DOCUMENT RESUME

ED 111 264 HE 006 646

TITLE	What Is the Open University? A Brief Explanation.
INSTITUTION	Open Univ., Walton, Bletchley, Bucks (England).
PUB DATE	74
NOTE	36p.; For complete study see ED 104 385
EDRS PRICE	MF-$0.76 HC-$1.95 Plus Postage
DESCRIPTORS	Adult Learning; *Correspondence Study; Course Content; Curriculum Development; Educational Television; Extension Education; Flexible Scheduling; *Higher Education; Home Study; *Independent Study; Individual Study; *Open Education; *Part Time Students
IDENTIFIERS	*Open University; United Kingdom

ABSTRACT

The Open University is described as an independent, autonomous university which offers an opportunity for higher education to adults who could not or did not take advantage of the limited opportunity in England to enter an institution of higher education immediately on or shortly after leaving secondary school. It provides a basis for continuing higher education throughout an adult's life. Most students are 21 years of age or over and study in their spare time. Its origins, administration, financing, facilities, students, and staff are described. The learning system employed is designed for teaching at a distance with course materials prepared by course teams and mailed to students. Television and radio broadcasts supplement the material. The university is viewed as a self-improving system available to all students without qualification. Its materials can be used by other institutions who can benefit from the course materials themselves along with systems for producing course materials, and systems which combine to deliver the courses. (LBH)

THE OPEN UNIVERSITY

WHAT IS THE OPEN UNIVERSITY?

A brief explanation

Prepared on behalf of the
Open University Consultancy Service

The Open University
Walton Hall
Milton Keynes, MK7 6AA

First published 1974

Designed by the Media Development Group of the Open University

Printed in Great Britain by
DAMS & LOCK, BIRMINGHAM, England

ISBN 0 335 00025 8

1.1

Contents

		Page
I	General Information	5
II	The Creation of a Learning System	8
III	The Students	25
IV	Some Financial Aspects	31
V	Use of Open University Materials and Systems by Other Institutions	36

I General Information

The Open University

What is the Open University?

The Open University is an independent autonomous university, established by a Royal Charter awarded in May 1969. It is not, therefore, affiliated to any other university, and it has the power to award its own degrees.

Aims of the Open University

What are its principal aims?

To offer an opportunity of higher education to adults who for any reason, could not or did not take advantage of the limited opportunity to enter an institution of higher education immediately upon or shortly after leaving secondary school. It is also the aim of the University to provide a basis for continuing higher education throughout an adult's life. Therefore Open University students are usually 21 years of age or over and study in their spare time, although a small number of students are admitted from 18.

Origins

How did the University come into being?

The idea of a University of the Air (that is, students learning largely through television and radio programmes) was suggested publicly by Mr Harold Wilson in a speech in Glasgow on 8 September 1963. Miss Jennie Lee, then an Under-Secretary of State for Education, presented a White Paper to Parliament about setting up such a university in February 1966. In September 1967 a Planning Committee, chaired by Sir Peter Venables (then Vice-Chancellor of the University of Aston), was appointed. The Committee completed its report in January 1969—recommending that the first students should start work two years later (which, in the event, they did—in January 1971). By this time the name of the proposed new institution had been changed to the Open University, in order to emphasize the aims of the University rather than the methods it might employ.

The [illegible]ncellor, Sir Walter Perry

Council and Senate

Who runs the University?

Like every other university in the UK, it is governed by a Council and a Senate. In general terms the Council looks after its management and business affairs while the Senate formulates its academic policies. Council membership is part-time and drawn largely from outside the University. It comprises the Officers of the University (see below), four members appointed by the Lord President of the Privy Council, three by the Committee of Vice-Chancellors and Principals of the UK, three by associations of Local Education Authorities, one by education authorities in Scotland, one by the Royal Society, one by the British Broadcasting Company (BBC), six by the Senate, two students and two members of the part-time tutorial staff. There are also eight co-opted members. The Senate comprises, at present, all members of the full-time academic staff, together with a number of other members of the University's non-academic staff and part-time tutorial staff.

Open University Officers

Who are the 'Officers'?

They are the Chancellor, Pro-Chancellor, Vice-Chancellor, Treasurer, three Pro-Vice-Chancellors and Secretary of the University. In British universities, the titular head of the university is the Chancellor, but he has no executive duties except ceremonially to confer degrees. The Pro-Chancellor is Chairman of the Council; he serves part-time and is a lay adviser on policy. The full-time executive head of a university in the UK is the Vice-Chancellor, who consequently bears very heavy responsibilities indeed including the chairmanship of the Senate.

Finance

Where does the University get its money from?

All universities in the UK are now financed in the main from Government funds which come from the Treasury to the Department of Education and Science (DES). For all other universities, the DES obtains advice on the dispensation of the monies so allocated from a body known as the University Grants Committee (UGC). The UGC makes plans over a five-year period, and the grants to universities are fixed by the Government for the quinquennium. The actual vote by Parliament is an annual one, but, by convention, Parliament has never changed the quinquennial grant once it has been agreed. A slightly modified arrangement operates for the Open University; it receives its grants on a

triennial basis directly from the DES. Approximately 85 per cent of Open University money comes from this source, and the remaining 15 per cent mainly from student fees; this proportion is very similar to that of a conventional university.

The campus

Does the Open University have a campus or specific site?

Yes. It is centred around an old manor house, Walton Hall, in about 70 acres of countryside in north Buckinghamshire. This site is within the area designated for building the new city of Milton Keynes and is about 50 miles north west of London—easily accessible from the M1 motorway and mainline trains from Euston Station (central London) stopping at Bletchley (about 4 miles away).

Campus facilities

What kinds of facilities are provided on the campus?

All the buildings of a university except those needed by undergraduates. Thus there is office space for teaching and administrative staff, together with a library, laboratories and meeting rooms; there are the usual support buildings such as a refectory, club rooms and recreational facilities. But there is also a complex of buildings, unique to the Open University, providing for its special operations—the production of correspondence course materials (design, graphics, photography, printing, publishing), the production of broadcast programmes (at present done mainly at Alexandra Palace); and the distribution of course materials to students all over the UK.

Television and radio

What about television and radio facilities?

These are provided by an arrangement between the University and the BBC, the production of programmes being carried out at Alexandra Palace in London. However, it is hoped to build an Audio Visual Production Centre at Milton Keynes before 1980. This will replace Alexandra Palace, but still be run by the BBC.

Student facilities on campus

And facilities for students?

There aren't any – apart from working space given to a few postgraduate students. There is however a national Students' Association, and this has its central office at Walton Hall.

Students' places of study

Where, then, do the students study?

At home, mainly, but also in Open University study centres of which there are 260 distributed throughout the UK. There are also short periods of study at residential summer schools in many of the courses.

Staff

What about staff - does the University have its own academic staff?

Yes, both full-time and part-time academic or tutorial staff. The full-time academic staff work either at Walton Hall (ie on the University campus) or at various regional offices. Part-time staff work from home or from their own institutions.

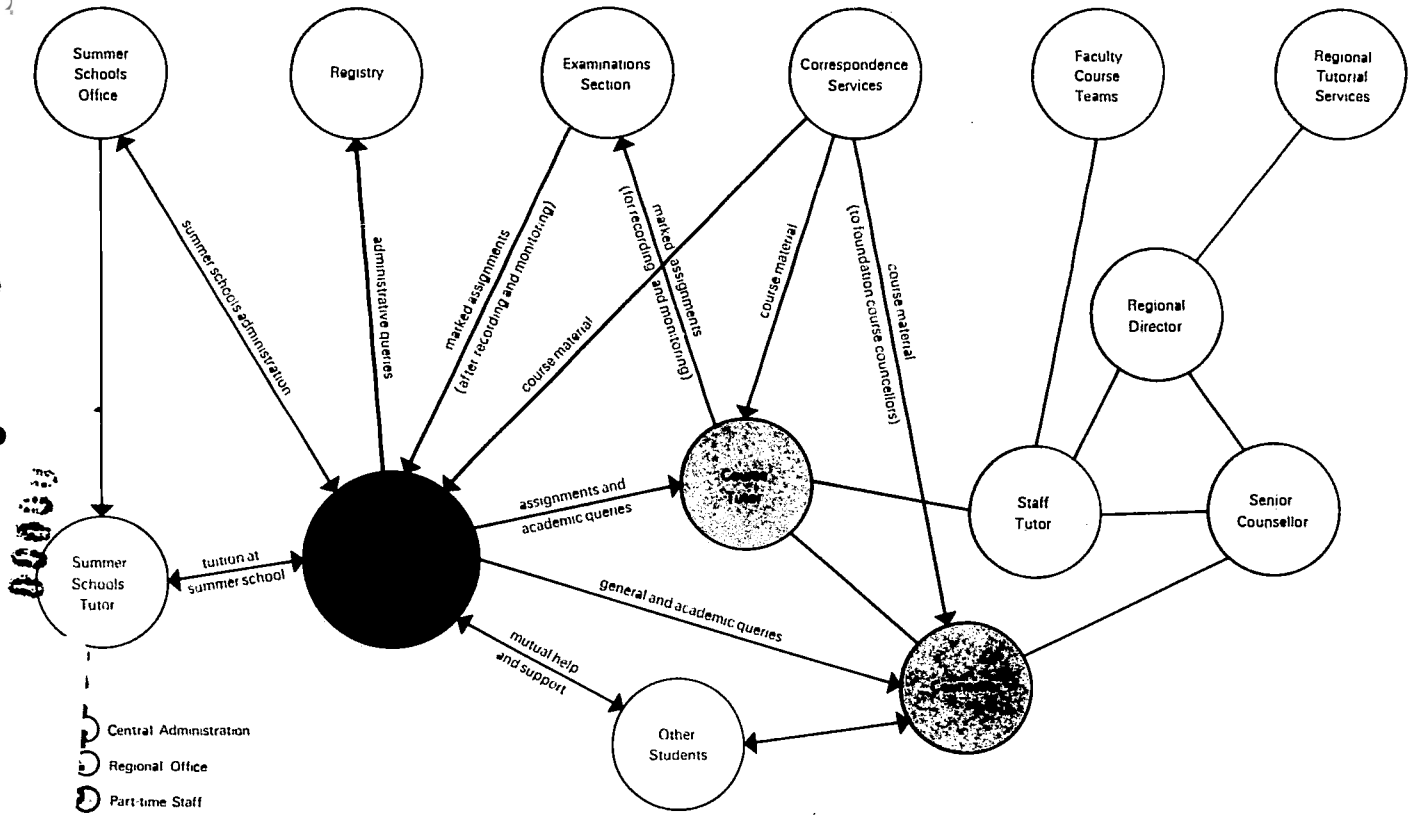
The learning system

This is getting a bit complicated. Let's go back to the beginning. How does the Open University's teaching system work?

II The Creation of a Learning System

The system is designed for teaching at a distance. Course materials are prepared by course teams comprising, very largely, full-time members of the academic staff. These course materials are mailed to students at intervals throughout a course according to schedules which cover a period of about 9-10 months. In addition to the correspondence packages, the students also receive television and radio broadcasts from the University, transmitted on a national BBC television channel and on VHF radio. A correspondence package may contain assignments which are part of a continuous-assessment system. These assignments are of two types—they are either tutor-marked or computer-marked. After studying the relevant section of the course, students carry out the assignments and return them to their tutors for tutor marking or direct to the University for computer marking. Grades and tutor's comments are sent back to the student as soon as possible. Students are also able to choose a study centre, as convenient to them as possible, where they can attend to watch the television programmes, listen to radio broadcasts, receive tutorials, meet with their counsellors,

Communications within the University



hold discussions, meet their fellow students and so on. This they would do once a week or fortnight, usually in the evening or on a Saturday morning. In the middle of most courses students are also required to attend a one-week residential summer school for intensive face-to-face study sessions. At the end of the course there is a written examination, invigilated in a conventional way. As a result of the grades achieved in their assignments (continuous assessment) and end-of-course examination, students either receive a course credit or they fail.

Course teams

That's a very condensed summary. Let's take it point by point and look at your diagram. What are 'course teams'?

A course team is a group of academic staff together with primary 'support' staff. The latter usually comprise an educational technologist, BBC/Open University television and radio producers, a course assistant or co-ordinator, an editor, and an administrator. The team has a chairman who is broadly responsible for seeing that the production of the course is properly planned and executed, that University standards are maintained, that work is allocated appropriately to members of the team and is kept to schedule, and that a myriad of other tasks in a very complex production system are carried out. These include control of the course budget, and the appointment of consultants to the team. The team members work closely together, submitting ideas and draft materials or scripts to their colleagues for scrutiny and comment. The syllabus and curriculum of the course are planned and decided by the team as a whole and not by individuals.

Course materials

What do the 'course materials' consist of?

The Open University learning system is 'student centred' and, as mentioned above, designed for teaching at a distance. Consequently the materials are carefully structured to enable students to learn as individuals on their own. The mainstay of the materials is the correspondence text. A full course, typically, will have 32 'unit' texts with each unit covering one week of work. Most of these texts are quite unlike a conventional textbook. They contain the usual expositions, diagrams, charts, and illustrations etc., but integrated with the text are queries, exercises, self-assessment questions, spaces for student comment and so on. In addition to

A student working at home with apparatus from the science foundation course home experiment ki

the text there may well be gramophone records, audio-tapes and filmstrips. There are always supplementary materials containing the assignments, broadcast notes and any other information which the course team wishes to convey. Set books and books for recommended reading are also listed for the student.

In addition the course team has to decide upon, design and write the script for the television and radio programmes. The degree of integration between the printed matter and the broadcasts varies widely. For example, in the science foundation course it is very close whereas in arts and social sciences television and radio serve more to enrich than to provide essential information. The course team also produces notes for tutors, marking schedules for the assignments, parameters for the computer-marked assignments and so on.

An outstanding feature of the science and technology courses has been the design by the course teams of home experiment kits. These are sent out to the students who do most of their basic experimental work in the lower level courses in their own homes. The apparatus they are supplied with is quite sophisticated including, apart from chemicals and glassware, a microscope, a colorimeter, a tachistoscope, a 'noise meter', a binary computing device, and a cathode-ray oscilloscope. Biology students are also supplied with dissection kits including materials to work on.

Faculties

Who are the 'academic staff'?

Full-time members of the University faculties or regions. There are six faculties—arts, educational studies, mathematics, science, social sciences and technology—and 13 regions. Just over two hundred academic staff are at Walton Hall in the faculties and there are about one hundred and sixty in the regions. Each faculty has a Dean, who is also chairman of the faculty board. The board is responsible for formulating faculty policies and for reporting to the Senate and Council via the main University Academic Board. Each region has a Regional Director who is responsible for the tutorial system in his area and liaison with faculties.

Institute of Educational Technology

Does each faculty have its own educational technologists?

No, there is an Institute of Educational Technology within the University which is responsible for attaching staff members to

course teams. It is also responsible for carrying out its own research projects and survey research for the University.

Correspondence Services

You said that materials are mailed to students?

Yes, by a department of the University known as Correspondence Services, and there is also a Sub-Post Office on the campus. Since we have over 40 000 students taking a variety of courses, the task of Correspondence Services is heroic. On average ten to fifteen thousand packages go out each week weighing many tons. In 1973 3.6 million packages were despatched. About twenty people work on this operation – backed up by the computer and rather a lot of complicated machinery!

BBC television and radio

What about the programmes for the television and radio components?

I've already explained that these are produced in the University studios at Alexandra Palace by the BBC, and the partnership between the University and the BBC has clearly worked with notable success considering its novel form. Up to the end of 1973 716 television programmes (each of about 25 minutes) and 678 radio programmes were produced. The figures at the end of 1974 should be close to a thousand of each. Transmission is usually between 5.30 and 7.10 pm during weekdays and on Saturday and Sunday mornings. Nearly all the programmes made so far have been in black and white, but extension to colour is gradually gaining momentum. All the television programmes are available on 16 mm film or casettes, and the radio broadcasts on tapes. The extent (within the overall budget allowed) of the use of television and radio and the educational purposes for which they are used, are solely the decisions of the course team.

In addition to programmes linked to courses, there are also regular magazine programmes on both television and radio (called *Open Forum*) in which general University affairs are discussed between staff and students. The problem of evaluating the use of television and radio by the University is the subject of a current research project in the Institute of Educational Technology.

Assignments

And assignments?

Assignments are an essential part of the learning system quite apart from their use for grading. The tutor-marked assignments (TMAs) rely mainly on short answer and essay type questions.

Computer-marked assignments (CMAs) are made up of objective questions—a very sophisticated range of format options and procedures for analysing students' responses being offered to the course teams.

Students learn from doing assignments, from discussing them with their colleagues and from receiving commentaries on the way that they have answered TMAs. In the assignments the University is primarily interested in what the student learns, and not how, and so it encourages students to discuss questions freely before submitting their work. Abuse of this freedom is possible, of course, but in practice very slight. Safeguards are built into the system via tutors, progress checks, summer schools and the end-of-course invigilated examinations.

Assignment grades

How are students 'graded' on assignments?

A—excellent; B—good pass; C—clear pass; D—bare pass; F—bare fail; R—bad fail.

Regions and study centres

What, exactly, are the 'regions' and 'study centres' you referred to?

For organizational purposes, the UK has been divided into thirteen regions by the University, ten in England and one each in Northern Ireland, Scotland and Wales. Each region has a regional office which is manned by a Director and his staff who are responsible for a whole range of activities which are part of the tutorial and assessment systems. For example, they organize examinations, day schools and summer schools, and student-staff consultation; they also provide an information and enquiry service for both students and the central organization. And they are responsible for arranging accommodation for study centres in existing educational institutions at strategic places throughout the region, which students can attend in the evenings or on Saturdays.

This accommodation ranges from the very good (with library, common room and cafeteria facilities in addition to study rooms) to the rather poor with barely adequate facilities. They are all equipped with television and radio receivers, and in areas where reception is bad (or impossible) they have film and audio-tape replay facilities so that students can still see and hear programmes. Some are also equipped with computer terminals for the use of mathematics students.

Tutors and counsellors

Weren't tutorials and counsellors mentioned earlier?

Yes, true enough—they haven't been forgotten! Each regional office is staffed by some thirty to forty employees of the University, of whom about ten are concerned primarily with academic affairs. These are the staff tutors and senior counsellors. Part of their job is to recruit and train part-time tutors and counsellors. Tutors are recruited for specific courses or parts of courses. A number of students is allocated to each tutor who marks and comments on written assignments. Many tutors also hold tutorials at study centres or attend day schools for the same purpose. A tutor is therefore primarily a teacher. Students are also assigned to a counsellor who lives locally. He attends the local study centre(s) and is available to help with individual study matters and to lead discussions. At foundation level (ie the first course a student does) he also helps with face-to-face tuition. There are about 4600 part-time members of tutorial and counselling staff in the University system in the UK who fill approximately 5100 posts (3450 tutorial posts and 1650 counselling posts).

Summer schools

And what are summer schools?

For each foundation course, students are required to attend a residential summer school, lasting one week, which is held on the premises of a conventional university during the summer months. At higher levels only some courses, including all science and technology courses, required summer school attendance. These schools provide the opportunity for concentrated face-to-face tuition and discussion, and also, for science students, the chance to work in fully equipped laboratories. Course team members also attend summer schools which for most of them provides their only opportunity to meet students personally.

A little history

Taken as a whole, that's quite an organization!

It is indeed. In the early part of 1969, the Vice-Chancellor, Sir Walter Perry, and the three members of the administrative staff were housed in temporary offices in Belgrave Square, London, spending all hours of the day and night working out plans to be ready to receive twenty-five thousand students for university courses in January 1971, which meant that their admission had to start early in 1970. This small group also had to tackle a whole

area completely new to any university in the UK (or elsewhere, for that matter, considering the numbers of students involved and the university level of the courses). This was the whole delivery system to students at a distance, using a range of media and technologies which, frankly, none of them knew much about. Not only this; the whole operation was being launched in an atmosphere of frank scepticism and critical disapproval from many quarters. But thanks to their dedicated work and that of the staff joining in a steady stream as the months passed, over 42 000 applications from aspiring students were processed in 1970 and 24 220 students were registered to start work in January 1971.

What the University offers

Very impressive!

But what does the University offer to its students?

The Open University offers a first chance to many people and a second chance to some to study for and receive a university degree comparable in standard to that of any conventional university in the UK, without having to leave their job or interrupt their career.

Degrees, disciplines, courses and credits

But what are the degrees, disciplines, courses and so on? And you've also mentioned levels of courses.

The University offers the BA and BA (Honours) degrees at undergraduate level, and three higher degrees—the BPhil, the MPhil and the PhD at postgraduate level. A full-credit undergraduate course is made up of studies spread over 9-10 months of the year with a terminal examination. The 9-10 months run consecutively from January to October—ie there are no terms or vacations! The workload means that a student studies on average for about 10-12 hours each week, and he (or she) is allowed to take up two credit courses in any one year. With the exception of educational studies each faculty offers a foundation course, and several courses at three higher levels (levels 2, 3 and 4). To take an ordinary first degree (BA) a student must obtain credits in two foundation courses and four further credits at level 2 or above. For a BA (Honours) a student requires credits in two foundation courses and six additional credits at levels 2 or above, of which at least two must be at levels 3 or 4. We'll come back to postgraduate degrees later, and also to something else we offer, post-experience courses—but these do not lead to a degree.

School students on a field trip from Leeds University

Credit exemptions

Then the shortest time for a student to get a BA degree would be three years?

Not necessarily. If a student has successfully completed one or more years of full-time study (or its part-time equivalent) at a higher educational level towards the acquisition of a qualification awarded by another institution, then he may be eligible for the award of general credit exemptions. Up to three general credit exemptions may be awarded which means that a student could complete an ordinary BA degree in two years. In fact, the first BA degrees awarded by the Open University were achieved by just over 900 students after studying during the first two years of the University's existence (1971 and 1972). It is, however, quite correct that the first students to achieve degrees wholly by studying at the Open University did not graduate before the end of 1973 – that is after three years of study.

Part courses

You said a student can take 'up to two courses' in a year – isn't the option either one or two?

No. Faculties may produce half-credit courses containing 16 units. So a student can take $\frac{1}{2}$, 1, $1\frac{1}{2}$ or 2 courses in a year, and, in fact, the average number of courses students are taking at present is 1·2. This means that the average time to achieve an ordinary BA, assuming no credit exemptions, would be five years. With the present rate of award of credit exemptions this average is reduced to four years.

Number of courses

How many courses are the faculties offering?

First of all, remember that production of courses is still in its early stages and courses are being added to the range at the rate of about twelve course credits each year. And also that the faculties of educational studies and technology were formed a year later than the other four, so that their courses started in 1972 and not 1971. At the moment, we are offering 68 course options, covering 40·5 credits, to our undergraduates.

Intra-faculty disciplines

That's a real achievement in so short a time, but what subject areas do the courses cover?

That's not too easy to answer simply. Remember that many of the courses offered are interdisciplinary and that some (14 of the 68 course options mentioned above) are interfaculty. To start

with, however, some faculties do have mainstay disciplines which roughly speaking could be thought of as intrafaculty departments. For example, the arts faculty covers history of art, literature, history, music, philosophy and logic: and educational studies covers human development and learning, sociology of education, educational administration and management, and principles of curriculum. Science has physicists, biologists, chemists and earth scientists, and social sciences includes sociology, psychology, economics, government and politics and geography. The technology faculty covers design, electronics design and communication, engineering mechanics, materials science and systems science and only in mathematics are no sub-divisions formally recognized, although here too there are obvious specialist areas. These disciplinary interests are, of course, reflected in important ways in the courses which are produced, but nevertheless the course team approach encourages a great deal more interdisciplinary thinking than is usually found in conventional universities.

So, what does the real output look like?

Variety of undergraduate courses

The best answer is probably just to list the undergraduate courses that will be available in 1975, together with those we hope to offer in 1976. We've divided them up by level and faculty, and said whether or not they are full credit courses. The capital letters beside each course indicate which faculty (or faculties) is involved: A, M, S, T and E are all obvious but D stands for social sciences.

Undergraduate courses offered 1975 and proposed courses for 1976.

Level	Faculty	Course title	Course code	Credit rating
Foundation	Arts	Humanities: a foundation course	A100	1
	Social sciences	Making sense of society	D101	1
	Mathematics	Mathematics: a foundation course	M100	1
	Science	Science: a foundation course	S100	1
	Technology	The man-made world: a foundation course	T100	1

Level	Faculty	Course title	Course code	Credit rating
Second	Arts	Renaissance and Reformation	A201	1
		The age of revolutions	A202	1
		The early Roman Empire and the rise of Christianity	A291	½
	Arts/Mathematics	History of mathematics	AM289	½
	Arts/Mathematics/ Science/Technology	Science and belief: from Copernicus to Darwin	AMST283	½
	Arts/Science/ Technology	Science and the rise of technology since 1800	AST281	½
	Social sciences	Decision making in Britain	D203	1
		Microeconomics	D222	½
		Comparative government and politics	D231	½
		New trends in geography	D281	½
		National income and economic policy	D282	½
		The sociological perspective	D283	½
		Statistical sources	D291	½
	Social sciences/ Science	An introduction to psychology	DS261	½
	Social sciences/ Technology	Urban development	DT201	1
	Educational studies	*Personality and learning	E201	1
		*Curriculum design and development	E203	1
		Decision making in British education systems	E221	½
		Language and learning	E262	½
		School and society	E282	½
	Mathematics	Linear mathematics	M201	1
		Topics in pure mathematics	M202	1
		Analysis	M231	½
		An algorithmic approach to computing	M251	½
	Mathematics/Social sciences/Technology	Statistics: an inter-disciplinary approach	MDT241	½
	Mathematics/Science/ Technology	Elementary mathematics for science and technology	MST281	½
		Mechanics and applied calculus	MST282	½

*These courses are offered for undergraduates for the first time in 1976.

Level	Faculty	Course title	Course code	Credit rating
	Post-experience/ Educational studies	Reading development	PE261	½
	Post-experience/ Technology	*Environmental control and public health	PT272	½
	Science	Comparative physiology	S22	⅓
		Geology	S23	⅓
		An introduction to the chemistry of carbon compounds	S24	⅓
		Structure, bonding and the periodic law	S25	⅓
		The Earth's physical resources	S26	½
		Biochemistry	S2 1	⅙
		Geochemistry	S2 2	⅙
		Environment	S2 3	⅙
		Geophysics	S2 4	⅙
		Genes and development	S2 5	⅙
		*Genetics	S299	½
	Science/Social sciences/ Technology	Biological bases of behaviour	SDT286	½
	Science/Technology	Principles of chemical processes	ST294	½
		Solids, liquids and gases	ST285	½
	Technology	Introduction to engineering mechanics	T231	½
		Systems behaviour	T241	½
		Systems management	T242	½
		Man-made futures: design and technology	T262	½
		Instrumentation	T291	½
	Technology/Arts/ Social sciences	Art and environment	TAD292	½
	Technology/Social sciences/Science	The role of technology in human ecology	TDS271	½
	Technology/ Mathematics	The digital computer	TM221	½
	Technology/Science	An introduction to materials	TS251	½
		Electromagnetics and electronics	TS282	½
Third	Arts	War and society	A301	1
		The nineteenth-century novel and its legacy	A302	1

*These courses are offered for undergraduates for the first time in 1976.

Level	Faculty	Course title	Course code	Credit rating
		Problems of philosophy	A303	1
		The development of instruments and their music	A304	1
		History of architecture and design 1890-1939	A305	1
		*Twentieth-century poetry	A306	1
		*The revolutions of 1848	A321	½
		*Art in the twentieth century	A351	½
	Social sciences	Historical data and the social sciences	D301	1
		*Patterns of inequality	D302	1
		*Research methods in the social sciences	D304	1
		*Social psychology	D305	1
		*International economics	D322	½
		Public administration	D331	½
		International politics and foreign policy	D332	½
		*Soviet government and politics	D333	½
	Social sciences	Regional analysis and development	D342	½
	Social sciences/ Educational studies	*People and work	DE351	½
	Social sciences/ Technology	People and organizations	DT352	½
	Educational studies	*Management in education	E321	½
		Methods of educational enquiry: an empirical approach	E341	½
		Urban education	E351	½
		Education, economy and politics	E352	½
	Mathematics	Partial differential equations of applied mathematics	M321	½
		Integration and normed spaces	M331	½
		Complex analysis	M332	½
		*Numerical computation	M351	½
	Science	Physiology of cells and organisms	S321	½
		Ecology	S323	½

*These courses are offered for undergraduates for the first time in 1976.

Level	Faculty	Course title	Course code	Credit rating
		*Earth science: techniques and methods	S333	½
		*Chemistry: an integrated approach – Part 1	S351	½
	Science Mathematics	Quantum theory and atomic structure	SM351	½
	Technology	*Telecommunication systems	T321	½
		Systems modelling	T341	½
		*Materials under stress	T351	½
	Technology Social sciences	Human factors and systems failures	TD342	½
Fourth	Arts	Great Britain 1750-1950: sources and historiography	A401	1
		*Thought and reality: central themes in Wittgenstein's philosophy	A402	1

*These courses are offered for undergraduates for the first time in 1976.

Postgraduate studies

You also mentioned postgraduate degrees.

Yes. The three postgraduate degrees (BPhil, MPhil, PhD) are awarded on submission of a dissertation or thesis after completion of a programme of research or advanced study. (There are no postgraduates *courses* at present.) The work is carried out by students, usually part-time, in their home area as there are only a few places for full-time postgraduate students at Walton Hall. Supervision is carried out jointly by members of the Open University academic staff and appropriately qualified people in institutions of higher education or industry near to the place where the student is carrying out his research. Students accumulate research credits each of which is equivalent to the satisfactory completion of three months' full-time research work. The numbers of research credits required before a dissertation or thesis may be submitted are BPhil 3; MPhil 6; and PhD 9. We hope to offer postgraduate courses eventually, and when they become available up to three postgraduate course credits will replace an equal number of 'research credits' for each of the degrees.

Post-experience studies

Does that cover all the Open University programmes?

No. There is also the 'post-experience' programme – but this is not a degree programme. The courses offered are variously referred to as updating, refresher, retraining, continuation or in-service courses and lead to the award of certificates or diplomas. Some of the undergraduate courses are transferable into the post-experience programme and vice versa but several special courses have also been produced or are planned. Examples are *The Handicapped Person in the Community*, *Industrial Relations*, *The European Economic Community* and *Computing and Computers*.

Course revision and remake

Teachers in conventional universities can revise and update or even completely rewrite their lectures or materials at short notice. How does the Open University cope with revision problems?

This is quite a problem, as you've guessed. It is tackled in several ways. Firstly, revision notes, addenda and corrigenda can be produced at short notice on the University's own printing equipment, and included in supplementary materials sent out to students and tutors. Secondly, funds are allocated for remaking various components of the course, such as television programmes, during the life of a course, originally estimated at about four years. Thirdly a complete course-remake programme is scheduled as an ongoing operation to provide replacements for courses as soon as they come to the end of their lives. For example, special course teams are already working on remaking the foundation courses. And lastly the tutorial system provides additional opportunities for revising or updating information.

The Open University as a self-improving system

I suppose the first few years of experience of running the Open University learning system will be very helpful in the revision or remake process?

Indeed it will and, in fact, already has been. A great deal of information is gathered by the Survey Research Department as courses are taken by students and this is passed back to the course teams. It has always been a principle of the University that it should operate as a self-improving system and this can be achieved only if we are prepared to be self-critical and to seek the right kind of information and interpret it in the right sorts of way.

So, we seek students' opinions on the difficulty, intelligibility, interest, usefulness and so on, of various materials and specific assignments, broadcasts and course units; and we ask tutors and counsellors for comments on a variety of aspects of the system. We learn, for example, about student study patterns, the extent to which study centres are used, why some students stop studying, what they would like to study in the future, and what they consider to be the strengths and weaknesses of the system.

III The Students

General

May we now turn to the students–who are they and how do they qualify for admission?

We were wondering when you'd get round to asking about our students. Let us start by going over again what we said earlier. The Open University caters primarily for adults of 21 years and over, although we do accept a few students under 21 in special circumstances (eg with physical disabilities) which prevent them from gaining acceptance elsewhere. And at present we are also running an experiment, at the request of the Department of Education and Science, which will admit 500 school leavers (18-year-olds) half of whom would qualify for entry into conventional universities and half who would not.

Entry qualifications

What are the entry qualifications for admission to undergraduate courses?

Apart from age, none at all.
Surely not!
Yes, apart from age, none at all. The Open University is open to all of 21 years and over. In effect, of course, they have to be able to read and write! The application form is very comprehensive and on the information given by an applicant we may advise him to take a course at a technical college or some other institution before attempting an Open University course. But if he insists that his application stands, then it goes into the system without detriment to his chances of acceptance.

GCE examinations

How does this differ from entry qualifications for conventional universities in the UK?

The most widely used entry qualifications for further or higher education in the UK are the nationally organized examinations for the General Certificate of Education (GCE). This is taken, usually at school, at two levels—ordinary level (O level) at age about 16 and advanced level (A level) at around 18. British universities express their entry requirements in terms of numbers of subjects examined, and of subject patterns and grades of successes in these O and A level examinations. By contrast the Open University records the previous educational achievements of its applicants for statistical purposes but they play no part in the admissions procedures.

The admission system

So how does the admission system work?

Relatively simply in theory—not so easily in practice. Applications are considered basically on a first come, first served basis. This is modified by the need to see that there is a balance between arts- and science-based courses, and that all courses have reasonable numbers of students, equitably distributed over the thirteen regions, among the occupational groups in the UK and between the sexes. Applications come in over the first 6 or 7 months of the year and are then cycled and recycled through a complex computer programme until all the places are filled. Reserve lists are created to fill in allocated places which, when offered to students, were not taken up for one reason or another.

Numbers of applications

How many applications does the University have to process?

We distinguish between numbers of students applying and the number of courses applied for, since each student can apply for up to two courses in a year. In 1970, applications were received for studies in 1971—the first year of university operation. Over 42 000 people applied for about 62 000 courses. At this time there were only four foundation courses available! In 1971 there were 34 000 applicants, in 1972 30 500, in 1973 about 35 000 and in 1974 our best total to date, over 52 000. Since the maximum number of students which the University is allowed to teach at any given time is limited by the Department of Education and Science to a total of around 50 000, the number of places to be

allocated must be guesswork initially, based on a hypothetical input-output model extending for several years and programmed on the basis of a number of factors. First, the numbers of students we admit (which we can control), then their speed of progress through the system, and lastly the dropout rate (neither of which we can control). So in 1971 we provisionally registered 24000 students, in 1972 20500, in 1973 17000 and in 1974 20000. The figures for final registration were: for 1971—19500; for 1972—15500 and for 1973—12500. We'll come to progress through the system and dropout later.

Provisional and final registration

What's this provisional and final registration business?

Provisional registration allows students to try their hands at Open University studies for three months before committing themselves to a full year of work and the full fees. In April each year students who started their studies in January and who wish to continue are finally registered, thus confirming their provisional registration of January. The number finally registered is the proper baseline for University statistics on success rates, dropout and so on.

Occupational groups

And which occupational groups provide most students?

This needs careful answering because as these are still early days we haven't reached a steady state. Genuine knowledge about the University is still very deficient in the lower socio-economic groups which, of course, comprise the largest segments of the population and hence the largest potential source of Open University students. We distinguish fourteen broad occupational groups from housewives, through the armed forces, professional groups such as executives, educationalists, lawyers, doctors and so on, highly skilled trades, clerical and office workers, sales staff, to the retired and those in institutions (for example prisons). The single group providing most applicants so far has been school teachers who provided 35·9 per cent in 1970 (ie to start work in 1971), 30·2 per cent in 1972 and 29·5 per cent in 1973. Other main contributing groups are (in 1973 for 1974) housewives 12·9 per cent, professions and the arts 11·7 per cent, technical personnel 11·2 per cent and clerical and office workers 9·7 per cent.

Men, women and age groups

How are applications distributed between men and women and the different age groups?

The proportion of women applying has increased, from 25 per cent in 1970, 30 per cent in 1971, 37 per cent in 1972 to 43 per cent in 1973, but fell slightly to 41·8 per cent in 1974. But the subject area pattern of their applications is markedly different from that of the men. Women students cluster heavily in arts-based courses and, of those who select science, in biology courses. Most of our first students (those finally registered in 1971) were in the 26-35 year age group (38·6 per cent of registrations) and in the 36-45 year age groups (31 per cent). In 1972, these two groups still provided over 60 per cent of Open University students but meanwhile the percentage of 21-25 year olds rose from 9·2 per cent in 1971 to 19·8 per cent in 1972 and 29·4 per cent in 1973. So the situation is still pretty fluid.

Applications for various courses

And how about the distribution of applications among courses?

The Open University is, of course, committed to keeping a balance between arts- and science-based courses. So *applications* are likely to tell a different story from *registrations* since over the first three years there has been a gradual decline of interest in science-based courses. The highest number of applicants has been consistently for the social sciences foundation course—in 1973 (for 1974) these were 36·6 per cent of all applications. Applications for the arts and social sciences foundation courses amounted to about 62 per cent of all applications in 1970 (for 1971), a fraction higher in 1971, nearly 65 per cent in 1972 and 67 per cent in 1973. It is University policy to maintain a balance of 55 per cent arts- to 45 per cent science-based students so considerably more arts-based applicants have to be turned away each year than science-based.

Student progress

How do the students fare in the system?

In the event, remarkably well. In 1971, 19581 finally registered students took 21715 courses, 17567 (81 per cent) final examinations were written, and 16346 (75 per cent) resulted in credits gained. Of those who did not sit the final examination, a sizeable number pursued their course work to the end—studying presumably for the sake of studying, simply because they wanted to. If we define a 'success rate' as the proportion of students who

The Graduation Ceremony at Alexandra Palace, May 1974

achieve what they set out to achieve then the success rate in 1971 was somewhere between 75 per cent and 92 per cent. The highest rate of examination success occurred in the arts in which of 5318 students sitting the (foundation course) examination 5232 gained a credit. (The figures for other faculties were: mathematics 3407 (2779 credits), science 3841 (3507 credits) and social sciences 5010 (4848 credits). In 1972, 25203 students sat a total of 36076 foundation and second level examinations. 23578 of the students gathered in 33458 credits between them of which 16277 were foundation course credits. 1110 credits with distinction were awarded at foundation level and 1234 at second level. The lower limit success rates (comparable with the figure of 75 per cent for 1971) were 71·4 per cent for foundation courses and 70·5 per cent for second level courses. At the end of 1972, the first BA degrees of the University were awarded—903 in all. In 1973 3603 students graduated, 45602 having sat examinations in 49 courses with 42501 credits being awarded.

Dropout

So that means that dropout isn't too much of a problem?

It is always a problem, but not as big as it might have been: 90 per cent or more drop out of some correspondence college courses and seen in this context our results are very encouraging. But the main point is that the figures quoted are maximum. Of the 25-30 per cent who apparently dropped out over 1971/2, for example, many achieved what they wanted in just studying the course and ignored the final examination; others have merely stopped for a year or so and, under our guaranteed registration system, will take up their courses again later. So the true dropout figure is less than the 25-30 per cent mentioned.

Disadvantaging factors

Is there evidence that educational achievement before enrolling influences the probability of success?

The changes in students' profile from 1971 to 1972 would indeed seem to indicate that the somewhat less well qualified 1972 group found the courses rather harder going than did their predecessors in 1971. When the group with the highest educational qualifications is compared with the lowest groups, their rate of achievement of credits has so far been the higher without exception. The difference is very marked in mathematics and considerably less

so in arts, social sciences and technology at foundation level. At second level the gap has narrowed somewhat. We are waiting at the moment to see if this trend will continue.

Student participation in Open University affairs

We've been talking about students as learners; what about students as members of a university community?

Considerable attention has been paid to this, starting with the Charter of the University which determined a role for students in its government and provided for an 'organization of students'. They are also represented on the Council and on a number of other University committees. There is a consultative committee structure with its base in the study centres, a series of regional committees and finally a national committee at the top of the pyramid. In its first years of operation this structure has developed very successfully as a forum for discussion. The culmination of all the consultative committee work is the annual meeting of the General Assembly (provided for in the Charter). We also have a Students' Association which was formally established late in 1972 as a result of the students' own consultative efforts. Informal communication occurs on a nationwide scale via a newspaper called *Sesame* published for both students and full- and part-time staff. This and the *Open Forum* programmes I've mentioned earlier aim to provide information of value to students and staff in dealing with the University's systems, to provide general study guidance, to help develop a sense of corporate identity and to encourage discussion of current issues within the University and of general educational topics.

IV Some Financial Aspects

Fees etc.

How much does it cost a student to study at the Open University?

Presumably you mean in terms of hard cash! It depends on how many courses he studies and whether home experiment kits and summer schools are involved. The basic tuition fees are £12.50 for

a half-credit course, £25 for a full-credit, £37.50 for one and a half credits and £50 for two credits. Deposits for home experiment kits which are returnable amount to £5 per half-credit and £10 for each full-credit course. Summer school fees are £38.50 per week at foundation level and £40.50 per week for second level and above. Set book costs vary very much with course, but a maximum of £10-£15 is the rule. Postage and travel associated with a course might amount to about £20. However, students in need can obtain grants from local education authorities to cover summer school fees, thereby reducing the cost, and some local authorities are also prepared to give further assistance to students in need.

Capital costs

You mentioned earlier the buildings on campus at Milton Keynes, so capital costs must have been incurred.

That's true. By March 1974 the University had spent about £6.2M, of which about £1.0M was spent on television and radio programme facilities by the BBC at Alexandra Palace.

Future building

Does that mean that its building programme was complete by then?

By no means, unfortunately. The magnitude and complexity of the Open University operation were not, and could not be, foreseen when the first building programmes were planned in 1969 and 1970 so these are now being extended. The University is still growing, and it is estimated that by the end of 1974 permanent and temporary accommodation at Milton Keynes will be 25 per cent short of the total required. Apart from the perennial shortage of basic floor space two major problems remain to be solved. The first is the provision of a sophisticated science and technology building, with the appropriate research facilities which that implies. The second is the provision of permanent television and radio programme production facilities, since Alexandra Palace is only a temporary home, the lease on which runs out shortly. So there's quite a lot of capital to be found over the next few years.

Recurrent costs and income

If the University is still growing then recurrent costs must be rising too?

Correct again! In 1971 the total non-capital expenditure was about £7M, in 1972 £10M and in 1973 rather more than £12M. Probably about half of each increase has been due to inflation. As mentioned earlier, about 85 per cent of this income is provided by grants from the Department of Education and Science and the remainder comes from students' fees and other sources.

Running costs and direct student costs

Presumably most of the recurrent expenditure as in conventional universities, is on academic salaries and linked directly to student numbers?

No, that isn't the case. In a conventional university, for as long as the staff/student ratio remains a major determining factor, academic salaries will account for the major part of running costs and vary in line with student numbers. In the Open University the salaries of academic staff on the central campus account for only about 15 per cent of running costs and are virtually independent of student numbers. So direct student costs are high at a conventional university but low at the Open University, where they are mainly accounted for by printed materials, visual aids, tutorial and counselling services, summer school tuition, home experiment kits and so on. In 1972, out of a total expenditure of £10.13M only £2.57M were direct student costs. The point is that items such as faculty and course development costs, BBC costs, and central and regional administrative costs, for example, remain the same whether we have 20 000 students or 50 000 students. It costs the same given amount to produce a television programme whether it is then transmitted to one student or to a million students. Similarly, costs of designing and producing a course are the same for one student as for thousands. But printing or manufacturing course materials and sending them out by post obviously incurs costs directly related to the number of students we have.

Cost per student

So, contrary to the position in conventional universities, the cost of the Open University per student comes down markedly as the number of students goes up?

Yes, the Open University has an opportunity to benefit greatly from economies of scale. We calculate that increasing the number

of students from about 17 000 to 70 000 halves the overall cost per student.

What, then, is the cost per student at the Open University, when you compare it with a student at a conventional university?

It is very difficult to find an acceptably rational basis for such a comparison, when you consider that the systems are quite different; they cater for different populations with different objectives by different means. But one crude measure might be the gross cost per student and, for undergraduates, the Open University gross cost in 1972 was less than that for conventional universities by a factor in the region of three or four.

Another is the capital cost per student which is vastly greater at a conventional university than at the Open University by a factor of about twenty—but then Open University students use the premises of many other institutions including universities for summer schools, weekend laboratory work, study centres and so on.

A third is the cost per graduate. The rate of graduation from conventional universities is high in the UK—on average over 80 per cent of those entering university end up as graduates. We do not yet know what percentage of students finally registered with the Open University will end up with degrees, but it will almost certainly be radically lower than 80 per cent. At the Open University students can move in and out of the system more or less as they like, and can study a course with or without taking a final examination and with or without the aim of eventually graduating. So if we welcome students wishing to study at university level without wishing to graduate, what use can we make of a 'cost per graduate' figure?

There are other factors which also make comparisons difficult. The vast majority of Open University students do a full-time job of work while they are studying, they live at home and do not require maintenance grants. These features are not on the whole characteristic of students at conventional universities. But the latter have provided for centuries a dynamic force in society such as the adult students of the Open University are most unlikely to parallel. Nor must we forget that studying at the Open University can have profound effects on the established patterns of social, economic and family life of its students. For most students at other universities new patterns are developed at a time of normally

accepted transition and in relation to university life as the primary factor in the developmental process.

Other bases for comparison

So what comparisons, if any, between the Open University and conventional universities are likely to be fruitful?

Probably those bearing on the similarities and differences in the *systems* by which course materials are created and through which students are induced to learn. When it started, the Open University used, necessarily, a great deal of the know-how from conventional universities and then proceeded to innovate. Conventional universities would almost certainly now benefit greatly by studying Open University innovations and adapting them where appropriate, for their own use. Some have already recognized this, and we have a number of collaborative ventures operating in both the UK and the United States.

V Use of Open University Materials and Systems by Other Institutions

Can Open University materials be used by other institutions?

Certainly. In fact, many institutions all over the world have already bought materials for whole or part of Open University courses.

How do they find out what materials are available?

They write to the Marketing Division at the Open University who will then send complete lists of printed materials, films, audio-tapes and so on together with synopses of the various units or groups of units in each course. They can then order as much or as little as they need. The address is given on page 40.

Materials v. systems

But surely few institutions have a requirement for 'teaching-at-a-distance courses'?

That is so. But it is necessary to distinguish between course materials and the systems devised for their delivery to students. The components of Open University courses are designed so that, summer schools apart, students can learn practically everything they need to (in order to gain a credit) without necessarily coming face-to-face with tutors or other students. So long as students can receive printed materials, see the films, listen to the audio-tapes, receive set books, communicate with tutors on assignments, and so on, then the courses are suitable for their study. This means that the actual *systems* which the Open University has devised to enable its own students to do these things *in the UK* are largely irrelevant to other institutions unless they think they might be of use or interest.

So the courses are not dependent for usefulness or success on being used for teaching-at-a-distance?

Absolutely right. They can be used in a whole variety of learning situations—on campus, part on and part off campus, or off campus, for part-time or full-time study.

Additional learning sessions

In a way, then, regular conventional tutorials, lectures and discussions are a bonus to students taking Open University courses rather than being essential?

That's probably very largely true. Remember, though, that the Open University course teams are preparing materials primarily for British students and this obviously involves cultural presuppositions, some of which are likely to be invalid in other countries. But the situation is probably very little different from that created by the use of textbooks internationally.

All v. part

Surely it's much simpler to take over the whole Open University package–materials and systems, the lot?

We doubt it. It would be wiser to assume the opposite. The Open University *system* for delivery to, and general communication with, its students is based on factors which are peculiar to the UK.

Distances are fairly small; there are *national* radio and television transmission systems which reach most of the population, a fast and reliable postal system; the universities are national institutions rather than local or county or state institutions, and so forth. No other country has *precisely* the same kinds of systems, so it would be unrealistic to expect to transplant the whole Open University system lock, stock and barrel outside the UK and assume that it would work as well as it does inside.

Open University advisory and consultancy services

How does an institution find out how much of the Open University system it can use and how much it can't?

Unless a department, faculty or institution is simply going to use Open University materials as primary or alternative texts, for example, in an otherwise conventional course, sound preliminary planning is essential—and the Open University is willing to help. In fact, the requests for help in such planning exercises have become so high that the University now has both an advisory system for low intensity enquiries and a consultancy service for more intensive work with other bodies, a charge having to be made for the latter. We have also opened an academic office in the United States to help deal with the flood of enquiries and problems sent in or posed by North American institutions in connection with the use or potential use of Open University courses. These addresses are given on page 40.

Visiting Walton Hall

Wouldn't it be simpler for other institutions to send people to Walton Hall to work out their ideas?

Not necessarily simpler, for us or for them, and not necessarily cheaper either. So many people have wanted to visit Walton Hall that reluctantly we have had to restrict both the number that can come and the time that they can stay. Periods of study can be arranged for people from other institutions but as a general rule it has to be either in an area where our visitors can make substantial contributions to the ongoing work of the Open University or else there has to be a formal consultancy contract for which fees are charged.

What the University offers

Can you summarize briefly, what the Open University has that could be of interest to other institutions?

Certainly. Firstly it has *course materials*. Secondly it has *systems for producing course materials* which are well-structured and learner-centred. Thirdly, it has a variety of *systems which combine to deliver the courses* to students in a teaching-at-a-distance situation—primarily in the UK, of course.

Course team support systems

We've already talked about the first two–is there anything you can add about, say, the systems for producing course materials?

A great deal, but space is limited! We've described the course team system in some detail—but backing it up are a whole series of other systems. There are, for example, the media design, reprographic and media production systems, the television and radio production system, the copyright and editing, and media library systems and welding them all together is the scheduling and project control system.

Delivery systems

Yes, I see what you mean. What about the delivery systems?

Well, we emphasized earlier that it is the systems for delivery which are most likely to be peculiar to our UK situation, so let's not spend too long on this area. We have a lot of well-developed computer programs for handling the diverse data associated with our large number of students. These cover, for example, student and tutor records, admission procedures, computer- and tutor-marked assignments, materials handling and correspondence services, statistical procedures for evaluation studies and analysis, examination procedures, summer schools, and, of course, university finance and stock control. The basic language used is COBOL and our hardware, (and therefore programming), is appropriate to the ICL 1903T system. There is also an independent student computing system, with terminals at many study centres, for use primarily in mathematics and technology courses. The computer provides a print out of labels for students to receive course materials. The packages are despatched by Correspondence Services and information and correspondence materials are also sometimes distributed by the regions. There is also, of course,

the television and radio transmission system, but at present this is part of the overall BBC national system rather than part of the Open University.

Can I find out any more about these?

Yes, we have a general booklet on the courses we offer, and another one on the various backup systems which go into far more detail than is possible here. You can get them both from the Consultancy Service whose address is given in the next section.

Enquiry system summary

As I said before, that's quite an achievement! Could you summarize briefly the steps an institution ought to take if it is seriously considering using Open University materials or systems?

Yes, of course. We assume first of all that you've already got the basic information you need from our Information Services Office, but if you would like to know more about the University in general terms or want to pay a short visit you should write there again. The address is DIRECTOR OF INFORMATION SERVICES, THE OPEN UNIVERSITY, WALTON HALL, MILTON KEYNES, MK7 6AA, ENGLAND.

After that your main point of contact will be with the Consultancy Service and here you need to specify as clearly as possible the characteristic of the student population you need to serve, the levels and areas of academic knowledge you wish to deal with, and the conditions under which any learning system you implement will have to operate. This will help you clarify whether your interest is in our *materials* or *systems* or both. Having done this write to THE DIRECTOR, THE OPEN UNIVERSITY CONSULTANCY SERVICE, WALTON HALL, MILTON KEYNES, MK7 6AA, ENGLAND. He will send you more detailed information about courses and systems, including for the former, catalogues from the Marketing Division.

On the other hand, if you would like to get in touch with Marketing direct, write to THE DIRECTOR OF MARKETING, THE OPEN UNIVERSITY, PO BOX 81, MILTON KEYNES, MK7 6AT, ENGLAND.

There is one exception to this. The University maintains its own office in New York and if you live in North America you should write to THE DIRECTOR, OPEN UNIVERSITY OF THE UNITED KINGDOM (NORTH AMERICAN OFFICE), 888 SEVENTH AVENUE, NEW YORK, NY 10019, USA.