

# Department of Information Systems

## Self Evaluation document

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{This document was submitted by the Department of Information Systems as part of its submission to the Internal TQARO review of teaching in the Department.

It was submitted in February 2002 and the review took place in early March 2002. The report of the review group is available from the Departmental website and should be read in conjunction with this Self Evaluation Document. }

## **Aims**

The Department of Information Systems at the London School of Economics and Political Science aims to provide excellent and innovative education in Information Systems to students at the School. Its provision is focussed around its internationally respected MSc and PhD programmes and the Department currently also provides two undergraduate courses in Information Systems as contributions to the wider degree provision of the School. The Department is also responsible for the academic direction of the Information Systems and Management degree of the University of London External Programme.

The aims of the Department are:

- ?? To provide a high quality education in Information Systems in a research-active environment for intellectually able students from a wide range of backgrounds;
- ?? To help students understand the social science basis and inter-disciplinary nature of Information Systems;
- ?? To enable students to concentrate on specialist areas within the subject;
- ?? To encourage students to develop intellectual flexibility in order to bring forward their critical reasoning ability;
- ?? To provide a basis for further study and for employment including, but not only, careers in relevant fields.

## **Contextual information**

It is perhaps helpful to begin with a review of the changes that have occurred since the last Internal LSE reviews (1996/1997) and the last QAA review (1994). These changes reflect a changing staffing profile, growing Departmental confidence in its abilities to deliver on its aims and, most recently, a new physical location for the Department.

A common theme of the last internal reviews of the Department (and one which could also be seen as the basis of the Appointment Committee's review) was a lack of clarity about where the Department saw itself going. Did it believe that its future lay in the more technical aspects of computing, as had characterised much of its earlier undergraduate teaching, in vocational training for future information systems professionals or in the academically rigorous study of technology in organisational and societal contexts?

In many ways, these issues are faced by all Information Systems Departments: there is no QAA benchmark for Information Systems, yet the subject matter covers aspects of the benchmarks for Computing, Library and Information Management and Business and Management and this has caused problems when deciding the RAE panel for the research work of the Department.

After much internal discussion, the Department has resolved that its intellectual aims and strengths are best addressed by focussing on the social study of information technology. That is, to develop the theoretical understandings of information and communications technologies as they are developed, applied, managed and used in various organisational settings. This particular focus ties in with the School's mission statement to "be a world class university centre of the social sciences in the heart of London" and differentiates the work of the Department from others that are often found in Computer Science Departments or Business Schools.

The Department's teaching and research maintains a strong empirical focus and practical bias, reflected in the title of the MSc—Analysis, Design and Management of Information Systems (ADMIS).

In fitting with this profile, the Department has recently appointed two internationally recognised Professors with strong publication records in this area (combining sophisticated theoretical work with the practical application of these ideas to areas such as IT strategy and managing large IT infrastructures). Other appointments include staff with expertise in systems implementation issues for mobile and internet technologies, the study and management of information systems failures and the linkages between organization science and information systems.

This focus on theory and practice is also found in the Department's internal procedures. It has developed technological solutions (a web based database system) to assist with some aspects of managing the large numbers of students on its MSc programme, it has effective knowledge sharing practices in place so that junior members of staff can develop their teaching and research activities and it has developed an effective administrative support system which successfully coped with the Convenor's absence through illness for over a month, the internal transfer to

another part of the School of the Departmental Administrator and the relocation of the Department at short notice.

At the same time, the Department has provided an ongoing, high quality MSc for a large student group, a successful, growing PhD programme and specialist teaching in information systems for undergraduates throughout the School.

MSc ADMIS has grown rapidly over the past dozen years or so, from 60 students in 1988/89 to 150 in the current year. Throughout this time it has maintained a high (for the field) proportion of female students (around 40%) (Roberston *et al.* 2001). Also, despite being one of the first MSc programmes in the School to move to full fee status, it has also managed to maintain a strong UK contingent as well as a large international cohort (there have been around 40 nationalities represented for each of the past five years). The Department has also been active in developing innovative teaching methods in areas such as teamwork and presentation skills, many of which have now been adopted elsewhere in the School.

The Department works with Media@LSE and shares responsibility for the recently introduced MSc New Media, Information and Society. Staff regularly attend Media@LSE faculty meetings and a useful interchange of ideas and best practice exists between the two groups.

The MPhil/PhD programme has also grown in recent years, with recruitment of around fifteen students per year over the past two years. The PhD programme has a strong record of PhD graduations (with 22 students graduating during the last RAE period). (In order to provide some context for this figure, 148 PhDs in Information Systems were obtained in North America over an equivalent period (Freeman *et al.* 2000). Recent PhD graduates have been hired by leading Information Systems Departments taking up academic positions in respected institutions in Britain (e.g., Brunel, LSE, Royal Holloway, Sheffield); Continental Europe (Catholic University of Lisbon, Erasmus University, Norwegian Computer Research Centre); Asia (Daito-bunka University, Tokyo, National University of Malaysia, University of Hong Kong), and the Americas (Georgia State, Houston, Massachusetts, McGill, Penn State, Rio de Janeiro).

Following the last APRC review of the Department, taught undergraduate provision has been restricted to two courses: *IS143 Information Technology and Society* and *IS340 Information Systems in Business*. With students' increasing familiarity with desktop productivity packages, IS143 has been able to shift its focus away from providing students in basic IT skills towards developing their critical social science skills to enable them to understand such issues as privacy, the effects of technology on globalisation and the gender issues associated with information technology whilst also developing an appreciation for issues around the development, use and management of information systems.

Staff in the Department are closely involved with many professional bodies in the field, including the UK Academy for Information Systems (UKAIS) and the Association for Information Systems (AIS). They are involved in the programme and organising committees for Information systems research seminar in Scandinavia (IRIS), the European Conference on Information Systems (ECIS) and the

International Conference on Information Systems (ICIS), as well as being active members of various IFIP working groups (including 8.2 (“development and use of information technologies in organizational contexts”), 8.6 (“diffusing software product and process innovations”), 9.4 (“Social Implications of Computers in Developing Countries”) and 9.6/11.7 (“IT Misuse and the Law”). Members of the Department are currently editors for two leading journals in the field: the Journal of Strategic Information Systems and Information Technology & People.

The Department’s medium term plans include refining its research focus around six areas (modernity, artefacts, transactions, globality, agora & demos and organisation) and to tie these research areas more closely with the specialist teaching provision in the Department.

## **Evaluation of the subject provision**

### ***Curriculum***

Overall our external examiners are satisfied with the curricula offered by the Department, with specific comments on the curriculum being made by the MSc externals. For example, Powell (2001) comments that “the programme meets objectives and ... those objectives are admirable”. He believes that “the standard of examinations is consistent with those at other top-rated institutions in the UK”. Similarly, Monteiro (2001) characterises the programme as a “comprehensive in-depth study of high standards”.

### **Undergraduate teaching**

Following the last APRC review, the Department has changed its undergraduate provision from three courses to two. The new first year course *IS143 IT and society* has reduced its emphasis on hands-on skills to more advanced material (website design, bibliographic software usage and information searching strategies) with the lecture material addressing more social science based topics such as the politics of the information society, e-government and the digital divide.

*IS340 Information systems in business* is intended to provide a critical understanding of the socio-technical process of information systems development and use, within which professionals may need to perform specific technical tasks. Reflecting changes in the relevant technologies and industry structures and practices, the curriculum of the course has evolved over the past four years by gradually lessening the emphasis placed on the software development life cycle and focussing instead on more recent professional practice using various theoretical perspectives.

### **MSc ADMIS**

The curriculum for MSc ADMIS is designed around two teaching terms with the third term devoted to examinations and preparation for the dissertation. Students complete their dissertations over the summer period. The QAA’s National Qualifications Framework suggests that Masters level teaching outcomes are “unlikely to be achieved in less than the equivalent of one academic year’s full-time study”. MSc ADMIS also meets the other aspects of the QAA’s framework for masters level teaching. The MSc is not a conversion Masters course, although the structure of the teaching does allow admission of students with a broad range of backgrounds.

In the first term, all students are introduced to a set of core half unit courses that provide a common focus for the second term when they take a full unit specialisation and a further half unit option. Students typically arrive on the MSc with strengths in either the more managerial or more technical aspects associated with information systems and the core courses *IS471 Systems Development* and *IS472 Information Systems Management* ensure that students have sufficient background knowledge in both these areas to cope with the remainder of the course. The course *IS470 Information Systems*, introduces students to theoretical themes which link these courses together, introducing both transaction cost economics as a way to understand organisations and social construction of technology as a way to understand technology. The students also take a compulsory, non-assessed course *IS490 IT issues and skills* which provides a forum for introducing various essential skills to the students, skills which are assessed in the other courses. For example, the course introduces students to questions of working in teams (which is assessed as part of their teamwork exercise for IS470), public speaking (presentations form an important aspect of all courses) and essay writing (for IS470, their chosen specialisation and the summer dissertation). The course also provides a forum for representatives from the library to speak about library skills and the careers service that introduces its services. Visiting academics and practitioners who speak about their work also use occasional slots in this course.

In the second term, the students specialise in a full-unit stream. All streams are assessed by a 5000-word essay (or equivalent) and a three-hour examination. This combination of assessment methods ensures that the students obtain a suitable depth of understanding of their chosen topic. Students also take a further half-unit course (which may be a half-unit version of another stream—assessed by examination only, a specialist option offered by the Department (for example, global consequences of information systems, IT failures, principles of privacy and data protection) or a half unit option available elsewhere in the School (a list of suggested half-unit courses is made available to students including: ID404 Introduction to Organisational Analysis, AC491 Financial Reporting and Management: Financial Reporting, OR411 Problem Structuring Methods, OR401 Techniques of Operational Research, OR423 Topics in Decision Analysis, LL407 Media and Communication Regulation, GV403 Network Regulation, LL406 Introduction to Regulation, PS439 The Social Psychology of New Technology, GI401 Feminist Perspectives on Technology)).

After their examinations, the students take their specialisation further in their 10000-word dissertation. This is a major piece of work, seen by most students as the culmination of their year at LSE. Students receive preparatory lectures and classes in questions of research approach and methods for data collection and analysis before beginning their dissertation work. Some students have developed their dissertations into conference or journal papers.

As can be seen, the MSc has a very straightforward structure that is easy to explain to students. This has various benefits: it is possible to take an overview of the assessment tasks that students are undertaking to ensure that there is no overlap of deadlines; it is possible to work from a consistent background understanding in the second term; links between students are developed through shared first term teaching. One disadvantage of the structure is that students are increasingly reluctant to take

half unit options that run in the first term, as this will lead to them taking four half units in the first term and only two in second.

As discussed below, the curriculum of the MSc is kept under constant review both in terms of academic development (arising from changing staff and interests) and also in relation to the broader environment of information systems. For example, in contrast to many other institutions, the Department has not rushed to introduce specific courses on e-commerce, rather these themes have been introduced into existing teaching on the MSc (for example, e-commerce business models have been developed in the Interorganisational Information Systems stream, security aspects for e-business are now covered as part of the Security stream). This has resulted in a more measured, research led approach to these themes rather than generic “how-to” lists that typically date rapidly.

One recurring issue that is often raised at staff–student committee meetings concerns training in vocational skill such as programming, particularly as these are seen as requirements for obtaining jobs. This is an area for which there is no obvious solution. On the one hand, teaching technical skills such as programming goes against the Department’s desire to focus on the social study of information technology, whilst on the other hand this is a concern often raised. Further complications arise from the broad landscape of possibilities in technical skills, for example, there are many programming languages that could be taught (java, c++, visual basic etc.) and any language chosen would be seen as the ‘wrong choice’ by some.

## **PhD programme**

On the PhD programme, all first year students attend a course on research methods (IS554) that introduces them to the main research methods used in information systems. They develop an annotated bibliography and research plan as part of the requirements for this course. They also attend and participate in a weekly research seminar. This provides them (as well as members of staff and visiting academics) with the opportunity to present their on-going research ideas in a supportive environment. Attendance at the seminars is strong (typically between 20 and 30 members including staff).

In the second term of their first year, students are also required to attend one of the MSc specialist streams (normally Interpretations of Information) and are required to write the 5000–word research essay for the stream.

At the end of their first year, MPhil students are expected to present upgrade materials including a bibliography, research plan and samples of writing. Two other members of staff, one of whom becomes the student’s second supervisor, evaluate these. They are also expected to present their research proposal to members of the Department. Once passing the upgrade, students are encouraged to develop their professional skills whilst completing their PhDs. Thus, all students are encouraged to undertake some classroom teaching and may be asked to review articles for some of the journals and conferences hosted by the Department.

## **Assessment**

The Department offers a mix of assessment methods for students. These range from traditional, unseen examinations, to individual essays and dissertations (of 5000 or 10000 words), to teamwork exercises which are assessed both in terms of the teamwork deliverable and also the students' reflections on the teamwork processes.

The Department has been developing, in consultation with its external examiners, a standardised marking scheme for all its essays (both undergraduate and postgraduate) that indicates different levels of achievement for a range of themes (for example, research question, use of literature, discussion and conclusion). Students are given the marking scheme before they begin their assessed work and, indeed, are encouraged to evaluate their own work against these criteria when they submit it.

This year, the Department's web based database system has been enhanced to provide staff with a computer based front-end for the entry of marks and comments on all essays and students are able to access their feedback directly from the web. In addition to simplifying the administrative process of storing and distributing copies of feedback forms for 150 students, it has meant that it is far easier to evaluate the use of the marking criteria. Similarly, tutors are able to pick up copies of the feedback forms for their tutees in advance of meetings with their tutees.

All students are given feedback on their submitted work. They are evaluated against each element of the marking criteria and further comments, in terms of strengths and weaknesses, are also added from each of the marks. The provision of this feedback has been continuously refined. Initially students were rated on a scale of 1–5 in each category, although this led some students to try and 'calculate' their mark according to their feedback. This year, feedback took the form of phrases like "marginal", "satisfactory", "promising" and "excellent", although further work is still needed in the choice of terms used (is the language you would routinely expect from an MSc student classed as "satisfactory" or "excellent"?).

Staff have found the scheme very useful for marking purposes and there has been a marked reduction in the divergence between markers. There were, however, a few cases of divergence at the last examiners meeting in 2001. As a consequence, in consultation with the external examiners, the relative weightings for the different sections has been adapted to provide more emphasis on the concluding discussion.

Last year, cleaning staff took a number of undergraduate essays from a staff office. Although all Departmental documentation makes it clear that students should keep back up copies of their work, in case of such eventualities, some students didn't and revised assessment mechanisms had to be introduced. The Department has revised its internal procedures and documentation to ensure that such problems will not arise in the future.

An ongoing issue for the Department and the School as a whole is that of plagiarism. This can range from inappropriate referencing to, very occasionally, wholesale copying of large parts of texts. The Department has had a standard hand-in sheet for many years now and has been developing the guidance offered to students in this area (both in terms of having a standardised formal wording for all essays and in terms of specialist sessions on how to reference). The Department is also proactive in

identifying and helping to address particular styles of essay writing that increases the likelihood of plagiarism occurring.

Despite all of these efforts, however, the Department has had to ask the School to initiate disciplinary action against students that it believes were plagiarising other people's work. In one case, which went to the University, the student's degree was withdrawn. In another, a mark of zero was recorded and the student had to resubmit the piece of work.

For examinations, all questions are prepared by the team teaching the course before being sent to the external examiners for review. All questions have indicative answers that show the areas they expect to see in the student answers. The Department is experimenting, at the undergraduate level, with a generic examination marking system (similar to the essay marking scheme) that will indicate different levels of achievement in examination answers.

All assessed work is marked by two markers. For essays, this is done using the marking system outlined above. For examinations the indicative answer plans are used and both first and second markers are asked to show that they have reviewed a page of work by ticking it (using differently coloured pens). In line with the suggestions from our external examiners, markers are encouraged to provide a brief comment at the end of a question indicating the strengths or weaknesses of the answer to help explain the mark that was allocated.

### ***Teaching and learning***

At the start of the year, MSc students are told that a good university has teachers and learners whereas a great university has only learners. This belief is implemented in the teaching of the department, where students are encouraged to enter into dialogue with the academic staff. Sometimes appropriate discussions take place within the formal lecture environment (although this is more problematic in the large lecture groups in the first term), more commonly such interaction is found in classes and seminars, office hours and tutorial discussions, as well as informally when staff enter the student space when collecting their post or making a hot drink. The open relationships between staff and students are further enhanced by regular attendance by members of the teaching staff at various student parties.

The Department has been actively involved in developing expertise in distance learning. The Computer Security Research Centre has taught the Security stream through distance learning means for some years and has developed these skills into a formal MSc in Information Systems Security and Access which it is hoped will be taught entirely on-line from 2003.

Within ADMIS, there is currently a project underway to provide on-line learning resources in support of the course IS471 Systems Development.

The Department operates a formal team teaching system whereby all courses are taught by at least two members of staff. This has a number of benefits. First, it reduces the teaching responsibility on individual members of staff and allows them flexibility in scheduling research visits and other commitments during term time. It also enables an effective mechanism for peer observation as staff regularly sit in on

each other's lectures. It also provides for ongoing transfer of knowledge and circulation of staff on courses.

Most classes follow traditional models of either attempting problems or discussing research papers although some do also use other approaches such as teamwork skills, public speaking and role-playing.

The Department strongly believes that students should develop teamwork skills. To this end it has, for the past three years, worked closely with staff in the teaching and learning development office to provide specialist teaching in teamworking. This consists of a series of specialist lectures and follow up classes that take place both during and after the teamwork exercise. Students are then assessed both in terms of the deliverable from the team and also their reflections on the teamwork process. The teamwork exercise is also designed to ensure that students mix, with care being taken to ensure that all teams have a mix of gender, nationality and technical background. Other Departments in the School have slowly adopted this model of teamwork teaching.

The Department has also experimented with dedicated teaching on presentation skills. These sessions have run in parallel with the teamwork sessions and have provided students with the necessary skills to cope with the kinds of presentations they are likely to face in their academic and professional lives. Unlike the teamwork skills, presentation skills are not formally assessed, although all courses do involve presentations.

Part time teachers are normally MPhil/PhD students in the Department. As stated above, all MPhil/PhD students are encouraged to undertake some teaching as part of their professional development. All part time teachers undergo the School's induction and training. Undergraduate class teachers receive specialist training in the packages they teach as part of their courses.

At the Undergraduate level, the Department is aware of the important role that class registers play in assessing student progression by other Departments and ensures that all registers are returned on time by having a member of the administrative staff collect all the registers, taking copies of them and returning them to the Undergraduate Office.

The teaching team (see below) reviews the teaching quality scores of the class teachers with appropriate support offered to class teachers who are not providing the level of service expected of them. Class teachers who perform particularly well in their duties are written to and commended by the Convenor.

One ongoing concern that will affect the quality of teaching offered by the Department is the number of students it is expected to teach. Although all the School's quality assurance mechanisms have told the Department to reduce its student numbers, in practice its staff-student ratio has remained pretty much unchanged over the past few years (and close to the School average) and the School is proposing to increase its student numbers.

## ***Student progression***

Although the Department does not have an internal undergraduate degree, it regularly hosts around 7 General Course students. One member of staff is tutor to these students and has a reduced load of MSc tutees to allow for this responsibility.

At the MSc level, all students are allocated a personal tutor at the start of the academic year, although the open door policy of the Department means that many students will also form close working relationships with other staff as well as with their personal tutors.

All MPhil/PhD students have a supervisor (although joint supervision, including joint supervision across Departments, is becoming increasingly popular). The research students tutor is not allocated any MSc tutees to ensure that she is available to see PhD students.

The Departmental web based database system allows tutors to generate photo lists of all their tutees, to send e-mail messages to all their tutees and to review the essay feedback for their tutees.

This database system is also used to generate mailing lists of, for example, all MSc students. This allows the Department to comply with the provisions of the Data Protection Act and allow students to change their preferences about, for example, receiving e-mails about academic related or social events. The photolist of students that is distributed to other students also allows them to specify their privacy options about whether to release their photo to other students.

At the MSc level, the student completion rate is very high. Typically no more than 6 percent of students fail to pass all the examinations at the first attempt. Apart from those students who fail to show up for the resit examinations the following year, most such failing students successfully complete the degree the following year.

The Department regularly undertakes reviews of its students to see if there are any emerging patterns in terms of student success or failure. Similar analysis has also been undertaken to try and identify any patterns in terms of student arrival based on admissions data. There are some obvious patterns: students with computer science backgrounds and some with business studies backgrounds often lack experience in writing formal, academic papers, students who don't attend the lectures and classes are unlikely to succeed etc. Students are warned of the common kinds of problems at the start of the year and the Department has adjusted the teaching it offers in writing essays to provide extra support for students who don't have suitable experience in this area. Another identified problem lay with the English language skills of some students. After close consultation with the Language Centre, the Department was able to refine its entry requirements to minimise such problems.

The largely international student body means that data on first destinations is particularly weak for the MSc body as a whole. However, the data that does exist indicates that most students are in full time employment or further study within six months of completing their MSc, earning salaries that rapidly exceed those of their teachers.

This year, the Department has attempted to introduce a new mechanism for improving the quality of its data in this regard, whereby staff are asked to record, in a public folder, details of all post graduation reference requests they are asked to complete.

A further quality indicator in this area is the number of students who come back to give careers presentations or offer summer dissertation opportunities for current students. A typical explanation that is given is that their employers are looking for “more people like them” to recruit. In the current year, students have had presentations and opportunities from various organisations including major banks and consultancy companies.

Progression for PhD students takes place at various times throughout their course of study. Students are expected to prepare for upgrade from MPhil to PhD status in their first year. Although this is earlier than many Departments, this does allow the identification of students who may be facing problems at an early opportunity. The exact timing of this, however, is still problematic. One solution, which is being explored at the moment, is shifting the upgrade timing by a few months in order to provide the first year students with more substantial feedback on their proposals before they commence their fieldwork. The Department is also looking at the increased use of public folders to support the distribution of upgrade materials and reports from assessors.

Formal monitoring of students once they have done is undertaken formally at twice-yearly meetings. In addition, the PhD seminar series is also used to monitor the progress of second and third year students. The Department is also looking to introduce small panels of faculty members to provide annual, detailed reviews of students after their upgrades.

### ***Learning resources***

As might be expected, the Department has been an early adopter of public folders and the web for making teaching materials available. Each course has a public folder associated with it, and it is common to find further sub folders dealing with lectures, classes, seminars, course administration and student discussions. The public folders are used as a backup for electronic copies of reading lists and course documentation, alongside further readings for the lectures and classes. The public folders for previous years are archived and are accessible to academic staff.

Similarly, the Departmental website has a specialised area devoted to providing support to students (<http://is.lse.ac.uk/support>). This contains links to the full text of various international conferences, some of which would otherwise be inaccessible to students, online Endnote libraries for journals and specialist subjects, together with links to other online resources not provided by the library. The Department is also working closely with the library on the ANGEL project that should provide an easy access mechanism for online reading list materials.

Other materials on the website include video recordings of lectures and workshops organised by the Department. These events provide students with access to leading international figures in the field. Recent examples include the first workshop on the Social Study of Information Technology and a seminar by Chris Argyris. Future

events, including the forthcoming workshop on IT and globalisation, and the Fifth Floor Lecture Series will also be made available on the site.

According to usage figures, the Departmental website is a very popular site, receiving two and a half times as many visits as the next most popular Departmental website (International Relations).

The website has a series of dedicated news pages (for MSc, PhD and undergraduate students as well as alumni) which provide links to various items, such as lecture announcements, photos of recent events etc. Students are also able to sign up for lectures and classes using the web system which ensures that students can only sign up for classes which are not oversubscribed.

The website also has detailed information for prospective MSc and PhD students which clearly outlines what is offered by the programmes. The FAQ, which is updated as new queries arise, lists answers to many common admissions questions. There are dedicated e-mail addresses (ISMScAdmissions and ISPhDAdmissions) that ensure that a member of staff is available to answer any admissions related questions throughout the year. The Department is also experimenting with a new, computer-based system for managing PhD admissions that would enable more than one potential dissertation advisor to review applications at the same time.

At the start of the year, graduate students are given a welcome pack of materials. This includes standard School material about things like the library and careers service, it also contains a FAQ for the Department, photolist of academic staff and a student handbook. This material is duplicated on the website and public folders.

As a matter of principle, the Department has been providing all students with free study packs for all its core courses and streams. This has ensured that the students have access to the key readings for their courses from the start of the teaching.

The Department makes heavy use of electronic journals, with most leading journals now available electronically (in part, a consequence of the need to provide student provision during the redevelopment of the library building). The Department has an excellent working relationship with its library representative who attends all staff-student committee meetings and is able to address the detailed concerns raised by students at these meetings.

Another useful teaching resource is the PhD programme. Following a suggestion raised at a staff-student committee meeting, the Department has been organising sessions where PhD students present brief summaries of their work to MSc students who are in the process of deciding on topics for their summer dissertations.

Departmental computing provision comes out of a specialist computer-teaching budget rather than the School's main computing budget. As a result, the Department has been able to invest in state-of-the-art workstations with flat screen displays, wireless networking and free printing for students in the Department. Inevitably, there are sometimes hardware and software problems with these machines and the Department is fortunate to now have excellent cluster support.

The Department also has a close working relationship with the Language Centre. This has evolved in various ways. The language centre is able to provide advice about English language requirements for applying students. The Department also holds a language skills assessment in the first week of term that is used to identify students who might benefit from further language assistance. The results of this assessment are passed on to the language centre representative who then contacts individual students to offer further support for their academic English. Similar support has been offered for PhD students and members of teaching staff. In return the Department has contributed to the centre's work on providing a set of multimedia resources for assisting students in their studies.

There are also good links with the Teaching and Learning Development Office. For example, the Department has pioneered teaching provision for teamwork skills and for presentation skills that have then been adopted elsewhere in the School.

The School's decision to relocate the Department to three floors of Tower One has been welcomed, and the Department has invested large amounts of its own reserves on refurbishing its new facilities, with the staff offices, PhD space and research area on the fifth floor coming live in February. The MSc space on the third floor has been developed to provide a useful mix of student workstations, locations for laptops (both networked and wireless) and for private study. Students have borne with the Department whilst these facilities have been installed and seem to appreciate the quality of the space.

### ***Maintenance and enhancement of quality and standards***

The Department has a variety of mechanisms in place for monitoring and ensuring the quality of its teaching provision. These can be broadly classified as proactive, ongoing and retrospective.

There are five main teams: The *Convenor's team* consists of a group of senior staff (research leader, teaching leader, infrastructure leader and external relations leader) that support the convenor in running the Department. Formal meetings of the Convenor's team are held two to three times per term, with further informal discussion being held as necessary. Issues considered by the Convenor's team include: addressing the implications of the move to premium fees; taking an overview of forthcoming sabbatical leave requests; managing enhancements to the Departmental infrastructure. For example, the overview of sabbatical leave requests is fed into the Departmental meeting (so that all staff can consider their planned sabbatical leave periods) and also the teaching team (which needs to take a long term view of staff availability for teaching various courses).

The Department also has a formal *Teaching team* that considers teaching and learning related issues. The team consists of the MSc ADMIS course tutor, the undergraduate tutor, the general course tutor, the teaching quality member, examinations officer, admissions team, external programme representative and team secretary. The team normally meets two or three times per term as required to address issues arising from the teaching provision in the Department. The team reports back to either the Convenor's Team (for issues of policy) or the Departmental meeting (for operational issues and wider discussion of policy related issues). Examples of issues considered by the teaching team include: proposed revisions of the marking scheme for students

essays and dissertations; dealing with external examiners reports and their implications for the provision of teaching in the Department; reviewing performance of part-time class teachers; formalising the expectations for students wishing to undertake internships.

The *Research Team* has general overview of the research in the Department, including research projects. Members of the team include the Research Students tutor, the research leader, team secretary, project officers from the various research projects in the Department as well as members of the academic staff. The team also plays an active role in the PhD programme, discussing issues such as admissions, upgrade of MPhil students, the structure of the research methods course.

*Departmental meetings* are, as a matter of policy, open to all staff associated with the Department. This includes all academic staff, tutorial fellows, visiting fellows, representatives from the library and language centre and research staff from funded research projects associated with the Department. All administrative staff are also encouraged to attend all such meetings, to allow them to follow through the implications of the teaching and research team meetings. Departmental meetings are held approximately once a month.

The *Staff-student committee* consists of representatives from MSc ADMIS, MSc New Media, Information and Society and PhD students. In addition to staff from the Department, the Departmental representatives in the library and language centre are also members. The SSC meets once a term and the minutes of the meeting are considered at Departmental meetings.

The Department finds the staff-student committee meetings to be very effective mechanisms for raising issues. It publishes the minutes of the meetings in the public folders shortly after they have been held, and all students are notified of their availability. Most issues raised at the meeting (particularly those relating to the library and Departmental provision of computing) are addressed immediately (often before the minutes have been formally posted).

### **Proactive measures to ensure and enhance quality**

The Department has an ongoing programme for reviewing teaching provision at both the undergraduate and postgraduate level. For example, following the recommendations of the last APRC review, the Department significantly altered the structure and nature of its undergraduate courses. Similar reviews have taken place for MSc ADMIS. There was a major restructuring of the MSc in 1997 that led to a much-revised structure from 1998 onwards.

More recently, following the appointment of two new Professors, the Department has undertaken a series of full and half day strategy workshops on a variety of topics, including the research foci in the Department. Two workshops have so far been held for reviewing the structure of MSc ADMIS and a third is scheduled for later this term. The structure of these workshops has varied, from open discussions led by trained facilitators to more focussed sessions that deliver formal proposals for consideration at future departmental meetings.

All proposals for new courses and programmes are initially discussed in the Department's teaching team, which raises any operational concerns with the proposals. The proposals are then brought to full Departmental meetings for wider discussion.

The Department has worked closely with its external examiners, for example, introducing and revising a consistent marking scheme and feedback process for all essays submitted during the year.

### **Ongoing measures**

The Department strives to keep good relations with its students and, as a result, feels that most problems are picked up quickly through informal means. Other issues are picked up and addressed at the termly staff–student committee meetings.

Following the suggestion of our external examiners, some years ago, each course coordinator is asked to produce a short (one page) report about the course which is sent to the external examiners, along with the sample scripts for that course before the examiners meetings. These reports have proved to be particularly effective at raising issues both for the course concerned (where the reflection on the course causes changes to be introduced into the course in the following year) and for the MSc as a whole (for example, the change in assessment methods for IS470 Information Systems and IS471 Systems Development being introduced next year are a direct result of such reflections).

The introduction of merit level marks by the School for courses and programmes as a whole provides another example of ongoing monitoring of the teaching provision. When merit marks were first proposed by the School, the Department undertook analysis of previous mark profiles to determine the effects of various sets of rules for awarding merit level MScs. The rules adopted by the Department would have led to approximately one third of all students being awarded merit level MScs. Unfortunately, as the School as a whole has discovered, there are systemic effects to introducing a merit classification, as many more students who may realise that they are not distinction candidates now believe that they are able to obtain a merit and push themselves harder to obtain the requisite number of merit marks. Our external examiner commented upon this increase in the number of merit marks and as a result, the criteria were strengthened in the following year to keep the number of merits to a more reasonable number.

The School is currently reviewing its guidelines for half–unit classification schemes and the Department may need to apply for special dispensation from whatever is agreed, to ensure that the number of merits achieved is kept in line with the external examiners' guidelines.

### **Retrospective measures**

The Department regularly reviews the experiences of the student cohort and uses the data it has available to try and identify any observable trends in the data. For example, recent checks have sought to identify differences in marking practices between first and second markers on dissertations, to see if there are any patterns to the best and worst performing students, to try and identify any patterns for arrival rates for MSc students from different backgrounds.

## **Concluding comments**

The Department welcomes this opportunity to present its teaching provision in Information Systems and looks forward to receiving feedback on its work from the review team.

## **References**

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Robertson, M, Newell S, Swan J, Mathiassen L and Bjercknes G (2001) The Issue of Gender within Computing: Reflections from the UK and Scandinavia, *Information Systems Journal*, 11 (2), pp. 111–126.