

# THE OPEN UNIVERSITY



*Pictured outside the original Walton Hall are (left to right) Tony Tompkins, data centre production manager and Leo McBride, planning, progress and control manager*

**"It does seem extraordinary to me and my colleagues that, with the worldwide reputation we have achieved and with the capabilities that we have to regenerate the economy, we seem to have been singled out for particularly harsh treatment in the university sector over the next three years".**

Tough words for a university vice chancellor to address to a government minister in public, but Dr John Horlock, vice chancellor of The Open University was in no mood to pull punches at the annual OU graduate press conference earlier last year.

The Open University, forged in 1969 in the white heat of Harold Wilson's drive for a more technology-based society and one of

## A BITTER SWEET SUCCESS

the indisputable success stories of the past decade or so, is today fighting a rearguard action against successive cutbacks in the real level of

Government grant which, at £56 million a year out of a budget total of £70 million, is its major source of funds.

What the university has had to face up to for the two years to the end of 1986 is how to save a total of £13.5 million. It hopes to roll back the pressure on budgets with a 'Defend the OU' campaign: it hopes, in other words, to get the same 'second chance' from Government that it offers itself to its students. But, at the bottom the 'university of the air' feels let down with its ideals intact, but, to extend the analogy, somewhat punctured.

Since its first OU courses began in 1971 a total of 180,000 people have registered as undergraduates and another 120,000 have studied single courses as associate students.

To date, over 62,000 BA (Open) degrees have been conferred.

Having concentrated in the early years on offering people from all walks of life the chance to study for a degree, the emphasis latterly has shifted to continuing education. Against a background of high unemployment, redundancies and accelerating technology in the economy as a whole, the OU is putting its energies behind what it sees as the urgent lack of retraining people for new careers.

In association with the British Institute of Management and the Foundation for Management Education, it has launched a series of courses designed to improve the management skills of new and middle managers. The Open Business School became, at a stroke, one of the biggest business schools in Europe when 1600 people registered for its first course in management education.

More recently it began a similar programme in updating for industry in technical subjects, namely manufacturing systems and computers, with major financial help from the Science and Engineering Research Council. And more recently still, with the help of Barclays Bank, it launched 'STARTUP your own business'. A course designed to help people turn ideas for new businesses into successful commercial ventures.

On top of all this, it has extended the concept of its community education packs, offering advice on everything from parenting to racism in the workplace and planning for retirement, into 'personal interest packs'. These cover general interest, musical, religious and historical subjects from 'The rise of jazz' and an 'Introduction to Hinduism' to 'Understanding Modern Europe'.

Currently there are over 100,000 registered students, 40,000 of whom are outside the undergraduate programme. With considerable justification, therefore, the OU can claim that it has far exceeded its goals. It has certainly achieved substantially better results than other attempts at 'distance learning' within Europe. It has become, with its 131 undergraduate courses and broader community and business programmes, a model of its kind looked at with envy by other countries.

The organisation behind this bitter sweet success story is considerable. The large modern complex of buildings that make up the OU administrative headquarters at Walton Hall in Milton Keynes also



*Shepherd, Philip Pennington, in town for the OU's annual national graduate press conference - January 31 1984*

includes the special BBC OU production centre where 300 BBC staff are engaged in putting together the 35 hours of TV and 13 hours of radio broadcasts each week.

The OU itself employs some 2800 full-time staff. About 600 staff are based in the OU's 13 regional offices which administer a nationwide network of 260 study centres and 5000 part-time tutors and counsellors.

Naturally enough with such a complex organisation developed in the late '60s and through the '70s, computers have figured large in the development story. The OU is, in the university's own phrase, 'an organisation built around computer-based support systems'. From the initial intake of 25,000 students and a handful of courses, computers have formed the basis of the administrative set up.

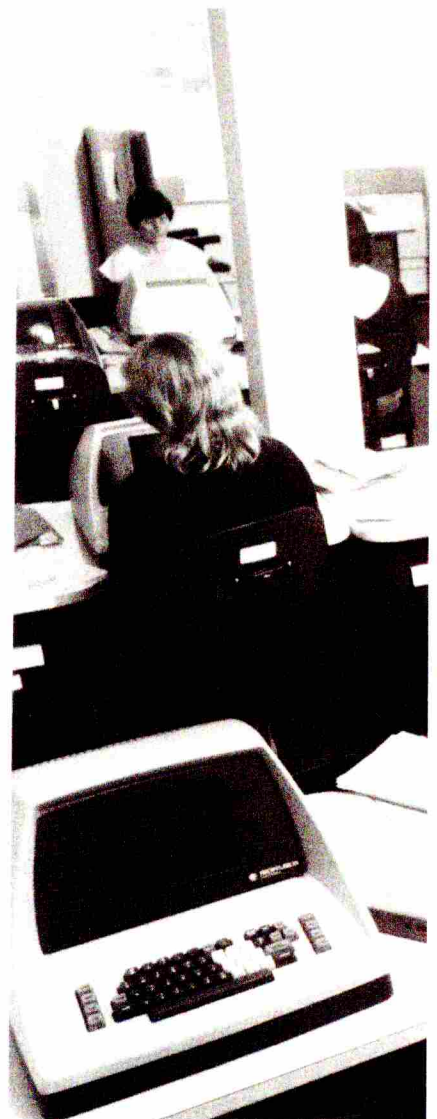
A Management Services Division (MSD), distinct from the academic computing services that support the computing element in a range of courses, is responsible for a raft of systems from straightforward financial applications - payroll and the like - to some quite unique systems handling student programmes.

MSD has a total staff of about 130 people divided between a Development Section, an O&M Unit

and a Data Centre. It operates a variety of computer equipment, but the main workhorse is a large-scale Sperry 1100/82 mainframe supporting a local and dispersed terminal network of over 100 visual display screens.

From one application system in 1969 there are now 33 applications with over 1300 operational programs in use. Many of these systems are seasonal by nature and are, by the same token, time dependent and critical. The merits of in-house control and the ability to respond in a flexible and timely fashion are, therefore, in the forefront of OU Data Centre thinking.

This applies from data prep onwards, which since 1978 has been handled locally with ROCC Computer equipment. In the early days,



explained Tony Tompkins, data centre production manager, the OU operated a conventional punched card installation. "As a pioneering university, we didn't also want to pioneer key-to-disk systems," he commented. In due course, however, the university installed a Seecheck system which has now been replaced by a R2805 equipped with 16 keystations.

The installation earns its keep on bread and butter data entry: nothing fancy, and no really large volume single jobs. But the work is spread across many applications and there are a large number of different format types.

The larger applications are finance and student records, admissions, assignments and exam systems. Each year about 400,000

assignments are submitted and marked in addition to examination papers at the end of each course. All tutor-marked exam papers, which contribute to the main student assessment load, pass through data prep, but it's not so much the volume as the turnround that's critical, according to Tompkins. It's here that a flexible on-site data prep system becomes a necessity in order to achieve the 100 per cent hit rate against deadlines.

Altogether the current data prep workload is an estimated 140 million key depressions in 1984 compared to 100 million key depressions in 1980. This is handled by eleven keyboard operators working a conventional day shift only.

Despite the considerable efficiency of its computer systems, continuing inflationary pressures and a

reducing grant have dictated increases in student fees. It now costs £133 for tuition on a full course and £82 per summer school week, hence, an undergraduate student can expect to pay about £300 a year including books and travel.

The university's fear is that this would price out of the market precisely those students who it is most anxious to attract: those who, for various reasons, some of them economic, missed out on a university education.

The pattern of students has changed over the years. Teachers now form a decreasing proportion of the student body going from 41 per cent in 1971 to a figure of 18 or 19 per cent currently.

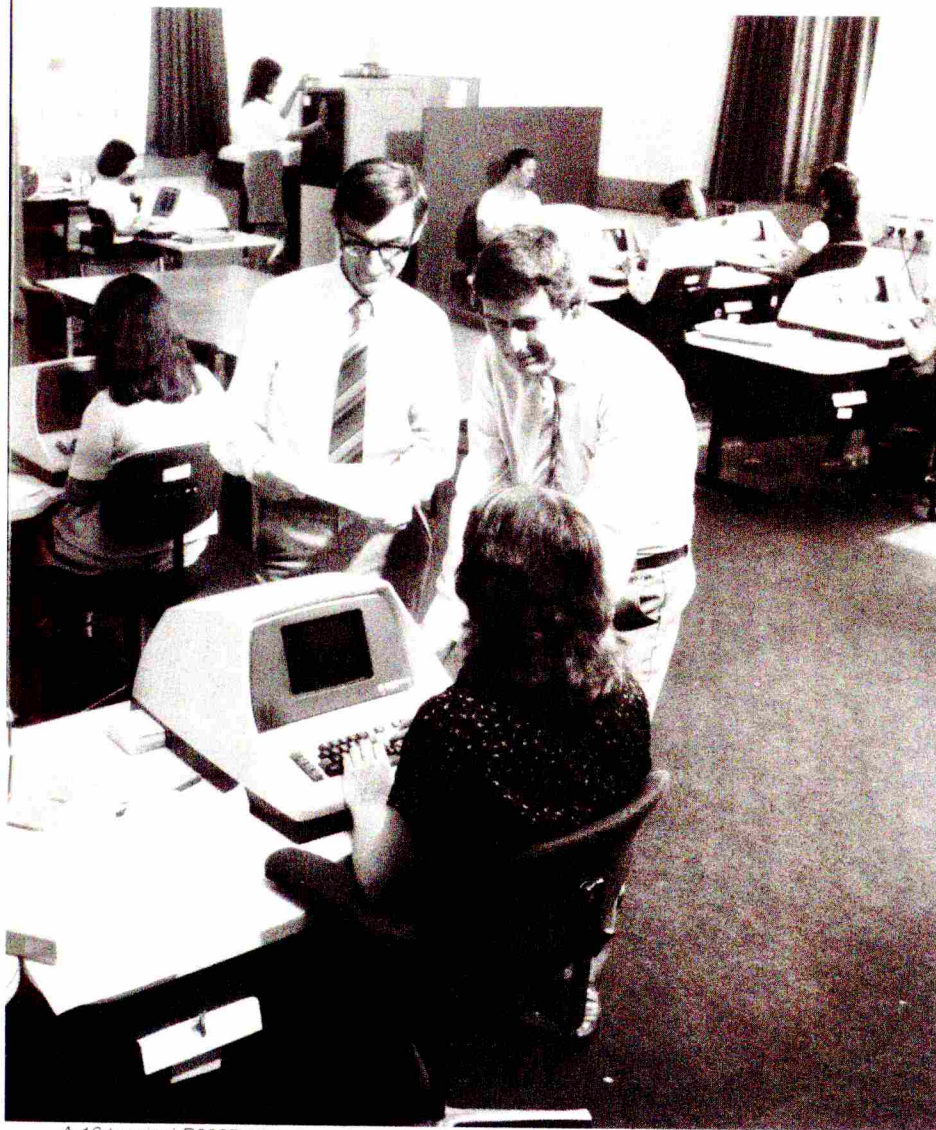
Housewives make up about 16 per cent and technicians a further 13 per cent. People in manual jobs account for 7 per cent, while those in office, sales or service industry jobs account for 15 per cent. And the balance between men and women is roughly equal.

If the pattern has changed, therefore, the variety and 'colour' of the students hasn't. The 1983/84 crop of 5232 OU graduates, for example, included a shepherd, a midwifery sister, a trumpet player with the English National Opera, a marketeer of industrial fasteners, a systems analyst, a microcomputer entrepreneur and so on until the sheep, if not the cows, came home.

The OU is justly proud that over 50 per cent of students who enter the university get through to a degree at the end of the road - 'very much higher than anywhere else in the world', according to vice chancellor Horlock. It's a sad commentary on the current state of educational funding that, after a period in which the OU has dramatically improved its productivity by undertaking a massive continuing education programme, it is confined to a financial straitjacket that takes no account of this and no account of inflation.

In appealing to the Government at its highest level by warning that the OU was being forced to reexamine its whole system of teaching, Dr Horlock said that the OU was at a 'second crossroads'.

The first, he reminded his audience, was 'when, as Secretary of State for Education and Science, Mrs. Margaret Thatcher defended The Open University's creation in the early 1970s and succeeded in persuading her colleagues that the university should go ahead'.



A 16-terminal R2805 minicomputer system is installed in the data centre at The Open University, Milton Keynes. The installation earns its keep on bread and butter data entry with the larger applications covering finance, student records, admissions, assignments and exam systems. Pictured discussing a data query with operator, Dorothy Izzo, are (left to right): Tony Tompkins, data centre production manager and Leo McBride, planning, progress and control manager.