations for action

The audit team recommends that the University consider further action in some areas.

The team recommends that it is **advisable** for the University to:

- establish a cycle for Senate Reviews of Schools which will enable the effective periodic review of all provision to start without further delay (paragraph 31)
- review and clarify, at university level, assessment regulations for each course (paragraph 47)
- act with more urgency in considering the effectiveness of institutional procedures in the event of major problems in partnership provision (paragraph 98)
- ensure that Senate's routine quality assurance requirements for partnership courses are implemented in all cases (paragraphs 27 and 106)
- monitor the success of postgraduate research programmes against appropriate internal and/or external indicators and targets in all faculties and at university level (paragraph 122)
- redraft formal agreements with partners in the light of Senate requirements and keep them up to date (paragraph 102).

The team recommends that it is **desirable** for the University to:

- make external examiners' reports available as a matter of course to student representatives (paragraph 37)
- use statistics on admissions and completion at university level to inform strategy and policy (paragraph 49)
- use Annual Reflective Review reports more effectively to identify good practice and to enhance quality (paragraph 92).

Section 1: Introduction and background

The institution and its mission

1 The origins of the University date back to 1946. It received its Royal Charter in 1969 and became Cranfield University in 1993. It has expanded and diversified from an original focus on aircraft research and design and now covers other technologies, manufacturing, management and health, as well as defence-related studies, including a partnership with the College of Management and Technology at Shrivenham. The main campus is located in Bedfordshire, between Bedford and Milton Keynes. It is a specialist, research-intensive institution, and much of its work is carried out in close collaboration with industry. All the students at Cranfield are taking postgraduate programmes, with about 30 per cent registered for research degrees.

2 The University's mission, as defined in its Strategic Plan 2006-7 to 2010-11 is 'to create and transform world class science, technology and management into viable, practical and environmentally desirable solutions that enhance economic development and the quality of life'. It aspires to be 'the University of first choice for students and clients in teaching and research in selected areas of engineering, applied science and management'.

The information base for the audit

3 The University provided the audit team with a Briefing Paper and supporting documentation, including that related to the sampling trails selected by the team. Sources of evidence to illustrate the institution's approach to managing the security of the academic standards of its awards and the quality of its educational provision were provided in electronic form. In addition, the team had access to the institution's intranet.

4 The Students' Association produced a student written submission setting out the students' views on the accuracy of the information provided to them, the experience of students as learners and their role in quality management.

5 In addition, the audit team had access to:

- the report of the previous Institutional audit, April 2005
- the QAA review of research degree programmes, July 2006
- the report of an overseas audit of the University's provision in India, June 2009
- the institution's internal documents
- the notes of audit team meetings with staff and students.

Developments since the last audit

6 In the last Institutional audit, in 2005, the audit team concluded that it had 'broad confidence' in the soundness of the University's current and likely future management of the quality of its programmes and the academic standards of its awards. The audit report commended the active engagement of Industrial Advisory Panels in quality management and course development; the University's recognition of the value of its periodic review process; arrangements for the professional development of academic staff; and the University's use of its research base and its industrial links to enhance the quality of learning opportunities. The report recommended that the University should give greater prominence to the strategic planning of the academic business of the University; review its provision of learning skills support in the context of its diverse student intake; and test the security of its arrangements for academic partnerships.

7 In connection with the first recommendation, following the appointment of a new Vice-Chancellor, the University's executive team has been augmented by a Pro-Vice-Chancellor (Learning and Teaching). Much documentation of policy has been revised or introduced, particularly the Learning and Teaching Strategy 2009-12, and the useful 'Guide to Courses'. Some Senate Codes of Practice have been updated, including those related to collaborative provision and to postgraduate research students, and templates to streamline some aspects of quality assurance documentation have been introduced, including those for Annual Reflective Review (annual monitoring) and the introduction of new programmes. Programme specifications have been replaced by 'course summary' and 'course structure' documents. The University determined that the periodic review arrangements commended at the last audit no longer suited its needs, and for all courses the practice of periodic review was put in abeyance at the end of 2007-8 pending the development of a new model. The new 'Guide to Senate Reviews' dispenses with periodic course review in favour of a range of review methods, known as 'Senate Review of a School'; 'Focussed Review' (based on themes or types of provision); and 'Special Measures' (where urgent intervention seems necessary). Senate Review of a School is now the primary method of review, and the first such review is due to take place in 2010-11. Four Focussed Reviews had taken place during 2009-10, though none were complete at the time of the audit.

8 Provision for learning skills has been improved by a new post to supplement English language teaching, and new policies have been established relating to disability legislation.

9 With respect to collaborative provision, the University finalised a major revision of its arrangements in March 2010, formalised in a new version of the relevant Senate Code of Practice. In 2006 it established a major new partnership, with the Institute of Clinical Research, India (ICRI), which was audited by QAA in 2008-9. The outcomes of the audit, which were a major stimulus of the revision, are considered in Section 5 of this report.

10 The QAA review of research degree programmes expressed confidence in the University's ability to secure and enhance the quality and standards of such programmes, and proposed three opportunities for enhancement, relating to training for supervisors; numbers of students supervised by individuals; and the collection of feedback. In response, the University now makes more efforts to encourage attendance at training events, and prior training for supervision is required. The actual experience of students and supervisors in place was investigated by a working group, which reached the view that no-one was disadvantaged due to numbers supervised. The University has also taken advantage of the Higher Education Academy Postgraduate Research Experience Survey (PRES) to augment its in-house student satisfaction surveys in existence at the time of the QAA review. In addition, there has been a new move to establish Doctoral Training Centres to improve the experience of research students.

11 Since the last audit, the University has established two new schools: the School of Applied Sciences and Cranfield Health. Schools and faculties have been aligned so that for all practical purposes school and faculty are the same unit. Reporting lines have been changed so that deans are responsible to heads of school: quality assurance is now a formal responsibility of both.

12 The audit team noted that, while much of the documentation had been brought up to date, the University had been slow to implement new arrangements. For some courses there will have been a very significant gap of time between their last periodic review and their coverage in a Senate Review of School under the new method. In relation to collaborative provision, too, the University has been slow to act at institution level where problems at course level had systemic implications (see paragraph 98).

Institutional framework for the management of academic standards and the quality of learning opportunities

13 The University Executive is responsible for the strategic direction of the University, and the principal academic body is the Senate; both are chaired by the Vice-Chancellor. The Pro-Vice-Chancellor has responsibility for academic quality assurance and enhancement and chairs the Teaching Committee, a Senate subcommittee, which is a key committee with respect to all teaching and learning matters. The recently established Doctoral Training Centre Committee, chaired by the Pro-Vice-Chancellor, reports to the Teaching Committee (TC) (see Section 6 for further detail). Senate's other subcommittee, the Senior Appointments Committee, considers staff recruitment, promotion and development and is chaired by the Vice-Chancellor.

14 The University stated in its Briefing Paper that learning and teaching activities are part of an integrated set of activities, together with research and innovation. Its organisational style is characterised as one of 'multi-layered devolution and empowerment' within an overall collective vision and strategic direction. This is reflected in an interlocking structure of schools and faculties, within which each school has the freedom to determine its own operational and committee structures. There are five schools ('operating units' reporting to the University Executive), the quality of whose teaching provision is scrutinised by Faculty Boards (chaired by deans) which report to TC. The audit team learned that deans are responsible to their Head of School for quality assurance and enhancement of the school's academic provision, while the Head of School has overall responsibility and accountability to Senate for all matters within the school. Faculty Boards include representatives from other faculties and are attended by Registry staff, who provide regulatory advice; representatives from central service departments present reports as appropriate. Faculties have one or more separate subcommittees (and associate deans) to deal with taught and research programmes, depending on the size and complexity of the provision.

15 The University's Strategic Plan identifies the importance of the following in the context of devolving decision-making to the most appropriate level: streamlining processes and minimising procedural burdens; systematically reviewing regulatory structures; and ensuring that committees and meetings are minimised to those which are necessary. At the time of the audit, the University was in the process of reviewing and clarifying structures, roles and responsibilities. University-level committees review and revise the University's Laws, which provide the framework within which schools and faculties operate. The Briefing Paper described the use of the QAA Academic Infrastructure in the development of University policy and in the maintenance of its academic standards; the audit team noted appropriate relevant references in the Senate Code of Practice and its Guides (see Section 2 for further detail). The Learning and Teaching Strategy 2009-2012 specifies four key indicators against which it will be evaluated, two of which refer to students - whether the student experience remains excellent and whether student numbers remain buoyant - and two of which refer to staff - whether staff engage with development of their learning and teaching and whether teaching is recognised and rewarded (see paragraphs 91-3 for further detail). Each year TC reviews the previous year's action plan and agrees an action plan for the following year.

16 The University is involved in a number of partnerships involving academic provision, though it does not have a separate university-level committee to oversee these; any such programmes are dealt with through the same committee structure as campus provision, with additional procedures as appropriate (see Section 5 for further detail).

17 To summarise: the University's organisational structure is one that has five strongly empowered schools within a general framework set by Senate; TC is responsible for the oversight of learning and teaching, while academic standards and the quality of learning

opportunities are managed operationally by Faculty Boards, which report to TC. Schools and faculties are permitted a considerable degree of flexibility in their internal structures.

18 This annex will show that these arrangements are generally effective and usually operate as intended. However, the audit team formed the view that, although each faculty has an overview of provision within its own school, TC does not have a corresponding overview across the University. The University is therefore urged to strengthen certain aspects of its oversight, as discussed in the detail of the annex.

Section 2: Institutional management of academic standards

19 The University uses a wide range of mechanisms for the management of its teaching provision to assure the academic standards of its awards. These include procedures for the approval, amendment and annual monitoring of courses; the course summary and course structure documents, which act as programme specifications; and the wider-reaching Senate reviews. The Briefing Paper also identifies accreditation and recognition by professional, statutory or regulatory bodies (PSRBs) and the use of the *Academic Infrastructure* and the *Standards and guidelines for quality assurance in the European Higher Education Area* or European standards and guidelines (ESG) as external inputs to the management of standards. The University makes use of a further range of mechanisms to ensure assessment standards, including the use of external examiners.

Approval, monitoring and review of award standards

20 In 2008 Senate approved a set of proposals from the Teaching Committee (TC) to establish new procedures for programme approval, monitoring and review. The resulting procedures are now codified in Senate Code of Practice 4/05. At the time of the audit the new procedures for programme approval and annual monitoring had already been put into effect and the audit team was able to examine full sets of paperwork relating to these. However, of the new Senate review procedures, only Focussed Reviews had begun.

21 Registry produces two practical guides aimed at university staff to support the Senate Code of Practice. The Guide to Courses (GC) contains details of the new procedures for course approval, amendment and annual monitoring. There are also sections to aid course teams in writing and amending the course summaries and course structure documents. The audit team found the Guide to be a well-written and comprehensive manual, and it was confirmed at meetings with University staff that it had proved helpful and been used effectively by course directors and deans during course approval, amendment and annual monitoring activities. The team considers the Guide to be a feature of good practice that has helped to promote a consistent, university-wide approach to approval and monitoring processes and the provision of accessible course summaries. The associated Guide to Senate Reviews provides similar practical advice for staff associated with Senate Reviews of Schools (SRSs) and Focussed Reviews.

22 Proposals for new courses are generally initiated within schools at a departmental level. Subsequent validation is a two-stage process. Stage 1 involves the proposal being considered by the University Executive to ensure alignment with University plans. Stage 2 focuses on the academic and quality aspects of the course and requires approval by the Faculty Board, TC and Senate. The Briefing Paper described how different aspects of scrutiny are distributed between local and central bodies to ensure comprehensive coverage. The audit team examined a complete set of documents relating to the recent approval of the MSc in Food Chain Systems in the Faculty of Medicine and Biosciences.

This confirmed that the process had been undertaken scrupulously in accord with the given procedures and had undergone the appropriate faculty and University scrutiny.

23 The audit team noted that there was no record in the approval documentation of any external consultation over the course and none is formally required by the stated procedure. However, the team learned during the meeting with staff responsible for the course proposal that there had indeed been considerable informal consultation with external parties and existing industrial panels. It was also indicated that this type of consultation would normally be the case during the development of a new course, a practice which aligns with precept 3 of Section 7 of the *Code of practice* published by QAA. The team encourages the University to prompt for and record this information on the course approval forms.

24 The procedures for approving amendments to existing courses are described by the University as 'highly-devolved', and a detailed breakdown of responsibilities and actions required in the process is given in the GC Section 2. The deans of the faculties play a pivotal role and may be responsible for giving approval at faculty level, although the Faculty Board or a subcommittee may also be involved. Ultimately, all locally approved changes are reported to TC. This new procedure was introduced in April 2009, and the University states it to have 'proved effective to date'. University staff confirmed to the audit team that the new procedure was well understood and that arrangements were in place at faculty level to monitor the cumulative effects of minor changes between periodic reviews.

25 The new approach to annual monitoring approved by Senate is termed Annual Reflective Review (ARR). Full details of the process are given in GC Section 5. ARR's are scheduled to take place annually in March/April to allow due consideration to be given to examination performance, feedback from students and external examiners' reports and yet still allow time to incorporate changes for the following year. Completed reports are submitted to the relevant Faculty Board through the Secretary, who arranges for the report to be reviewed by the Dean, Associate Dean or Faculty Sub-committee for Taught Courses. Reports are not routinely discussed or seen at Faculty Board meetings, but may be if the need arises.

26 Each Faculty Board has its own mechanisms for consolidating issues or concerns either relating to individual courses or faculty provision as a whole. The audit team saw several examples of completed ARR's, as well as examples of these digests and evidence of their consideration at TC. All this evidence combined to demonstrate that the exercise had generally been completed properly and that the process could effectively contribute to the maintenance of standards and the quality of learning opportunities. However, its potential was not yet fully realised across all parts of the University (see paragraph 91).

27 The first faculty digests of ARR reports were presented to TC in autumn 2009, although one faculty was to include its 2009 summary in its 2010 summary, as not enough 2009 ARR reports had been received. Indeed, there seems to have been reluctance on the part of some course directors to complete them and TC expressed concern about this in 2009. TC also noted, at its June 2010 meeting, that a number of reports had not been received, even though the due date was in April.

28 ARR's were used for the first time in April 2009 and, in the light of feedback from course teams, TC approved a revised template for use in 2010. This provided evidence to the audit team that the University has mechanisms in place for gauging the effectiveness of its processes for programme monitoring. It was also noted by the team that many ARR's for 2010 had been submitted using the 2009 template. Quality assurance staff explained that they had also noted this and it would form part of their ongoing assessment of the effectiveness of the new ARR procedures.

29 There are three different types of wider-ranging reviews described in Senate Code of Practice 4/05 (see paragraph 7). Senate Reviews of Schools (SRSs) are intended to act as the standard periodic review mechanism. To date, the University has only carried out Focussed Reviews (FRs), two of which relate to collaborative provision. Details of the audit team's consideration of these are given in Section 5.

30 The new procedure for SRSs had still to be put into practice for the first time and, therefore, the audit team was unable to examine completed paperwork relating to its operation. However, it was noted that the procedures for both SRS and FR include the use of external and student reviewers, in alignment with precept 3 of Section 7 of the QAA *Code of practice*. The audit team examined the new procedures and formed the opinion that one significant improvement in the new mechanism was that SRS would now include a review of the entire teaching provision of a school, including postgraduate research programmes. This compares favourably with the piecemeal reviews of courses under the previous mechanism. Overall, the team concluded that the new procedures could provide a comprehensive review mechanism if they were executed fully as intended. The team suggests that their combined effectiveness is kept under review as SRSs are rolled out.

31 It was, however, noted by the audit team that, although periodic reviews of courses had been suspended in 2008-09, there was still no schedule in place for future SRSs, although one is planned for 2010-11. This was confirmed by senior staff. It was also noted that many courses had not been subject to a periodic review for eight years. The team could not agree with the University's view that routine annual monitoring measures are a sufficient substitute in the meantime and was concerned that the substantial delays had the potential to put the management of standards and quality at risk. The team, therefore, recommends that it is advisable for the University to establish a cycle for Senate Reviews of Schools which will enable the effective periodic review of all provision to start without further delay.

External examiners

32 The University's Senate Code of Practice 1/06 describes the external examining framework in detail. Each course has at least one external examiner, who holds an academic position and has significant subject and university-sector experience. Some courses may feature additional examiners, who may be drawn from industry or other sources as appropriate. External examiners are usually nominated by the course team, which has responsibility for ensuring that there is an appropriate set of external examiners in place at the start of the academic year. Official appointments are approved on behalf of the faculty by the Dean, and Faculty Boards send external examiner lists to Senate for final approval in December each year.

33 External examiners are usually appointed for 3 years in the first instance. On appointment, the course team provides them with full details of the course, its assessment methods and attendance requirements. External examiners also receive a University handbook which gives details of their key tasks and responsibilities. The audit team found this handbook to be clear and comprehensive.

34 All external examiners are required to produce an annual report, for which there is an electronically available template providing prompts on a number of aspects of the course and assessment. Reports are formally submitted to the Vice-Chancellor, although initial processing is delegated to Registry, which then circulates copies to the course team, the Dean, the Head of School and the faculty administration. Course teams are expected to comment routinely on external examiners' reports in the ARR. If, however, a more formal response is required to a matter of concern raised by an external examiner, then course teams and the Dean will respond via the Registry. If there were a serious concern raised by an external examiner then the Vice-Chancellor would be informed.

35 The audit team examined some examples of external examiners' reports and found them to be rigorous and comprehensive, helped by a well-designed template. The team also considered the Staff Guide to Taught Course External Examining to be a practical and useful document.

36 The production of summaries of external examiners' reports, which was in place at the time of the last Institutional audit, was suspended in 2007-08. The audit team encourages the institution to consider again how it might best make use at university level of the input provided by external examiners.

37 It was also noted by the audit team that the University does not currently make external examiner reports available 'as a matter of course' to student representatives, though this is required by HEFCE following the 2006 review of the quality assurance framework. This was confirmed by senior staff. The team considers it desirable that the University conform to the given HEFCE requirement.

38 Overall, the audit team found evidence to indicate the strong and scrupulous use of independent external examiners, which contributes to the effective oversight and management of academic standards.

Academic Infrastructure and other external reference points

39 The University has made explicit use of the FHEQ in developing its own internal level 7 descriptors, which are published as an appendix to the GC. Course teams are expected to use this as a framework in developing new courses and the audit team saw evidence in the sampling trail for the new MSc in Food Chain Systems that this requirement was being met.

40 Every taught course has an associated course summary and course structure document. The design of these documents has been guided by advice on the design of programme specifications set out in *Guidelines for preparing programme specifications*, published by QAA. All these documents are published on the Registry webpages and are readily available both externally and internally within the University. The audit team examined a wide sample of this course documentation and generally found it to be clear and comprehensive, apart from some sections relating to assessment regulations (see paragraph 47). The ARR template requires course teams either to confirm that the current course summaries and course structure documents are up to date or to submit and gain approval for the amended versions. Course teams are expected to be aware of subject benchmark statements as reference points that indicate the knowledge and skills that students might be expected to possess at the start of their postgraduate study. Some of the benchmark statements are also relevant to postgraduate programmes, particularly in the School of Management.

41 The University has recently considered the ESG and noted that national expectations and requirements subsume the issues raised there. This review was confirmed by the audit team through an examination of the minutes of the TC for 14 September 2009 and the associated paper produced by the Quality Assurance Office.

42 A large number of courses make use of Industrial Advisory Panels, and many courses are accredited by PSRBs. The ARR template prompts course teams to summarise the main conclusions and recommendations they have received from these and other external sources. The University maintains a central list of accreditations, but reports of accreditation visits are not seen centrally, and the University may wish to consider whether there might be some further advantage to be gained from this.

Assessment policies and regulations

43 The University has a single-tier examination board system, with Faculty Boards being responsible for appointing and running examination boards under delegated authority from Senate. University documentation suggested that in two faculties (the School of Applied Sciences and Cranfield Health) there is a single examination board for all the courses in their remit, while in others a separate examination board is appointed for each course.

44 Minutes from examination boards are forwarded to Registry, which performs routine checks to ensure conformance with the given regulations. Formal appeals on assessment are managed at university level in accord with Senate Code of Practice 3. The procedures were revised in 2008. The Secretary and Registrar reports annually to TC on appeals.

45 There are no university-wide examination regulations other than those given in Senate Code of Practice 6. This restricts the number of attempts at a piece of assessment to two and, in the case where no resit is allowed, states that a condonement scheme will normally apply. All other aspects of assessment are delegated to the faculties and are produced on a course-by-course basis with reference to various external bodies, including external examiners, PSRBs and Industrial Advisory Panels.

46 The audit team found that assessment strategies between faculties varied considerably, although one notable fact is that the normal requirements for a taught master's award across the University is 200 credits at FHEQ level 7, instead of the more usual 180. This very often includes a substantial group project, as well as an individual dissertation. The team was made aware that PSRB requirements are one reason for the substantial variation. The University described in the Briefing Paper how faculties have the job of ensuring broad consistency across their courses and further stated that 'the University guards carefully against the risk that this flexibility could lead to inequality of treatment'. The team accepts that some variability in assessment practices is justified given the special nature of the institution's taught provision (i.e. the need to satisfy the requirements of various PSRBs) and is satisfied that the University is aware of the issues and potential problems surrounding this.

47 The audit team made a detailed examination of the assessment rules for a wide range of courses from the course structure documents publicly available on the Registry webpages of the University website. It found that, while these course documents generally appear to provide a valuable source of information for students, some of the assessment rules were deficient in a number of ways. In one example the rules were not readily available, and in others they were not considered by the team to be sufficiently transparent. Some assessment rules were drafted loosely, so that it was possible, even if unlikely, that students could meet the stated requirements without having met all the intended learning outcomes. In the light of all these observations, the team considers it advisable for the institution to review and clarify, at university level, assessment regulations for each course.

48 There is a policy of a 20-working-day turnaround to produce written feedback on coursework. However, evidence seen by the audit team suggested that this was not being met consistently. The team was able to confirm through documentation and meetings with students that this issue had been recognised by the University as a problem and was being acted on and monitored as part of the ongoing Learning and Teaching Strategy 2009-2012 (see paragraph 57).

Management information - statistics

49 The University states in the Briefing Paper that it does not routinely produce statistics on student achievements at an institutional level on the grounds that cohorts tend to be of small size and success rates are high. The ARR requires course teams to comment

on progression, but this more usually takes the form of a reflective commentary discussing student performance. These comments are, however, not routinely seen by TC. The audit team accepts that success rates are generally very high but believes that some advantage could be gained by consideration at university level of various indicators of student admissions, progression and exit performance across the institution, and that it would be desirable to use such statistics to inform strategy and policy.

50 The audit team agreed that confidence can reasonably be placed in the soundness of the University's present and likely future management of the academic standards of the awards that it offers.

Section 3: Institutional management of learning opportunities

51 Most of the structures and procedures viewed by the University as central to the management of standards are also relevant to its management of learning opportunities for students. The Briefing Paper highlights the following additional mechanisms specifically related to learning opportunities: the use of Industrial Advisory Panels; employer engagement in activities such as group projects; the links that are made between research activity and teaching; the use of institution-wide feedback; and the role of students in quality assurance.

Academic Infrastructure and other external reference points

52 The audit team examined a wide range of procedures and practice relating to student learning opportunities and found a large number of examples where the *Code of practice* published by QAA is used explicitly and effectively. In particular, the Guide to Courses makes extensive use of Section 7 of the *Code of practice*.

53 The Briefing Paper states that, as each section of the QAA *Code of practice* is revised, TC notes any development and its impact on University policy. In addition, as the University reviews and revises internal policies and procedures, the sections of the *Code of practice* are revisited. Recent examples include the revisions to the appeals and complaints procedures and the course approval, monitoring and review procedures and to the management of collaborative provision partnerships. There was explicit reference made to the revisions to Section 2 of the *Code of practice* published by QAA during the development of the new Senate Code of Practice 7 which was approved in 2008. Overall, the audit team found that the University was generally making effective use of the *Code of practice*.

Approval, monitoring and review of programmes

54 Responsibilities are distributed between local and central bodies to ensure comprehensive scrutiny of teaching provision during the course approval process. The necessary information is provided in the school statement and in the accompanying formal course proposal. These are required to address directly resource issues, as well as a risk assessment of the introduction of the programme. Evidence to support the view that this is a robust procedure was present in the documentation provided for the sample trail for the approval of the MSc in Food Chain Systems. Added to this, sections of the course summary documents are devoted to student support mechanisms, and specific sections of the Annual Reflective Review (ARR) template require a commentary from course teams on student support, resources and responses to feedback from students, external examiners and industrial advisory panels. The audit team saw ample evidence in both the sample audit trails that this was providing effective monitoring in alignment with the *Code of practice*.

55 The terms of reference for both Senate Reviews of Schools and Focussed Reviews also include consideration of a full range of learning provision and student support issues. Evidence of this working in practice was present in the paperwork the audit team saw as part of the sampling trail relating to the Focussed Review.

Management information - feedback from students

56 Course teams operate a number of mechanisms to collect and respond to student feedback at the module level. These include online and paper-based questionnaires as well as meetings between the course team and students and their representatives. Course teams are expected to report on the results of these exercises in the ARR and to indicate where student feedback has had an influence on the development of the course. The audit team saw several examples of evidence that this feedback was being collected and reported on through the ARR.

57 The University participates in both the Postgraduate Research Experience Survey (PRES) and the Postgraduate Teaching Experience Survey (PTES). The results are compiled and a summary produced for the University Executive, the Teaching Committee (TC), Cranfield Students' Association (CSA), and heads of school. The summary is also presented to the annual Learning and Teaching Conference. The University also runs its own survey of new students, the New Student Survey (NSS), and graduating students, the Student Satisfaction Survey (SSS), which cover those aspects of the student experience not dealt with in the PRES and PTES. The surveys are managed by the Student Relationship Management Working Party and the results are subsequently considered by the University Executive, the service directors, school marketing teams and the CSA. An example of a development arising out of these surveys is the introduction of an essential student information website on the intranet, intended to collate key information from across the University. High-level summaries of the results of the NSS, SSS, PRES and PTES are also now provided on the webpages directed at prospective students. The audit team also noted that TC had responded to the issue of the timeliness of feedback to students and had produced an action in its Teaching and Learning strategy for 2009-10 for course teams to monitor this carefully.

58 Overall, the audit team judged that the University's arrangements for collecting feedback from students contributed effectively to maintaining the quality of student learning opportunities.

Role of students in quality assurance

59 The University states in the Briefing Paper that 'the formal links between students and the University is managed through the CSA', which is managed by an elected executive committee of current students and representing all the schools, as well as an Education and Research Officer.

60 There are two branches of the CSA, one for the Cranfield campus and one for the Shrivenham campus. The Presidents of both campuses are ex officio members of Senate, which the Briefing Paper states gives them automatic entitlement to membership of Court and consequently ensures that there is student representation at the most senior level of the University. Student representation through the CSA is also found on the TC and the Amenities and Welfare Board.

61 The Briefing Paper states that there are formally elected student members of each Faculty Board and the terms of reference for each Faculty Board state that there should be student representation with voting rights. The audit team discovered at the briefing visit that, while student representatives were present on Faculty Boards, they were not necessarily

always elected but were often appointed directly by staff usually because student volunteers were not forthcoming.

62 Not every student that the audit team met knew who their Faculty Board representative was, and furthermore there are no clear links between the course representatives and the Faculty Board representatives. The student written submission reported that, despite the CSA being the formal link between the students and the University, there are currently 'no communication links' between the CSA and the University Faculty Boards except for the biannual Association Council Meeting. The student written submission states that, as the elected CSA school representatives are not members of the Faculty Board, there are no formal links with the academic faculty.

63 The Briefing Paper states that: 'at taught course level course teams are expected to ensure that students are nominated to represent their cohort and where course sizes are small course teams may choose to ensure all students an equal voice'. Due to the postgraduate nature of the University there is a high student turnover, and a combination of this and the high workload of these students can make it difficult to recruit course representatives. However, the team was told by University staff that the maturity of the students meant that they did not hesitate to provide direct feedback to staff who are involved in course provision. This was echoed by the students at both the briefing visit and audit visit, who made it clear to the team that they felt that their course sizes were small enough to allow for them to have an adequate role in assuring the quality of their course.

64 At the audit visit, the team found evidence of student influence on University policy (see paragraph 74), but no clear student influence was found at Faculty Board level. Furthermore the team discovered that no formal training is provided to students undertaking representative roles. Students became involved in Senate-level reviews for the first time in 2009-10 during the Focussed Reviews.

65 Overall, the audit team found evidence that the student representation system as described in the Briefing Paper was not fully effective, but that this was offset by the small course sizes, high staff-student ratio and accessibility of staff. Both staff and students made it clear to the team at the briefing visit and audit visit that these allowed for an effective student voice.

Links between research or scholarly activity and learning opportunities

66 The University is a wholly postgraduate institution and, given its focus on and links to industry, arguably occupies a unique space in the higher education sector. A key mission aim is to 'create and transform knowledge to practical application', and consequently links between research and learning opportunities are viewed as high priority for the University. The University's Learning and Teaching Strategy 2009-2012 demonstrates that at an institutional level the University considers research-informed teaching to be integral to its courses, and that through this the University 'aims to ensure the most relevant and effective learning experience possible for all students'.

67 Information collected from the Briefing Paper and from both the briefing visit and audit visit demonstrates the priority to research given in the curriculum. For example, up to 50 per cent of a taught master's course is assessed by a research dissertation, allowing all students to 'take advantage of the research environment of the specialist facilities of the University to ensure that they are exposed to the latest ideas and the relevance and application of those ideas'. There is an expectation on the part of all concerned that research-led teaching is integral to the student experience. Students reported at the audit visit that, prior to registering at Cranfield, they had a high awareness of Cranfield's research

output and reputation and that a key aspect of their learning experience was their direct involvement in the research culture of the University, which is made possible through their access to specialist research staff and facilities.

68 The staffing policies of the University are to employ those academics who have or can develop 'business development and generation abilities, as well as research, learning and teaching skills'. Students made it clear to the audit team that they value being in a wholly postgraduate, research-intensive institution and that they benefit from the links that the academic staff have with industry and commerce. As such, they feel that their own work is close to the forefront of academic work.

69 The Briefing Paper states that 'the curricula and course content of all taught master's have been developed within the context of a fully postgraduate institution, with an appropriate exposure to the applied research environment and mission'. The audit team confirmed the accuracy of these claims, having found evidence of applied research and industry-specific focus in course programme design that was reflected in course summary documents. These course summaries offered a clear and comprehensive articulation of the links between research and learning opportunities to their students.

Other modes of study

70 Programmes of study at the University are predominantly campus-based and the University does not offer any pure distance-learning arrangements. However, it makes frequent use of blended learning for both its full-time and part-time students.

71 The University provides a range of study modes, from the more traditional full-time and part-time provision to part-time (executive) provision tailored specifically for those in full-time employment and reflective of Cranfield's target student population and its position in the higher education sector. All modes of study provide students with an opportunity to undertake on or off-campus research as part of their study. In keeping with Cranfield's mission to maintain a strong industrial focus, the audit team found evidence of frequent visits to industrial settings for taught postgraduate students and of students undertaking research in industrial placements.

72 The Briefing Paper states that most taught courses now employ a virtual learning environment (VLE) to supplement the direct-contact teaching provided by the University, and extensive use is made of this. Students informed the audit team that they found such provision to be of a very high standard, and in particular students who were enrolled at the University while still remaining in full-time employment spoke of the VLE provision available as being essential for them to be able to complete their studies.

Resources for learning

73 Both the library and the IT provision of the University were rated highly in the PTES and CSA QAA Survey (the student written submission). The University has a centrally administered library that operates across both campuses, with supplementary resources provided by a number of schools. The audit team found that the high satisfaction levels with the library resources found in the PTES and the student written submission were supported by the views of students. These students felt that the library resources, the access to subject specialists, the availability of hard copy and electronic materials, the library's responsiveness to service user requests, and the library's generally proactive nature concerning issues of resourcing were all of a very high standard.

74 The audit team found evidence that the effectiveness of the library's response to service user feedback was of a high standard. The library has made use of the LibQual+

Customer Satisfaction Survey and responds to each feedback comment directly on its website. The Librarian was able to provide the team with the example of a change to opening hours to include both weekends and bank holidays as evidence of the library's effective responses to service user feedback.

75 Students met by the audit team were very positive concerning the IT provision, including in-house training, the intranet and assistance with technical issues. Students based off campus made it known to the team that they found assistance with technical difficulties from remote locations to be of an equally high standard.

76 While rating the IT provision at the University highly, the students did raise concerns that there was at times a lack of communication between departments and IT services regarding the need to provide key resources, specifically the limited number of licenses for essential software, and that this posed a particular problem around submission deadlines.

77 The audit team concluded that the students are served to a very high standard by the learning resources available to them.

Admissions policy

78 The University's formal admissions policy, including guidelines for admissions in exceptional circumstances, is outlined in the University Laws and is approved by Senate. In keeping with the mission of the University, the admissions policy is such that the schools have some flexibility to admit students who do not necessarily have the normal higher education qualifications. Senior staff informed the audit team during the audit visit that decisions regarding exceptional admissions are discussed in detail at Faculty Board level after having received admissions information from the Registry. Institutional oversight of this process is most commonly exercised through the provision of statistical data on exceptional admissions presented to Senate annually. In addition, the team received specific examples of institutional oversight regarding particular cases of exceptional admissions which were discussed at Senate.

79 It was noted by the audit team during the audit visit that senior staff considered the flexibility in their admissions policy in light of the agenda of widening participation and felt that this flexibility was justified by the success rate of the students who were admitted under exceptional circumstances.

80 Support for staff involved in the admissions process was found to be variable. Staff do not receive formal training in order to ensure that they can competently carry out their role, although it was suggested to the audit team during the audit visit that staff could have access to training if they approached the Registry with any particular needs. An example was found in one school of an admission tutors' action group intended as a support mechanism for those staff involved in the admissions process of that school. The audit team concluded that, although school practice regarding student admissions is variable, nonetheless institutional oversight has been maintained.

Student support

81 Academic and pastoral support networks for students are outlined in detail in the course handbooks provided to each student. It is through these handbooks that students are made aware of their entitlement to support and the University policy regarding student support is communicated to staff. The support afforded to part-time students is in essence the same as that provided to full-time students, however it was made clear to the audit team by staff at course level that schools take into account the fact that part-time students

frequently study while being in full-time employment and make efforts to ensure that their needs are accommodated.

82 The audit team found that international students were well supported by the University through the same channels as home students. The team was assured by the students at the audit visit that, although they had not made use of the English language support provision offered by the Learning Development Team, they knew of its existence and the support it provided should the need arise. The team was also informed by staff at the audit visit that the students could either refer themselves for English language assistance or could be directed to the Learning Development Team by their course leaders. In addition, as a wholly postgraduate University, Cranfield has a high staff-student ratio and students confirmed that this made staff particularly accessible.

83 Overall, the audit team found the University's student support to be comprehensive and effective.

Staff support (including staff development)

84 The University's Learning and Teaching Strategy 2009-2012 identifies seven focus areas, one of which is staff support, development, recognition and reward. Two key related performance indicators are whether staff engage with development of their learning and teaching and whether teaching is recognised and rewarded. The purpose of the Staff Learning and Development Strategy is to 'support the University in developing a learning culture for its staff.' The University offers a full Postgraduate Certificate in Learning, Teaching and Assessment in Higher Education (PgCert LTAHE) for academic staff, a half course for research and support staff, both of which are accredited by the Higher Education Academy (HEA), and a two-day executive programme for senior staff; the fellowship route for membership of the HEA is also promoted. These courses fall within the remit of the Academic Professional Development (APD) Lead, a new post within the University's Learning and Development Team, who will report annually to TC. The APD Lead is Course Director for the PgCert LTAHE and will also lead on the general development of teaching, learning and assessment and teaching quality enhancement.

85 There is a formal induction process and probationary members of academic staff are allocated a mentor; they are required to undertake the PgCert LTAHE if necessary. Staff who met the audit team confirmed that all teaching staff are expected to gain a teaching qualification. Peer observation of teaching is part of the mentoring process and is in place for all staff in some schools, though there is no university-wide policy. Staff supervising research students undergo training and are mentored during their first supervision. Staff taking on new roles go through an induction process and are also likely to be mentored. Academic status is awarded to senior research staff, who take relevant modules of the PgCert LTAHE, and both recognised teachers and postgraduate research students can avail themselves of staff development opportunities, although the latter are not involved in teaching other than giving presentations to postgraduate taught students on their own research topic or technical software training.

86 A key mechanism for capturing staff development needs is the annual performance and development review (PDR), which includes reviewing progress towards the PgCert LTAHE; the audit team was told that the appraisal scheme is under review and that this is likely to place more emphasis on staff development activity (see paragraph 93). Staff who met the team confirmed the importance attached to staff development, recognition and reward. Promotion guidance from the Senior Appointments Committee (SAC) includes teaching criteria, and the team was told that teaching excellence had indeed been used as part of the case for promotion. The team also learned that a promoted post parallel to

Reader (Associate Professor) had been introduced for staff more actively involved with teaching and was told that such promotions were likely to happen in future.

87 Regular staff development opportunities are provided, including a well-attended annual teaching conference, school-based workshops and lunchtime events open to all; the audit team was also told of plans for thrice-yearly university-wide seminars on teaching and learning issues. Some schools offer annual Teaching Awards, but others consider this divisive and instead encourage everyone to raise their standard. The team noted the University's strong commitment to staff support and would encourage it to develop the potential of its current and planned provision in this key area.

88 The audit team agreed that confidence can reasonably be placed in the soundness of the University's present and likely future management of the quality of the learning opportunities available to students.

Section 4: Institutional approach to quality enhancement

89 In the Briefing Paper, the University stated its view that quality enhancement is 'inextricably linked' to quality assurance and good day-to-day management of teaching provision. The Senate Guide to Courses explains that one purpose of regular monitoring is to 'provide a clear structure for continuous enhancement of the provision, by identifying any shortcomings...or opportunities for improvement.' Three key areas were identified in the Briefing Paper as encompassing the University's approach to quality enhancement: its quality assurance and enhancement systems, staff development (see paragraphs 84-7) and the dissemination of good practice. Many of the examples cited under quality assurance and enhancement systems refer to the provision of clear and concise documentation and information for various audiences. The audit team formed the view that, although improving such provision should indeed benefit students, it does not necessarily improve the quality of learning opportunities.

Management information - quality enhancement

90 Given the University's view of the close relationship between quality assurance and quality enhancement, it makes use of the same systems for collecting and using management information, in particular the use of the Annual Reflective Review (ARR).

Good practice

91 Opportunities are provided for course teams 'to identify and reflect upon risks relating to their teaching provision and the learning opportunities for students', of which the most obvious example is the ARR report. The ARR report template asks staff to reflect on a number of topics, but it does not ask them explicitly either to identify plans for enhancement or to evaluate actions taken toward this end since the previous report, although it does ask where they feel student support could be enhanced. Course teams are also asked to highlight teaching or assessment practices that they feel merit dissemination to other Course Directors. The intention is that good practice thus identified at course level is reported through faculty digests to the Teaching Committee (TC); it is also to be identified through reviews of ARR reports by Registry and the Academic Professional Development Lead, with a view to wider dissemination. The audit team saw examples of ARR reports, which, although they did not explicitly highlight enhancement activities, did identify good practice. However, the team found that there was considerable variability in ARR reports, which ranged from the largely descriptive to the genuinely reflective. The team took the view that ARR reports had the potential to capture much valuable information and, if completed

promptly and reflectively for all courses, should provide TC with an overview of University provision, but this potential was not yet being fully realised.

92 The Briefing Paper noted that the University recognised that 'there is still a debate to be had about how a university the size and diversity of Cranfield best approaches the identification and dissemination of good practice.' The audit team agreed that systematic procedures for identifying and sharing good practice on a university-wide basis are currently under-developed and would encourage the University as it engages in this debate to consider the further development of such processes. In particular, the team considered that it would be desirable for the University to use ARR reports more effectively to identify good practice and to enhance quality.

Staff development and reward

93 The Briefing Paper acknowledged that the University's engagement with the Higher Education Academy (HEA) had been relatively uncoordinated. However, the audit team heard that planned staff development activities should enable good practice to be sourced more systematically through the HEA and similar bodies (see paragraph 89). Staff who met the team outlined a number of internal opportunities to share good practice, such as Course Director meetings, as well as within the explicit context of staff development; Doctoral Training Centre leads are tasked with sharing best practice across the University (see Section 6 for further details). Students who met the team were aware of good practice in their own schools and suggested that this could be shared more widely. The staff newsletter Perspectives provides information about the range of staff activity and advertises the annual teaching conference; the team was told that, in the context of improving internal communications, consideration was being given as to whether Perspectives could be available to students. The University may wish to consider whether this might be a useful way of highlighting learning and teaching issues and of disseminating good practice across schools.

Section 5: Collaborative arrangements

94 At the time of the audit, the University had no specific strategic intentions for increasing collaboration, though the current strategic plan (2006-11) envisages growth in partnerships with 'overseas teaching institutions that can be used as a base for the delivery of Cranfield products'. Individual school strategic plans also envisage growth in this area: international expansion is 'central' to the strategy of the Management School, for instance. In fact, only one partnership with large numbers, with the Institute of Clinical Research, India (ICRI), has started since 2006. This is discussed below. There are some longstanding programme validation arrangements with military agencies, but the majority of links are small scale and ad hoc, usually involving Cranfield 'flying faculty' delivering versions of existing Cranfield courses to specific markets in remote locations.

95 There were 628 students on 21 partnership programmes listed in the University's register of collaborative provision. The register includes partnerships with a range of universities, specialised institutions, and industrial, defence and government establishments. The link with ICRI is the most substantial by far, with 333 students; the next largest is the Certificate in Learning and Teaching in Higher Education, which the University offers to its staff in collaboration with Oxford Brookes University, which has 102 students, and which must be regarded as a 'collaborative' programme in that it was jointly designed and is taught in part using the resources of another University only: no students are shared. Most of the remaining partnerships have 10 students or fewer.

96 The University's procedures for collaborative provision have recently been substantially changed, following the June 2009 report of a QAA overseas audit of the

University's partnership with ICRI. The audit itself had taken place between October 2008 and January 2009. The report identified as positive features the priority given by the University to ensuring effective communication across sites and between countries, and the recent development of a risk register for the partnership. It identified 16 points for consideration by the University, covering a range of matters to do with course management, admissions and assessment, adherence to established procedure, timeliness of action in response to problems, the use of external examiners, and the provision of information to students. The evidence gathered by the overseas audit team did not provide 'a sufficient basis for confidence in Cranfield's management of quality and standards in relation to the large, complex overseas provision' represented by ICRI. In response to the report, the Vice-Chancellor set up a task group to consider the recommendations and to propose changes as necessary, which found that some problems only related to the early cohorts of students. Other matters, such as those relating to the ambiguity of overall responsibility for the quality management of partnerships, were expected to be resolved by revised lines of reporting for deans and heads of school, intended to make clear that heads of school were responsible overall for the quality of courses in their faculties as well as their 'business' aspects. A number of proposed changes were formalised in Senate Code of Practice 7/02, 'Partnerships involving academic provision'. Some recommendations remained unresolved: for the specification of the responsibilities of course directors, 'no timeline [was] specified at present'.

97 Senate Code of Practice 7/02 identifies four categories of partnerships involving academic provision: 'Programme Validation', 'Joint Provision', 'Partial Award Recognition', and 'Partner Support'. In summary, Programme Validation involves a Cranfield award largely or wholly delivered by a partner; Joint Provision involves an arrangement for teaching and assessment, and for course management shared between the University and a partner; Partial Award Recognition involves recognition by Cranfield of credit in respect of defined parts of an award taught and assessed by a partner; and Partner Support involves Cranfield courses taught and assessed largely by Cranfield staff using the resources of a partner. These four modes represent a hierarchy of 'risk', and, while the Code establishes a general framework for the management of partnerships, it operates a 'principle of proportionality' in determining the 'checks and balances' to apply in the case of any one. The University's terms are used hereafter in this report.

98 The report of the 2005 QAA Institutional audit expressed concern about 'the absence of a systematic institutional-level overview of quality and academic standards in collaborative provision.' Things were going wrong with the ICRI partnership and had been the subject of discussions on a regular basis at Faculty Board and at Teaching Committee (TC) levels from its inception in 2006. However, development of the new Senate Code did not begin in earnest until TC saw a draft in July 2009, and it was not recommended for approval by TC until January 2010. Senate finally approved it in March 2010. The Code appeared comprehensive, and the new arrangements seemed likely to forestall the problems unanticipated in respect of ICRI. However, the audit team concluded that it had taken too long for the University to act on the lessons of ICRI. It would be advisable for the University to act with more urgency in considering the effectiveness of institutional procedures in the event of major problems in partnership provision.

99 The University stated in its Briefing Paper that all collaborative provision is undertaken within the framework provided by Senate Code of Practice 7/02. The University's Code refers explicitly to Section 2 of the QAA *Code of practice* and is evidently closely informed by its precepts, including those regarding due diligence. Proposals for new courses, even those put forward before the Senate Code of Practice 7/02 came into effect, refer to external reference points such as the National Academic Recognition International Comparisons (NARIC) tables, which themselves are informed by *The framework for higher education qualifications in England, Wales and Northern Ireland* (FHEQ). As with other kinds

of provision, the University always refers to the industrial/academic advisory boards it has in place for parallel 'in house' courses. Some partnership courses, even Programme Validations such as the MSc Military Construction Engineering, are accredited by professional, statutory and regulatory bodies (PSRBs). Not all legal agreements seen by the audit team align with the Academic Infrastructure, though the procedure for developing new agreements seems likely to remedy this.

100 The framework for the management of quality and standards in courses taught at the University campuses applies also to those taught in partnership. Overall responsibility for management is with heads of school. TC establishes quality assurance requirements on behalf of the Senate, and their implementation is overseen by Faculty Boards and deans of faculties. At the level of the course, course directors are responsible for the day-to-day business of managing programmes and their students, including such matters as the production of course handbooks or 'manuals', compiling Annual Reflective Reviews (ARRs), and meeting the routine quality assurance requirements of the University, as well as being students' first port of call in case of problems. Course directors may be members of partner staff or Cranfield staff, depending on the kind of partnership.

101 The basic mechanisms of approval, monitoring and review, and for setting and maintaining standards, are common to all courses. The Registry's Quality Assurance Office is responsible for the articulation and scheduling of quality assurance procedures.

102 Relations with partners are formalised in legal agreements. Historically, these have been memoranda of understanding, but the University is increasingly adopting formal contracts. Some extant memoranda are significantly out of date. A 1997 memorandum with the Royal School of Military Engineering (RSME) in respect of the MSc in Military Construction Engineering explicitly excludes the University from any responsibility for learning opportunities, though in fact the University appeared to provide a highly-valued library service to the RSME students. The memorandum fails to capture important changes in the management of many of the staff teaching the course that post-date it. The recent contracts seen by the audit team deal almost exclusively with financial and intellectual property details and do not mention such matters as residual obligations to students (though it should be noted that this matter has been identified by the University as needing attention). Since Senate's Code of Practice 7/02 requires new course proposers to consult the Registry for advice on legal agreements at an early stage in the approval procedure, it seems unlikely that future agreements will suffer these defects. However, the University currently has no timetable for ensuring that extant agreements meet its new requirements. It is advisable to redraft formal agreements with partners in the light of Senate requirements and keep those agreements up to date.

103 Senate Code of Practice 7/02 specifies arrangements for checking the suitability of the partner; academic approval of the provision; the establishment of proper contractual arrangements; and requirements at faculty and university levels for reporting the progress of the establishment of the partnership. The Code is accompanied by templates for the presentation of detail to the University Executive and Senate committees. A site visit by an independent team appointed by the Teaching Committee is required, and a report of the visit goes first to the Faculty Board and then to TC, which is responsible for recommending to Senate whether or not a proposed partnership should go ahead.

104 No partnership had been approved under the new procedures at the time of the Institutional audit. However, two or three 'Partner Support' arrangements had been approved in 2009-10 as the new Code was under development, and were managed with the precepts of the Senate Code in mind. In particular, the new requirement for risk assessments to be undertaken in respect of all partnership proposals, and for the involvement of the TC and

Faculty Boards at a much earlier stage than formerly seemed likely to expose difficulties before they become problems.

105 The University's procedures for ARR apply to partnership courses as for all others, though from the start of 2010-11 the University will additionally require from each partnership course an 'annual operating statement' at the beginning of each session. This was designed in collaboration with several partners and a number of course directors and is likely to form a good reference point for the ARR that follows it. Responsibility for these documents lies with the course directors concerned, who are members of the partner institution in the case of Programme Validation, and Cranfield employees in the case of Joint Provision. The format for ARR is as for in-house courses. Examples of completed ARRs for 2009-10 appeared full and likely to prove vehicles for improvement and for giving assurance to the sponsoring faculties that courses are progressing as intended. TC does not see ARRs, but does monitor their submission.

106 Those ARRs outstanding two months after the specified submission date included that for ICRI, for the course at which no ARR had been submitted for the two years previously. The University's delay in making explicit the responsibilities of course directors for partnerships may be related to these omissions (see paragraph 102). The University stated that the ICRI partnership had been monitored very closely since the recent difficulties became apparent and it had been the subject of Focussed Review in the present session. However, in the view of the audit team, special measures do not substitute for the regular self-scrutiny implied by routine quality assurance activities and there was no valid reason why the ARR had not been compiled. It is advisable to ensure that Senate's routine quality assurance requirements for partnership courses are implemented in all cases.

107 Two partnerships, with RSME and ICRI, had had Focussed Reviews. Neither was complete, though draft reports were available, and the audit team was able to examine a very full set of paperwork assembled in respect of RSME. This suggested that the procedure was fulfilled as intended. Since the report was due to go to TC via the Faculty Board, it seemed likely that the procedure would be effective in giving the University assurance that the standards and the quality of learning opportunities in this collaboration were managed effectively.

108 Feedback from students is captured as for other courses through the standard mechanisms of monitoring and review. The ARR form includes a section in which the course directors describe arrangements for collecting student opinion, and Focussed Review includes at least one session with students. In relation to the example seen, this mechanism appeared to be working effectively. Focussed Review teams include a student member, in the audit team's view a useful recent innovation, which should further improve the flow of information between students and staff.

109 The University intends that partnerships also be reviewed as part of the overall provision of a school under the new method of Senate Review of a School, but none have yet taken place.

110 Standards of courses delivered in partnership are set at approval as for any other course. Assessments are conducted in accordance with the Cranfield 'Laws', as for any courses, and this is spelled out in course documents. The same assessments, or similar ones amended to refer to local conditions, are used where the course is a version of one taught at the University, and the same examination boards are used for remote and local delivery. For Partner Validation, where there is no parallel University course, the chair of the Board of Examiners is a member of Cranfield staff, appointed by the faculty. Key staff must be Cranfield 'recognised teachers' and staff confirm that recognition is a rigorous procedure.

The University keeps an up-to-date register of all staff approved. Only recognised teachers may be members of the examination board.

111 All courses have external examiners, wherever they are taught, and in Partner Support and Partial Award Recognition, where partnership courses are versions of courses delivered at a Cranfield campus, the same external examiners are used. External examiners for Programme Validation and some instances of Joint Provision courses are appointed by Cranfield and formally report to the Vice-Chancellor. External examiners' reports for Programme Validation courses appeared generally thorough, and confirm that standards meet those of the University at large. Course directors respond to external examiners directly, and their responses are reported in ARR. Where the reviews were submitted, this mechanism seemed to be effective.

112 The University's arrangements for appeals and complaints apply to all registered students, wherever they are taught.

113 On the basis of the example examined by the audit team, it can be confirmed that the involvement of the partner organisation was shown on the certificate and on the transcript. As noted by the report on the overseas audit of the University's partnership with ICRI, the certificate makes no reference to the transcript.

114 The University uses a management information system for the administration of student records, including students registered with partners, and, though it does not routinely specify student numbers on its register of partnership provision, it was able to supply them. The Register did not include the partnerships most recently established, which suggests that it was updated intermittently, rather than as and when new partnerships were approved. The University also keeps an institutional register of professional body accreditations, some of which affect partnership courses.

115 Most statistical information is collected at course level and reported in ARRs. As indicated elsewhere in this report, the University does not routinely use data at institution level in managing the quality and standards of its courses, whether in partnership provision or not.

116 Few of the University's partnership courses involve 'open' admission, the majority being tailored or commissioned for very specific student groups, such as those identified by the RSME for the MSc in Military Construction Engineering, or by the Ethiopian Ministry of Defence for the MSc in Security Sector Management. In such cases, the courses are not advertised in the normal sense. The major sources of information for students are course manuals. The manual seen by the audit team was generally comprehensive, though this example omitted any mention of students' final right of appeal to Cranfield against assessment results, where, unusually, the anachronistic memorandum was explicit.

117 Information provided to the students at ICRI is in a different category. While satisfied with the robustness of the 'discussions' about publicity material, QAA's overseas auditors were critical of a lack of clarity about the ownership of the first year of the course, the potential for misunderstanding about delivery on one of ICRI's campuses, and about work placements. The University now ensures that course manuals and their content are reviewed and revised annually. The ICRI website is now also reviewed regularly to check for accuracy, and all marketing materials are received and considered by Cranfield Health. ICRI's website now makes it clear that the 'Foundation' year of study, which qualifies students for entry to the MSc, is an ICRI course not a University one.

118 Senate Code of Practice 7/02 appears to be a good basis for the management of current collaborative work, and for its development in the future. Provided the University applies it promptly to current as well as future provision, and provided responsible staff are

pressed to fulfil its requirements in full, as the present recommendations suggest, the audit team has confidence in the University's arrangements for managing the academic standards and quality of learning opportunities available to students on its awards delivered by collaborative partners.

Section 6: Institutional arrangements for postgraduate research students

119 Some 30 per cent of the students at the University are enrolled on programmes leading to master's or doctorate level degrees by research. These include professional doctorates.

120 The research programmes operate within a Code of Practice and regulations agreed by the University Senate. The Code has been regularly updated, most recently in 2008. It outlines clear and helpful procedures on admissions, appointment of supervisors, supervision, progress monitoring and reporting, transfers of registration, and examinations.

121 The management of the research degree programmes is the responsibility of the schools, with scrutiny of processes, oversight and development of programmes carried out by the Faculty Boards, which report to the University Teaching Committee (TC). The arrangements for deliberative committees vary across the faculties. Some faculties have a research degree committee reporting to the Faculty Board. In other cases a single subcommittee of the Faculty Board deals with both taught and research degree students. Faculties also have an Associate Dean for research or similar position, whose responsibilities include research students.

122 The minutes of Faculty Boards and the subcommittees seen by the audit team include regular reports from the Associate Dean. The meetings receive details of individual student progression and deal with operational aspects of the research degree programmes. However, the minutes of the Faculty Boards and their research degree committees or equivalent provided little evidence of any routine monitoring of overall performance, related, for example, to completion rates, the take-up of training by students, appeals and complaints, recruitment profiles or employment progression. The audit team also learned that monitoring of information against internal or external indicators is not routinely considered at the TC. The team noted that monitoring the management and development of academic provision and support for research students will be included in the arrangements for the Senate Reviews of Schools, but none of these had taken place at the time of the audit. It is advisable for the University to make arrangements to monitor on a regular basis the success of its postgraduate research programmes against appropriate internal and/or external indicators and targets in all faculties and at university level, in line with precept four of the *Code of practice, Section 1: Postgraduate research programmes*.

123 Information for prospective research students is provided through a prospectus and through web-based information. The students met by the audit team confirmed the accuracy and helpfulness of the information provided. Arrangements for the admission of research students are set out in the Senate Code of Practice. The Code requires admissions decisions to involve a person independent of and additional to the potential supervisor, and where possible it is expected that the candidates should be interviewed. The involvement of more than one person in making an admission decision was confirmed in meetings with staff. Formal responsibility for recommending the admission and registration of students rests with the Head of School. Students' initial registration is for doctorate/MPhil. This is changed to the full doctorate award when the candidate demonstrates the requisite capability at a transfer review.

124 The Senate Code of Practice sets out the arrangements for the appointment of supervisors and their overall supervisory work load, which should not normally exceed 10 students. The audit team learned that this maximum can only be exceeded with the agreement of the heads of school, who are responsible for the allocation of supervisors. The Code also usefully draws distinctions between inexperienced, experienced and mentoring supervisors. Inexperienced supervisors are only permitted to cosupervise with a mentoring supervisor. Experienced supervisors will have completed the training programme provided by the University's Learning and Development Team and have cosupervised at least one research candidate to satisfactory completion. Training is compulsory for all new supervisors and the audit team learned that consideration is being given to compulsory continuous professional development for all existing supervisors. Mentoring supervisors will normally have supervised individually three doctoral candidates to completion without appeal. The role of the mentoring supervisor includes mentoring inexperienced staff members in supervisory skills.

125 The students met by the audit team were clear about the arrangements for meeting their supervisors and were satisfied with the supervisory support provided. However, this contrasts with the views expressed in the student written submission and in the Postgraduate Research Experience Survey, which include critical comments about the feedback and guidance given by supervisors. The team saw evidence of these issues being considered at Faculty Boards and their subcommittees and learned that weaknesses in supervision were one of the factors which had prompted the development of the newly introduced Doctoral Training Centres (DTCs).

126 Under the Senate Code of Practice students are required to make regular reports and their progress is regularly reviewed by a small panel, independent of the supervisor, established specifically for the purpose. One of the reviews, normally between 9 and 12 months after initial registration, is to confirm transfer to doctoral studies. At the time of each progress review, the supervisor makes a written progress report to the panel with copies to the student. Guidance on the contents of the reports, a part of which is also completed by the chair of the Review Panel, is provided in the Code of Practice. Reports from the students are also made to the review group and students may meet their panel. In some faculties it is a requirement that such a meeting takes place at every review. The panel submits its report for each student to the Head of School and Faculty Board or research subcommittee or similar body, and completion of the reports and reviews is monitored by the Associate Dean or equivalent. The report sets out the group's view of the student's progress. Where this is less than satisfactory the group will provide additional reviews and give details of action required to remedy the situation. The documentation seen by the audit team indicated that these review arrangements are carried out thoroughly and that timeliness in completing annual reviews is monitored by the Associate Dean. For their part, the students met by the team welcomed the regular review meetings and confirmed that they take place as described in the documentation and that they are helpful. These arrangements for supporting and monitoring the progress of research students are considered by the team to be a feature of good practice.

127 Formal appointment of examiners is made by the University Registry following approval by the Faculty Board on the recommendation of the Head of School. There must always be at least two examiners, one of them external to the University. The criteria for appointment ensure that the examination team has the appropriate experience, seniority and qualifications. The audit team learned that in exceptional cases, related to security clearance issues, it is possible for the supervisor to act as an internal examiner, but still the examination team must include two further examiners, one of whom must be external. It is possible for an independent chair to be appointed.

128 Apart from the support provided by the supervisors, who among other things are responsible for ensuring that students are aware of the assessment rules and criteria, postgraduate research students are also supported by their departments and schools. The audit team learned that the type and level of support varies across the University. All research students have access to a nominated individual, independent of their supervisor, whom they may approach concerning problems, including problems with supervision. Induction is provided by schools, in some cases supported by a manual, although the audit team learned from some of the students that they had not taken part in any induction activities. Students are also provided with handbooks either in hard copy or online. Handbooks seen by the audit team provided relevant and useful material, including information about appeals and complaints, monitoring arrangements and training programmes. Students met by the audit team found them helpful.

129 A programme of generic and discipline-specific training is provided through the schools and is also available online. For some schools attendance at the training programme, including discipline and induction-related content, is compulsory. The take-up of training was described as good, with a high level of demand for some programmes. The students met by the audit team were aware of the training opportunities, although some of them had not participated. A check on the take-up of training is made as a part of the students' progress reviews. The University Learning and Teaching Strategy encourages research supervisors and groups to embed interactive personal development planning opportunities and modules into their general supervision of students. The students met by the audit team were aware of this development but recognised variability in its implementation. The team learned that, apart from occasional presentations relating to their own work and providing support, research students are not involved in teaching and are not involved in the assessment of students.

130 A recent development designed to enhance the student experience, approved by the University Executive in 2009, is the creation of DTCs which, despite their name, have a responsibility for all students taking research degrees. Seven DTCs have been approved and all students registered for a research degree are allocated to a DTC. The responsibilities of the DTCs include developing suitable training provision for research students and ensuring that students are provided with appropriate research and generic skills training. The DTCs are also involved in reviewing student feedback and sharing best practice. At the time of the audit the DTCs were in their early stages of development, but the students met by the audit team were aware of their development in providing support for students. The leaders of the DTCs will submit annual reports to Faculty Boards. Centrally the DTCs come together in a DTC Committee, chaired by the Pro-Vice-Chancellor for Learning and Teaching, which reports to the TC. Apart from the leaders of each DTC, the members of the Committee include the leader of Academic Professional Development and the Quality Assurance Officer. The DTC Committee is responsible for overseeing the provision of research student training and enhancing the student experience through developing generic training modules and building the research community. It will also provide advice and comment to Faculty Boards and the TC, and the team learned of plans for the Committee to be involved in monitoring completion rates. This Committee provides the potential to strengthen coordination and oversight across the University.

131 The Briefing Paper makes reference to the considerable investment in resources for research students over the past five years, in near-industrial-scale facilities, new laboratories and dedicated facilities. The student written submission expressed the students' satisfaction with the University's investment in facilities and infrastructure. This was confirmed in meetings of the audit team with students, who were particularly appreciative of the resources provided by the Library and IT staff.

132 Postgraduate research students' views are canvassed through the University's New Student Survey and the Student Satisfaction Survey. The University also takes part in the Postgraduate Research Experience Survey (PRES). The results of these surveys are reported to University committees and to the Cranfield Students' Association. Summaries of this information are also available on the website for prospective students. The documentation seen by the audit team indicates that the results of the student surveys are considered at faculty level and in the past have prompted university-wide initiatives such as that to create the DTCs to enhance the student experience. Postgraduate research students are represented on Faculty Boards, but the students met by the audit team were unaware of their representatives or their role. The team also learned that a research committee is being established by the CSA.

133 In the view of the audit team the arrangements that support postgraduate research students are generally comprehensive and well implemented. The Senate Code of Practice provides a coherent framework and its various elements are being followed in the faculties. The support for students is generally sound, and notably there is a well-developed and supportive system for the regular monitoring of student progress. The University has taken appropriate action in response to the report of the QAA review of 2006, although regular monitoring of information about the research degree programmes against internal and external indicators is not well developed and does not yet fully meet the expectations of Section 1 of the *Code of practice* published by QAA.

Section 7: Published information

134 In the Briefing Paper the University identified a number of published materials that it provides to students and other stakeholders in both hard copy and online. Some information, such as the learning and teaching elements of the corporate plan, are not published in the public domain, but such information is available on the intranet to staff and students.

135 Responsibility for maintaining the accuracy of the prospectuses and updating the University's web-based material lies with the marketing team of each faculty. Staff at the university level informed the audit team that the marketing teams receive their information regarding course approval from Senate and all information is updated annually. Once enrolled on a course of study, students use the course handbooks as the primary source of information regarding their course structure and academic and pastoral support provision. The course handbooks also act as a key source of information for staff and are reviewed and updated in the late spring in preparation for the forthcoming academic year.

136 Through a review of a range of hard copy and electronic information and based on the information provided by staff and students at the audit visit, the audit team was able to conclude that at institutional level the information provided to students and stakeholders in the form of prospectuses and on the University's website was detailed and accurate, and that reliance can reasonably be placed on the accuracy and completeness of the information the University publishes about the quality of its educational provision and the standards of its awards.

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