



Promoting higher quality

**The Quality Assurance Agency
for Higher Education**

Subject Review Report

March 2000 Q162/2000

Kingston University

Molecular Biosciences
Organismal Biosciences

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 self-assessment 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 March 2000 of the quality of education in molecular biosciences and organismal biosciences provided by Kingston University.
2. Kingston University was established by Royal Charter in 1992, but can trace its origins back over 100 years to 1899 with the foundation of Kingston Technical College. The two Schools of this College, Art and Technology, became separate colleges, but were reunited in 1970 with the formation of Kingston Polytechnic. Gipsy Hill College of Education, founded in 1917, merged with the Polytechnic in 1975, and the NHS Colleges of Nursing and Midwifery were incorporated in a joint Faculty of Health and Social Care Services managed by the University and St George's Hospital Medical School of the University of London. Kingston University is divided into six faculties, including the joint faculty, with a total (in 1998-99) of 14,704 students; of these, 2,824 were postgraduate and 3,310 were part-time. Overall, this amounts to 12,642 full-time equivalents (FTEs). The School of Life Sciences, responsible for the programmes in this review, is one of five within the Faculty of Science.
3. There are 373 FTE undergraduates and some 16 postgraduates currently enrolled on these modular courses, which are taught by 19 academic staff and supported by 12 technical and 4.5 administrative staff. In addition, there are 92 students following the science foundation scheme at four of Kingston University's associate Colleges; 34 of these students are registered for biology degree programmes. The MSc and BSc in Biomedical Sciences are approved by the Council for the Professions Supplementary to Medicine (CPSM) and accredited by the Institute of Biomedical Sciences (IBMS).
4. The following provision forms the basis of the review:
 - Science Foundation Scheme (Biology modules only)
 - BSc (Hons) Applied Biology (single and joint honours modes)
 - BSc (Hons) Biochemistry
 - BSc (Hons) Biomedical Sciences
 - BSc (Hons) Combined Studies: Field in Human Biology
 - MSc Biomedical Sciences.
5. The statistical data in this Introduction are provided by the institution itself. The aims and the objectives are presented overleaf. These also are provided by the institution.

The Aims and Objectives for Molecular Biosciences and Organismal Biosciences

The University's Mission is 'to provide career-related higher education, advanced training and research for the development of individuals and organisations in support of the economy and society'. In support of this the School has the following aims and objectives of the courses under review.

Aims

- A1 to provide wide access to a range of well-designed, relevant and up-to-date courses in the life sciences for students from a variety of academic and social backgrounds;
- A2 to maintain positive links with professional bodies, the health services and industry;
- A3 to provide high-quality and appropriately resourced physical, teaching and learning environments;
- A4 to assess students' progress in a fair and reasonable manner and to use this to aid their learning experiences;
- A5 to regularly monitor the quality of provision and to enhance it in response to self-evaluation and feedback from students and appropriate external agencies;
- A6 to be supportive of students with respect to their academic, pastoral and welfare needs;
- A7 to provide a value-added dimension to its students' education and give them the opportunity and knowledge to achieve their full potential and meet their career aspirations;
- A8 to promote independent learning and encourage the acquisition of problem-solving skills in order to produce graduates capable of contributing effectively in their chosen career;
- A9 to equip its graduates with key skills, including knowledge of safe working practices.

Through its taught postgraduate provision, the School additionally aims to:

- A10 enable students to build upon their existing entry qualifications and acquire knowledge and skills in a pathology specialism for improved prospects of employment/research in the health services and industry;
- A11 equip students with a knowledge of the organisation and role of specialist laboratories within diagnostic pathology.

Objectives

The School offers a range of undergraduate degree courses and a taught postgraduate course. The undergraduate degrees range from a tightly specified, vocational and professionally accredited course to flexible single and joint degree programmes.

All programmes share the common core objectives that on successful completion of their course, students will be able to:

- O1 demonstrate, at a level appropriate to their programme of study, a knowledge and understanding of subjects within the life sciences relevant to their course;
- O2 apply subject knowledge and understanding to the solving of problems in their subject discipline;
- O3 demonstrate competence in a range of practical skills and research skills and to apply them to the solution of problems in their subject area;
- O4 have a knowledge of and be able to comply with safe working practices in the life sciences;
- O5 learn independently and develop a spirit of critical enquiry;
- O6 demonstrate a range of recognised key skills that will enhance their career prospects;
- O7 work effectively both independently and in collaboration with others;
- O8 be aware of the career opportunities available to them.

Course specific objectives are that on completion of their course students will:

BSc (Hons) Applied Biology (Full and Joint degrees)

- O9 have an understanding of a range of biological processes and, from a choice, an in-depth knowledge of topics and concepts in Applied Biology.

In addition, Joint Applied Biology (standard/major/minor) students will:

- O10 gain a knowledge and understanding of another academic subject in addition to life sciences;

BSc (Hons) Biochemistry

- O11 understand living processes at the biomolecular, cellular and tissue levels of biological organisation;
- O12 acquired specialist knowledge of biochemical analytical techniques;

BSc (Hons) Biomedical Science

- O13 understand how the human body functions in health and how it is affected by disease;
- O14 satisfy the requirements for the approval of their degree qualification by the CPSM and accreditation by the IBMS;
- O15 have an understanding of biomedical sciences laboratory organisation and safety;

BSc (Hons) Combined Studies (Human Biology Field)

- O16 have an understanding of the structure and function of the human body in health and disease;
- O17 have a knowledge and understanding of another academic subject in addition to life sciences;
- O18 as mature entrants, have built upon their prior learning and experience to acquire the knowledge and skills to have enriched their lives and, where desired, enhanced their employment prospects;

In addition postgraduate students will:

- O19 be able to demonstrate a sound understanding of the biology and diagnosis of disease;
- O20 be able to demonstrate a sound understanding of a specialist area of diagnostic pathology;
- O21 understand the principles and practise of independent research in Biomedical Science;
- O22 have improved existing and acquired new laboratory skills;
- O23 satisfy the requirements for the approval of their degree qualification by the CPSM and accreditation by the IBMS.

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:

Aspects of provision	Grade
Curriculum Design, Content and Organisation	4
Teaching, Learning and Assessment	4
Student Progression and Achievement	4
Student Support and Guidance	4
Learning Resources	4
Quality Management and Enhancement	4

8. The quality of education in molecular biosciences and organismal biosciences at Kingston University is **approved**.

The Quality of Education

Curriculum Design, Content and Organisation

9. The School of Life Sciences offers several modular degree programmes that provide access to a range of carefully designed, relevant and contemporary courses in the life sciences. Students without traditional entrance qualifications may enter these degree courses through the well-structured and appropriate science foundation scheme. The undergraduate programmes are current in content. There is an initial emphasis on consolidation and breadth of study at Level 1, progressing to discussion of more advanced, coherent, intellectually challenging and specialised material through Levels 2 and 3, with a greater emphasis on independent learning. At Level 2, students have the opportunity to follow approved courses in one of two universities in the USA. This has proved to be popular and successful. All courses, both undergraduate and postgraduate, have modules that allow students to experience a range of modern technologies and techniques. The courses have a strong vocational input, which is embedded in the practical work and content of many modules by relevant clinical, industrial and professional applications, in keeping with the University's mission statement.

10. An impressive range of modules, appropriate for the development of subject-specific, practical and key transferable skills, is identified for all programmes; this imparts a well-defined balance and unique flavour to each programme. There is solid evidence that the research activities of staff inform the content of modules, particularly in Levels 2 and 3. The BSc Applied Biology programme offers a wide choice of modules, including an elective subsidiary module at Level 1. Several coherent strands are evident throughout this programme and these are in the process of being refined. Module choice in the biochemistry programme is more restricted, and there is very limited flexibility in the BSc Biomedical Sciences as it is associated with strict accreditation criteria. The BSc Combined Studies (Human Biology) was designed primarily for part-time mature students and has now ceased to recruit. Transfer between certain degree programmes is possible at the end of Level 1, predominantly to the Applied Biology degree, although this is relatively uncommon.

11. A key feature of the undergraduate programmes is the emphasis at Level 1 on developing a sound understanding of essential and relevant aspects of mathematics, statistics and chemistry. Alternative biology and chemistry modules have been designed at Level 1 to

appropriately reflect the variety of students' entrance qualifications. The content of these modules and their learning outcomes are effectively constructed to ensure that all students are essentially equally prepared for the more demanding work at Levels 2 and 3. In recognition of students' limited practical skills on entry, the School has introduced a practical module at Level 1, which has successfully led to improved practical performance in subsequent levels of the programmes.

12. The MSc in Biomedical Sciences, is available full or part-time. It provides graduates in a biological or related discipline with an appropriate combination of core and specialist options forming three major themes, broadly histopathology, haematology and microbiology. These enable students to build on their first degree and acquire specialist knowledge and skills that improve prospects of employment in the health services and associated industries.

13. 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

14. The School has a clear and well-structured strategy for teaching, learning and assessment, which enables students to maximise their knowledge through interactive and independent learning and supports the achievement of the aims and objectives. A wide variety of teaching techniques is used, including lectures, practicals, tutorials, group sessions, peer-assisted learning, poster presentations, independent study packs and computer-assisted learning. All are appropriate for the student profile. The staff's teaching approach is responsive to the needs of students and incorporates informal and structured feedback mechanisms. Clearly defined learning outcomes are written for courses and modules to guide students and staff, and these are usually reinforced verbally at the beginning of teaching and learning sessions. Students from Level 1 onwards are encouraged to take responsibility for their own learning, actively supported by the teaching staff. All full-time academic staff are research active, enhancing the quality of the teaching process by increasing student awareness and exposure to newer techniques and applications in lectures, practicals and project work.

15. Teaching of key and cognitive skills such as analysis, problem-solving, communication, teamwork and effective self-management is embedded into all the modules, monitored to ensure coverage and clearly

identified in the module guides. The practical sessions clearly demonstrate how these skills are being developed by group work, sharing of results and analytical analysis. Health and safety considerations are an integral part of the course culture, and are reinforced in practical sessions at all levels. This progressive development of skills is highly valued by current and former students.

16. The reviewers observed a total of 18 teaching and learning sessions consisting of lectures, practicals and a tutorial, including biology modules from the science foundation scheme. These were uniformly very well taught by highly qualified, enthusiastic and committed staff, and provided evidence of excellent planning, appropriate content and pace of delivery, and effective student participation. Several members of staff possess postgraduate teaching qualifications in higher education. Students and external examiners reinforce the reviewers' overwhelming impression of excellent quality teaching.

17. All students are provided with detailed written and verbal information on the nature of all forms of assessment and the requisite criteria. However, the School may wish to clarify the specific requirements for the Level 3 dissertation module and formalise the criteria for assessment at masters level. Timely receipt of all coursework, assessment and deadline information enables students to plan their work more effectively. Students commented favourably on the quality and timing of written feedback, which is often supplemented orally. Work is usually returned to the students within a month, the exceptions being in rolling practical classes where work is not returned before all assessments are received. All projects and dissertations are blind double-marked, and all modules at Level 2 and 3 are internally moderated. Current and former students speak very highly of the approachability and accessibility of all staff, and consider that these features considerably enhance the learning experience.

18. 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

19. The School of Life Sciences accepts students with a wide range of ethnic backgrounds and entry qualifications such as Access, foundation, GNVQ and BTEC, in addition to GCE A-Levels, which typically 50 per cent of entrants offer. The GCE A-Level points scores usually range between 12 and 16 (or equivalent), although the average for 1999 entry was around

11 points. A significant number of students enter the undergraduate courses from the science foundation scheme. For the undergraduate and postgraduate courses, the ratio of applicants to the number of places available (1999-2000) is between 2:1 and 3.4:1, and the ratio of female to male students accepted is approximately 60:40. All entrants to the MSc programme have at least an honours degree in an appropriate subject. Therefore the aim of providing wide access to the courses offered has been achieved.

20. Slightly more than 70 per cent of the students who enter at Level 1 of the undergraduate programmes successfully obtain a degree within four years of study. Over 40 per cent of graduates obtain First or Upper Second class honours degrees, between 50 and 55 per cent obtain a Lower Second or Third class honours degree and up to 6 per cent are awarded an intermediate qualification. Approximately 80 per cent of students entering the science foundation scheme with an intention to study the undergraduate programmes in this provision successfully progress to Level 1. Few students transfer between undergraduate degree programmes, withdraw or fail to obtain an honours degree after reaching Level 3. This is consistent with the aim to provide students with a value-added dimension to their education and to give them an opportunity to achieve their full potential. In the two years that the current MSc programme has run, an average of 82.5 per cent of students who have completed the course have obtained a postgraduate qualification, with approximately 75 per cent being awarded a masters degree.

21. There is considerable evidence from a review of students' work that the identified aims and objectives for development of subject-specific, transferable and practical skills within individual programmes and modules are being achieved. This impression is supported by external examiners, who state in their reports that work is appropriately marked and that the learning outcomes meet the standards expected, with examples of particularly high levels of achievement from well-motivated students. Several students have had their project work published in peer-reviewed scientific journals. Graduates expressed great satisfaction with the quality of education they had received.

22. Employers commented very favourably on the quality of the graduates produced and hold them in high regard. This has resulted in many employers offering undergraduate projects based in their own laboratories, and these often result in full-time employment on graduation. Around 75 per cent of students graduating from the undergraduate

programmes over the last three years have gone on to employment or further studies, and only approximately 8.7 per cent were unemployed six months after graduation. From the first cohort of masters students, 7.5 per cent were unemployed six months after graduation. Typical destinations for graduates and postgraduates include the pharmaceutical industry, hospital research laboratories and other UK universities.

23. 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

24. The University, Faculty and School have in place a comprehensive range of academic and pastoral support and guidance services, appropriate to the student profile. Information on the services is set out clearly in the University prospectus, the university and school web sites, and in a wide range of supplementary publications. Potential applicants, including those from clearing, are encouraged to visit the University and School on open days. English language qualifications are required for international students. Mature students and students with marginal entry qualifications are interviewed.

25. Prior to arrival, all new students are sent a welcome pack of useful information including study guides. An induction week introduces students to services provided by the School, University, and Students' Union. MSc students have their own induction programme, and the international office provides additional induction support. Former and current students commented favourably on the effectiveness of documentation, and the admission and induction arrangements.

26. Module tutors provide subject guidance, such as assessment criteria, assignment deadlines and module information, whilst course directors and year tutors deal with more generic academic issues. The year tutors are responsible for debriefing and advising students on their academic performances and module choices. Students confirmed that they had ready access to their year tutors (allocated at induction) and other academic staff. Further support is provided for Level 3 and masters students by their project/dissertation advisers. Students undertaking external projects received effective support from a visiting tutor from the School, while those taking advantage of the opportunity to study Level 2 modules in the USA also reported good support. Current and former students were unanimous in praising the efforts of all staff in creating a happy, pleasant and productive working environment.

27. The School has piloted, and continues to run, a peer-assisted learning programme. The University's teaching and learning support service is available to support students' individual learning needs and their acquisition of study skills, with diagnostic help for students identified for special educational needs counselling. Independent study packs seen by the reviewers are of high quality and significantly enhance the learning experience.

28. A student services department covers most of the non-curricular needs of students, including health and counselling, the student advisory service (finance, grants, loans and Access funds), and residential services. The Students' Union offers additional advice and support on a range of matters, including finance, housing and welfare. A clear and comprehensive policy on disabled students or those with special needs is set out in the University Disability Statement, and a special needs co-ordinator liaises effectively with academic departments. Students were highly appreciative of the wide range and levels of support and welfare services available.

29. There are close links between the School and the careers advisory service, to which students are introduced during their induction, with contact maintained throughout their study. Students approved of the organised meetings and workshops on specific employment issues. The School runs its own careers day and has a dedicated careers notice board, and staff advise students on an individual basis. Student feedback on all these services was generally very positive.

30. 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

31. The School endeavours to match resource provision to its learning, teaching and research aims, operating within the context of the integrated provision of the Faculty. Requirements are discussed at boards of study and at other school meetings including senior staff meetings. Allocations take into account new programmes, student numbers and both current and future perceived needs of the School and therefore fulfils the aim to provide high quality and appropriately resourced physical, teaching and learning environments.

32. The campus has centrally programmed teaching rooms of various sizes and configurations, which are suitable for the range of provision, and generally of a

high quality. All rooms have overhead projectors, screens and whiteboards; large rooms, with a capacity of up to 330 are also equipped with audio, video and digital projection systems. The well-organised laboratories contain a good range of general teaching and specialist research equipment. Both revenue and capital funds are used to support the acquisition of new equipment, and the School has a five-year rolling programme for capital funds. Overall laboratory provision is highly satisfactory, and contingency funds are available for maintenance and repair.

33. The campus library, with eight seminar rooms and over 470 study spaces, is stocked with over 8,000 multimedia items including a comprehensive range of up-to-date relevant textbooks and periodicals, with multiple copies of popular texts. Access to a wide range of electronic journals is possible through the library web page. About 60 per cent of the School's library budget is spent on books, the remainder on periodicals and interlibrary loans. There is a flexible loan system that can be adjusted to satisfy all student demand. The arrangements for student induction and user support are very good. A member of the School's academic staff takes responsibility for library liaison and a life sciences subject librarian attends staff meetings, boards of study and the Learning Teaching Committee. The library opening hours during term-time are 0845 to 2100 hours from Monday to Thursday and 1000 to 1730 hours on Friday, with shorter opening hours on weekends and during vacation. The library is well supplied with networked PCs that provide access to CD-ROMs, external networked services and the internet. The library provision fully supports the curriculum, the liaison between the library and the School is effective, and students agreed that the library provision is highly satisfactory.

34. Teaching and learning have been underpinned by a recent major investment in information technology, and the provision of computer-based learning materials is rapidly increasing. Students have access to 125 university and 130 faculty-networked computers, giving an overall student to computer ratio of about 10:1. A new learning resources centre, with enhanced central computer provision, is currently being built at the campus. The social, dining and recreational facilities on the campus are of good quality and fit for their purpose. Overall, the University's and Faculty's facilities together constitute an appropriate, effectively managed and well-used resource; students, staff and the reviewers confirm that this resource matches student needs well.

35. There is an effective team of 9.5 technical and 4.2 administrative staff in the School, with additional technical support at faculty level. The support staff are

well qualified, very supportive of the provision and contribute to the student learning process. Support staff have excellent access to staff development and this frequently leads to advanced qualifications.

36. 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

37. The University has a long-standing set of quality assurance procedures with clearly defined interrelationships, reporting procedures and lines of responsibility; these are constantly under review. The School's boards of study report to the Faculty Course Quality Assurance Committee, which reports to the faculty and university academic boards. The 1995 Higher Education Quality Council quality audit report was favourable to the arrangements then in place.

38. The University has recently introduced additional quality management systems, notably course logs for each degree programme. This is a rapid-response checklist of quality assurance, covering all aspects of the courses. Contributions from module leaders go through to the Head of School, who collates the document in consultation with relevant school staff. The log is approved at school and faculty level, informs university procedures, and is acted upon rapidly at both school and university levels. It is clear to the reviewers that the system is very effective in maintaining and enhancing quality assurance procedures, and is particularly effective in ensuring that decisions are implemented. Courses are formally reviewed quinquennially and effective additional quality enhancement is provided by the newly established Industrial Liaison Committee and accreditation by professional bodies. The School's modular office maintains and manages the comprehensive information systems relating to students, and databases are electronically accessible to staff.

39. The University values the external examining system very highly, and in 1997 introduced new comprehensive principles and guidelines for the practise of external examining. External examiners play an important role in providing feedback on the curriculum and ensuring standards, and the quality management procedures ensure that their recommendations are rapidly and effectively dealt with. External examiners have commented very favourably on the speed with which such suggestions are acted upon, and on the improvements that ensue.

40. The School is highly responsive to its students. Formal feedback is obtained by questionnaires, which are carefully analysed. Comprehensive reports are prepared on all modules and discussed at the relevant programme's staff-student consultative committee (SSCC). Student attendance at SSCCs is high, and students are very positive about the School's responses to their requests. A recent example was cited whereby feedback on the quality of coursework had been improved as a result of students' suggestions. Additionally, students are represented on the School's Learning and Teaching Committee. Students appreciated and valued the variety and efficiency of mechanisms used to elicit their opinions, which they felt were genuinely welcomed by staff.

41. Staff development is well established and clearly expressed in the University's staff development policy. Identification of opportunities for staff development is an important function of the University's appraisal system, and earmarked funds are used for professional enhancement in teaching and learning. All new staff undergo extensive induction, and greatly value the role of experienced mentors. Those without experience of teaching in higher education, together with some established staff, are undertaking the Postgraduate Certificate in Teaching and Learning in Higher Education. All staff are subject to a well-organised and documented peer review of teaching.

42. The School's self-assessment document succinctly states the aims and objectives, relating them clearly to the aspects of the provision. It contains a good description of the provision, with evaluation in places. The document was discussed with students at an early stage of development. The reviewers unanimously feel that the review process has significantly enhanced the quality of the School's provision in molecular and organismal biosciences.

43. 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

44. The quality of education in molecular biosciences and organismal biosciences at Kingston University is approved. All aspects make a full contribution to 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.

45. The positive features of the education in molecular biosciences and organismal biosciences in relation to the aspects of provision include the following:

- a. The coherent, intellectually challenging degree courses, which are informed by industry and professional practice, and provide appropriate subject knowledge and essential practical, cognitive and transferable skills (paragraphs 9 to 11).
- b. The clear strategy for teaching, learning and assessment, which requires the use of a variety of teaching methods delivered by enthusiastic, approachable staff and results in high-quality teaching and learning across the provision (paragraphs 14 to 16).
- c. The varied entry routes for undergraduate courses, the good progression and completion rates, the consistently achieved learning objectives and the high level of satisfaction with the courses expressed by external examiners, employers and the graduates themselves (paragraphs 19 to 22).
- d. The comprehensive range of academic and pastoral support, guidance and welfare services provided by the University and the School, the high-quality course publications, the pro-active careers services, and most importantly, the School's happy, pleasant and productive working environment (paragraphs 24 to 26; 28; 29).
- e. The School's clear strategy for provision of learning resources, the well-equipped and well-maintained teaching rooms and laboratories, and the efficient support for teaching and learning provided by the library and computer services (paragraphs 31 to 34).
- f. The well-established quality assurance structure at all levels of the University, the evident and extensive involvement of students, external examiners and subject staff in course review and revision, and the effective process for staff induction and development (paragraphs 37 to 41).