

**Subject Review Report** 

October 2000 Q6/2001

Loughborough University
Librarianship and Information Management

### **Reviewing the Quality of Education**

The Quality Assurance Agency for Higher Education (QAA) was established in 1997. It has responsibility for assessing the quality of higher education (HE) in England and Northern Ireland from 1 October 1997 under the terms of a contract with the Higher Education Funding Council for England (HEFCE).

The purposes of subject review are: to ensure that the public funding provided is supporting education of an acceptable quality, to provide public information on that education through the publication of reports such as this one, and to provide information and insights to encourage improvements in education.

The main features of the subject review method are:

### Review against Aims and Objectives

The HE sector in England and Northern Ireland is diverse. The HEFCE funds education in over 140 institutions of HE and 75 further education (FE) colleges. These institutions vary greatly in size, subject provision, history and statement of purpose. Each has autonomy to determine its institutional mission, and its specific aims and objectives at subject level.

Subject review is carried out in relation to the subject aims and objectives set by each provider. It measures the extent to which each subject provider is successful in achieving its aims and objectives.

Readers should be cautious in making comparisons of subject providers solely on the basis of subject review outcomes. Comparisons between providers with substantively different aims and objectives would have little validity.

## Review of the Student Learning Experience and Student Achievement

Subject review examines the wide range of influences that shape the learning experiences and achievements of students. It covers the full breadth of teaching and learning activities, including: direct observation of classroom/seminar/workshop/ laboratory situations, the methods of reviewing students' work, students' work and achievements, the curriculum, staff and staff development, the application of resources (library, information technology, equipment), and student support and guidance. This range of activities is captured within a core set of six aspects of provision, each of which is graded on a four-point scale (1 to 4), in ascending order of merit.

The aspects of provision are:

- Curriculum Design, Content and Organisation
- Teaching, Learning and Assessment
- Student Progression and Achievement
- Student Support and Guidance
- Learning Resources
- Quality Management and Enhancement.

#### Peer Review

Reviewers are academic and professional peers in the subject. Most are members of the academic staff of UK HE institutions. Others are drawn from industry, commerce, private practice and the professions.

### **Combination of Internal and External Processes**

The review method has two main processes:

- Preparation by the subject provider of a selfassessment in the subject, based on the provider's own aims and objectives, and set out in the structure provided by the core set of aspects of provision.
- A three-day review visit carried out by a team of reviewers. The review team grades each of the aspects of provision to make a graded profile of the provision, and derives from that profile an overall judgement. Provided that each aspect is graded 2 or better, the quality of the education is approved.

### **Published Reports**

In addition to individual review reports, the QAA will publish subject overview reports at the conclusion of reviews in a subject. The subject overview reports are distributed widely to schools and FE colleges, public libraries and careers services. Both the review reports and the subject overview reports are available in hard copy and are also on the world-wide web (see back cover for details).

### Introduction

- 1. This Report presents the findings of a review in October 2000 of the quality of education in librarianship and information management provided by Loughborough University.
- 2. The origins of the University extend back to 1909 when a technical institute was founded in the town. Following a period of rapid expansion the institute was renamed Loughborough College. In 1952 it split into four separate institutions: the College of Technology, the College of Art and Design, the College of Further Education and the Training College. In 1966 the College of Technology achieved University status as Loughborough University of Technology and was renamed Loughborough University in 1996 to reflect the breadth of disciplines. The University comprises 23 departments organised into three faculties: Science, Social Science and Humanities, and Engineering. In the academic session 1999-2000 the University had 8,778 full-time and 162 part-time undergraduates, and 701 full-time and 1,259 part-time taught postgraduate students.
- 3. The Department of Information Science has 259 full-time and two part-time undergraduates, together with 70 full-time and 31 part-time taught postgraduate students. There are 16 full-time academic members of staff, and two Adjunct Lecturers. The Department is supported by 5.1 full-time equivalent administrative and technical staff.
- 4. The following provision forms the basis of the review:
- BA Information and Library Studies (terminates June 2002)
- BA Information and Publishing Studies (terminates June 2002)
- BSc Information and Computing (terminates June 2002)
- BSc Information and Management (terminates June 2002)
- BA Library and Information Management (introduced October 1999)
- BA Publishing with English (introduced October 1999)
- BSc Information Management and Computing (introduced October 1999)
- BSc Information Management and Business Studies (introduced October 1999)
- Bachelor of Library Studies
- MA/MSc in Information and Library Studies
- MSc in Information Studies
- 5. The statistical data in this Introduction are provided by the institution itself. The aims and objectives are presented overleaf. These also are provided by the institution.

# The Aims and Objectives for Librarianship and Information Management

#### **Aims**

The Department of Information Science's mission includes the statement:

To produce high-quality graduates and postgraduates who will (i) have a good grasp of the principles of information science and of the professional practice derived from them, (ii) be eagerly sought by employers both at home and abroad across a broad range of activities in the traditional and emerging sectors'.

This component of the mission is promoted through the following departmental aims to:

- provide high quality teaching and learning programmes, at undergraduate and postgraduate levels, approved by the University, moderated through an external examination system, and accredited (where appropriate) by relevant scholarly and professional bodies;
- prepare graduates for professional careers as information specialists by providing effective learning experiences for students who stem from a number of academic backgrounds;
- develop the information-based curriculum in response to changes in society, technology, market demand and student aspiration;
- promote interdisciplinary understanding of the concept and application of information science;
- develop and use information and communication technology in support of teaching, research, communication and administration, and to encourage creativity and innovation in the development and use of multimedia applications;
- provide students with a range of transferable skills appropriate to their needs for professional development;
- provide a stimulating, friendly and supportive learning environment.

### Objectives

On completion of their studies, students will have:

- acquired knowledge, understanding and experience of the underpinning principles of information science and be able to apply them in a range of professional sectors and situations;
- achieved enhanced knowledge and understanding in context through their contact with researchers and external experts in both public and private

information sectors, and for students enhancing their degree with the additional award of Diploma in Professional Studies, through personal work experience;

- acquired the intellectual capacity to work effectively and independently;
- acquired the intellectual capacity to work competently as a member of a team, being aware of group dynamics and the need for communication skills;
- acquired an attitude to scholarship that facilitates lifelong learning and continued professional development; and,
- fulfilled or part-fulfilled the requirements for membership of relevant scholarly and professional societies.

Specific Objectives by Programme

Students graduating from the Department will have acquired:

BA in Library and Information Management

BA in Information and Library Studies

 the necessary skills to enter the information and library professions. Students will be provided with a broad education and training in basic professional and managerial skills applied to the information needs of individuals, organisations and society at large;

BSc in Information Management and Computing

BSc in Information and Computing

 the necessary skills to enter the information and computing sectors. Students will be provided with a broad education and training in information and communication technologies applied in industrial, commercial, academic and public sectors;

BSc in Information Management and Business Studies

BSc in Information and Management

 a broad education and training in information and management technologies applied in business, academic and public sectors;

BA in Publishing with English

BA in Information and Publishing

 a multidisciplinary education in English and Information Science that will allow acquisition of publishing skills that will equip the graduate for life in the 21st century publishing industry;

### BSc in Information Studies

 a multidisciplinary education yielding an understanding of information in all its forms, and an awareness of knowledge environments and systems and technologies by which information is handled, and the sources from which it is available;

### Bachelor of Library Studies

 awareness of working environments and an understanding of the information needs of individuals and organisations; an ability to tackle technology issues with confidence and to raise awareness of legal, ethical and professional issues;

### MA/MSc in Information and Library Studies

 an understanding of the professional, managerial and technical dimensions of librarianship and other information work, and the core skills required to obtain a first professional post in the sector, building upon pre-programme experience; and will have acquired the learning skills needed to gain further professional understanding;

### MSc in Information Studies

 a systems approach to information provision; an understanding of the principles underlying the organisation, retrieval, dissemination and management of information; and to have enhanced practical skills in information and communication technologies, building upon experience gained in undergraduate study and/or during pre-programme employment.

### **Summary of the Review**

6. The graded profile in paragraph 7 indicates the extent to which the student learning experience and achievement demonstrate that the aims and objectives set by the subject provider are being met. The tests and the criteria applied by the reviewers are these:

### Aspects of provision

- 1. Curriculum Design, Content and Organisation
- 2. Teaching, Learning and Assessment
- 3. Student Progression and Achievement
- 4. Student Support and Guidance
- 5. Learning Resources
- 6. Quality Management and Enhancement.

### Tests to be applied

To what extent do the student learning experience and student achievement, within this aspect of provision, contribute to meeting the objectives set by the subject provider?

Do the objectives set, and the level of attainment of those objectives, allow the aims set by the subject provider to be met?

### Scale points

1

The aims and/or objectives set by the subject provider are not met; there are major shortcomings that must be rectified.

2

This aspect makes an acceptable contribution to the attainment of the stated objectives, but significant improvement could be made.

The aims set by the subject provider are broadly met.

3

This aspect makes a substantial contribution to the attainment of the stated objectives; however, there is scope for improvement.

The aims set by the subject provider are substantially met.

4

This aspect makes a full contribution to the attainment of the stated objectives.

The aims set by the subject provider are met.

7. The grades awarded as a result of the review are:

Grade
4
4
4
4
4
4

8. The quality of education in librarianship and information management at Loughborough University is approved.

### The Quality of Education

## **Curriculum Design, Content and Organisation**

- In accordance with its mission statement the Department of Information Science provides undergraduate and postgraduate programmes that develop skills and knowledge for students who wish to gain employment in careers dealing broadly with information. The department has recently undertaken a review of the content and titles of its undergraduate programmes and now provides a range of programmes which promote an interdisciplinary understanding of the concept of information, based upon skills changes in the job market. The three-year undergraduate programmes are modular and comprise a range of core and optional modules. Students may opt to take a four-year programme that incorporates a placement year, which is valued by students and also highly regarded by employers. If successfully completed students graduate with a Diploma in Professional Studies (DPS) in addition to their undergraduate qualification. The one-year Bachelor of Library Studies (BLS) programme allows students who already possess a recognised professional qualification to gain a degree level qualification. The postgraduate programmes, which may be taken in full or part-time mode, are also modular and deal with advanced understanding of information science. The programmes are well designed and fulfil departmental aims and the relevant programme-specific objectives.
- 10. The joint degree programmes that link Information Management with Computing or Business Studies and the degree in Publishing with English, are designed specifically to promote an interdisciplinary understanding of information science. This reflects recent subject developments within the profession, and meets the departmental aim. The two postgraduate degrees and the undergraduate programmes in Library and Information Management are fully accredited by the Library Association and the Institute of Information Scientists. The same bodies accredit the Information Management with Computing and Information Management and Business degrees subject to students completing the one-year placement.
- 11. The levels of study and their breadth and depth are appropriate to the programmes. The design of the curriculum is such that the minimum thresholds for progression are often higher than required by university regulations. This ensures that students attain appropriate understanding in modules that are seen to be important in developing knowledge and expertise in

- key professional areas. There are some potential practical problems associated with the timing and credit allocation for the compulsory six-week, first-year placement module and the reviewers noted minor concerns over the coherence of the modules that comprise the content of the Bachelor in Library Studies. However, the teaching staff have obviously given due consideration to the need to balance the requirements of the accredited programmes of study with problems of progression.
- 12. In designing the curriculum, flexibility and student choice has been carefully planned. The balance between core and optional modules is achieved while still ensuring the delivery of key skills and an understanding of principles that contribute to achieving the programme-specific objectives. The incorporation of research-based options into the programmes, particularly at postgraduate level, supports the enhancement of students' knowledge and understanding through their contact with active researchers.
- 13. The curriculum design has been informed by recent developments in subject-specific issues and teaching and learning developments. This is illustrated in the use of the internet and the Department's intranet for the dissemination of important information and supplementary teaching material. The mechanism for debating curriculum development has included an External Advisory Board, market research of employers and the involvement of the University Learning and Teaching Development Unit.
- 14. This aspect makes a full contribution to the attainment of the stated objectives. The aims set by the subject provider are met.

Curriculum Design, Content and Organisation: Grade 4.

### **Teaching, Learning and Assessment**

- 15. The departmental strategy for teaching and learning is clearly articulated and is currently being reviewed in line with the new University Learning and Teaching Strategy. Evidence of well-expressed learning outcomes closely related to the general departmental aims is found in both module specifications and assignment outlines. Students are very positive about the learning experience, and employers about the final outcomes, views that are echoed by external examiners' comments.
- 16. A variety of teaching methods is employed including lectures, workshops, tutorials and seminars. The reviewers noted with approval the involvement of practitioners and researchers from outside the Department in some modules. The Department's

intranet is used by most tutors to support lectures and the hardcopy information provided to the students is of a generally high quality in module specifications, handouts and handbooks. The review team observed 13 teaching sessions and found that the content and organisation were generally excellent with clear articulation of objectives. Student participation was positively encouraged, and the balance between lectures and support in tutorials and workshops was generally well judged, and appreciated by students.

- 17. Staff in the Department have worked closely with the Learning and Teaching Development Unit of the University both in the development of computer-aided learning and the university-wide network for learning. The development of staff in teaching and learning is an important part of the University induction procedures for new staff and those seeking promotion through teaching and research. In the Department the Teaching and Learning Committee minutes reflect useful discussion of teaching methods and assessment practices and a series of relevant teaching seminars takes place.
- 18. The Department has carried out a useful mapping of key skills across all modules. Skills in the effective use of information technology (IT), presentation and teamworking are practised in many modules and all play a part in assessment. However certain interpersonal skills are not being developed as comprehensively as employers would wish. The reviewers would encourage a greater development of self and peer-group assessment as demonstrated in the Informatics and Systems module.
- 19. A variety of assessment methods is used, including essays, reports, group and individual presentations and examinations. Assignment criteria are matched to learning outcomes and students clearly understood what was expected of them in the majority of pieces of coursework. Staged assignments as in the Information Management module indicated how individual students progressed over the year. Students' examination work is marked anonymously and subject to double-marking.
- 20. External examiners have mentioned the variation in the quality of feedback to students over a number of years. Students confirmed this, noting in particular the differences between departments, but they were generally satisfied with the guidance that it provided. Staff make use of different mechanisms including written comments, individual guidance and feedback by email. Most module tutors now use a standardised cover sheet and some tutors use a more informative module-specific feedback sheet, which is very clearly related to the assessment criteria. The reviewers would encourage the use of the latter as an example of good practice.

21. This aspect makes a full contribution to the attainment of the stated objectives. The aims set by the subject provider are met.

Teaching, Learning and Assessment: Grade 4.

### **Student Progression and Achievement**

- 22. The Department achieves its aim to attract students of high quality, stemming from a number of academic backgrounds. Over the past five years the ratio of applications to places has risen, and the average GCE A-Level scores have increased from 16.8 to 21.9 points. Of the postgraduate students 73 per cent have Upper Second class degrees or better. Employers are involved in the interviewing of postgraduate applicants and a high proportion of those applying to the Arts and Humanities Research Board for support are offered Postgraduate Professional and Vocational Awards.
- 23. The number of undergraduate students admitted with qualifications other than GCE A-Levels has dropped as entry requirements have risen. However, the University is encouraging such applicants, and very full guidance about requirements for non GCE A-Level applications is given in the University's admissions information. Admissions policy is informed by an equal opportunities code of practice, and the University participates in local and national programmes to widen access to higher education. Equal numbers of male and female students participate in the Department's undergraduate programmes; and 7 per cent of students have a disability. The gender balance on the postgraduate programmes is towards female students.
- 24. The recruitment policy, combined with careful programme design and content, results in commendable progression figures. Failure and withdrawal rates are generally low, and 88 per cent of undergraduates complete their programmes and are awarded degrees. Withdrawal rates from the postgraduate programmes are also commendably low.
- 25. The spread of degree results is evidence of a high level of attainment. On average over the past five years 6 per cent of students completing the undergraduate programmes have achieved Firsts, and 50 per cent, Upper Seconds. These proportions have risen during the past five years, which contributes to achieving the Department's mission statement. All students presenting themselves for examination in the postgraduate programmes have received masters awards, and 15 per cent have received the award with Distinction.

- 26. Students' assessed work confirms the development of discipline-specific skills relevant to professional careers as information specialists, as well as the acquisition of a range of transferable skills appropriate to their future professional needs. The programmes in the provision also encourage a professional approach to change and personal development. These characteristics have received favourable comment from external examiners, and are valued by employers in a variety of information sectors.
- 27. Final-year undergraduate projects and postgraduate dissertations demonstrate evidence of learning that addresses a range of academic and professional issues. Opportunities are afforded for students to undertake projects related to real-world situations, some of which originate from employers. Although less than 25 per cent of students elect to do the DPS year, students and employers regard it as an excellent opportunity to acquire and enhance professional skills.
- 28. Employers consider that the Department produces graduates and postgraduates who are likely to have excellent chances of competing for jobs within a range of information-related professions. During the past five years 89 per cent of graduates have entered employment or further study or training within six months of graduating. The comparable figure for postgraduates is 98 per cent.
- 29. This aspect makes a full contribution to the attainment of the stated objectives. The aims set by the subject provider are met.

Student Progression and Achievement: Grade 4.

### **Student Support and Guidance**

- 30. The University has a well-designed guidance and support policy covering all aspects of student need from admissions and induction through to careers advice. The documentation produced by the University is comprehensive and students spoke highly of its quality. Printed material is well supplemented by information available on the University web site. Information on accommodation, the Students' Union, and other support services is sent out in advance of arrival at the University. The programme-related information provided by the Department is appropriate to student needs and draws attention to the University provision.
- 31. Many students highlighted the open days as a very positive experience, and one of the reasons for choosing to come to study at Loughborough. The Department was praised by students for its welcoming atmosphere and friendly staff. Admissions tutors work closely with the University, in dealing with applications. Additionally,

- on postgraduate programmes the admissions tutor maintains direct contact with applicants to give advice on option choice and any procedural queries; a link which is much appreciated by students, particularly those who are part-time.
- 32. Induction for undergraduates achieves a balance between providing information on the programmes and preparing students for the experience of being at University. Postgraduate students also have a departmental induction programme that is described as very useful and appropriate to students' needs. Overseas students are encouraged to come to the University for pre-induction sessions.
- 33. Programme leaders and module tutors provide academic guidance. Students spoke highly of the level of guidance at programme level and the approachability of all staff. Academic guidance for postgraduate students working on their dissertations is effectively organised by the programme tutor and supported by other supervisors.
- 34. Students fully understand the personal tutorial system and see their personal tutors within the first week of starting the programme and subsequently. Students can also email staff and receive a quick response. The support from academic staff is underpinned by the administrative team whose enthusiasm is praised by students and academic staff. A lunchtime drop-in session is arranged by the programme tutor for part-time postgraduate students who attend on only two days a week.
- 35. Students can be referred by personal and academic tutors to specialist services such as counselling, the English Language Study Unit, Disability and Additional Needs Service and the Learning Teaching Development Unit when appropriate.
- 36. Effective liaison between the Department and careers service is well developed and contributes to achieving the aim of preparing graduates for professional careers. One of the careers advisers visits the Department regularly and general workshops on aspects of preparing for work are available to all students. Information is available from the careers service on campus and through the web site. Academic staff also give advice on career pathways; information is displayed on departmental noticeboards; practitioners are regular visitors to the Department to talk to students; and an employment agency, specialising in the information profession, also visits the Department.
- 37. This aspect makes a full contribution to the attainment of the stated objectives. The aims set by the subject provider are met.

Student Support and Guidance: Grade 4.

### **Learning Resources**

- 38. The provision of extensive and varied learning resources is required to fulfil the departmental mission. These are available in the University library, within the Department itself and through the facilities of the University's central computing services. The provision and resourcing of both library and IT services are successful in supporting the aim of providing high-quality teaching and learning in a supportive learning environment.
- 39. The University library is well resourced, and an appropriate amount is allocated to support teaching and research in the Department. The library holds over 500,000 volumes and a wide range of journal subscriptions. There are 94 networked computer terminals within the building, and 519 study places. The library operates a number of specific procedures to support library use by part-time students.

  A University subject librarian liaises regularly with the Department's library officer. These procedures operate successfully in supporting the learning needs of students within the provision.
- 40. The Department's IT resources are managed by the departmental IT committee, which reports through an Infrastructure Co-ordinator to the departmental staff meeting. The Department's IT strategy is developed in close co-ordination with the University's computing services, and considerable attention has been paid to ensuring that staff and students encounter a uniform interface throughout the campus. Almost all campus-based student residences are linked to the University network. The Department maintains four computer laboratories and is successful in ensuring that as far as possible at least one is available to students during normal working hours. Students have 24-hour access to University facilities, and the Department pays students to act as supervisors so as to maximise access out of normal working hours. The Department has a policy of investing heavily in its own IT resources; hardware is regularly replaced and kept up to date, and software acquisition is managed with careful attention to programme needs.
- 41. Students' use of the Department's IT facilities is assisted by computer support staff, who offer a range of services, including drop-in workshops, a loan service for manuals, technical support and advice and problem solving. Careful attention is paid to the training and professional development of the support staff, to ensure that the assistance available to students is as effective as possible. Students express satisfaction with the access they have to the IT facilities, and external examiners have noted the quality of provision.

- 42. The Department is housed in a extensive suite of rooms in the same building as the University library and the general environment is clean, well maintained and friendly. Teaching accommodation within the Department is flexible, supporting a variety of teaching methods. It includes an information laboratory with a teaching collection of reference books and material related to cataloguing and classification. Teaching accommodation outside the Department is generally satisfactory, although the reviewers saw a number of teaching rooms where conditions were less than ideal.
- 43. The University campus is large, with a full range of recreational and social facilities. The students' learning experience is supported by a friendly, supportive and pleasant environment that appears to be maintained and treated with care and respect.
- 44. This aspect makes a full contribution to the attainment of the stated objectives. The aims set by the subject provider are met.

Learning Resources: Grade 4.

### **Quality Management and Enhancement**

- 45. The quality management and enhancement procedures within the University are well established, operate effectively and are clearly presented in the Academic Quality Procedures Handbook. There is a coherent set of committees spanning university, faculty and departmental levels that support curriculum development and respond to issues raised internally by both staff and students. The reporting structure is well defined and the framework supports the Department's aim to provide high-quality teaching and learning programmes at undergraduate and postgraduate levels. Procedures are in place which ensure the effective review of modules and programmes, and to facilitate changes to modules where these are deemed necessary.
- 46. External examiners play a key role in quality assurance and provide constructive feedback on issues that require attention. Recent reports of the postgraduate programmes have been extremely supportive and complimentary. Reports for the undergraduate programmes have identified a range of issues that have stimulated discussion in the departmental Teaching and Learning Committee and at departmental staff meetings. In the case of one issue, relating to feedback to students on coursework, the Department has been slow to resolve the matter satisfactorily. The reviewers note some significant changes that have been introduced recently to address this.
- 47. Requirements and mechanisms for response to student views are well embedded and include a departmental Staff-Student Committee. There is clear

evidence that student opinion on modules, and generally on the programmes is sought, discussed and acted upon. In the postgraduate programme informal mechanisms are also employed to gain useful feedback from students. For joint degrees there is a variation between departments on mechanisms used to respond to module feedback questionnaires, but there is ample evidence that appropriate responses are made. Programme-specific questionnaires feed into programme reviews and ensure that in joint programmes a holistic approach is taken to reviewing all modules in a programme.

- 48. An effective staff development scheme is operated in the University providing a range of relevant courses. A novel feature of the scheme is the use of an interactive induction package for new staff. The programme for probationary staff has been accredited and commended by the Institute for Learning and Teaching. The Department itself supports staff development through a range of seminars, some of which are very pertinent to the development of teaching skills. Detailed induction arrangements for new staff are also provided. All staff participate in formal staff appraisal and this contributes to the identification of staff development needs.
- 49. The self-assessment document provided a useful descriptive overview of the provision. It was compiled with the assistance of the Quality Assessment Unit, and student input was sought.
- 50. This aspect makes a full contribution to the attainment of the stated objectives. The aims set by the subject provider are met.

Quality Management and Enhancement: Grade 4.

### **Conclusions**

- 51. The quality of education in librarianship and information management at Loughborough University is approved. All aspects make a full contribution to the attainment of the stated objectives and the aims are met. The reviewers come to this conclusion, based upon the review visit together with an analysis of the self-assessment and additional data provided.
- 52. The positive features of the education in librarianship and information management in relation to the aspects of provision include the following:
- a. A well-designed curriculum that supports the development of graduates and postgraduates who have relevant knowledge of the principles of information science and of professional practice (paragraphs 9; 10).

- b. The high quality of teaching across the range of programmes at all levels ensuring a high quality of learning for all students (paragraph 16).
- c. Robust and demanding admissions procedures producing high-quality students who progress successfully through the programmes and are highly regarded by employers (paragraphs 22; 24; 25; 28).
- d. The good quality of support and guidance both at university and department level which ensures that students learn in a stimulating and friendly environment (paragraphs 30; 34; 35).
- e. Carefully planned, well-resourced and responsive provision of library, information technology and support services at university and department level (paragraphs 39 to 41).
- f. A robust framework for quality management, which can enable the provision of high-quality teaching and learning programmes (paragraphs 45; 46).