

**Developing and implementing
a Strategy for Central
Teaching Space at Leeds
University -
a Service Provider's View**

David Brook
University Media Services
University of Leeds

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1 Introduction

Leeds University has almost 21,000 students on campus and 5,000 staff. Over 500 undergraduate degree programmes are offered, with an expanding programme of part-time degrees. Also, the Faculty of Medicine, Dentistry, Psychology and Health links to the two major teaching hospital trusts in the city and the university is the centre of a network of associated colleges covering many fields of endeavour from health studies to dance.

The core of the university's mission is to promote excellence and to achieve and sustain international standing in higher education teaching, learning and research. The university is achieving this in the context of its teaching and learning strategy by means of a very wide ranging and multi-layered approach, to the provision and support of the student's learning experience. This includes amongst other things, supporting course delivery on the web as well as the supply and support of good quality teaching space.

The university recognized five years ago that there were significant problems associated with the supply and support of its central teaching spaces:

- the *accommodation and facilities* were, at that time, falling below the standard expected by the teaching and learning community;
- a limited range of *teaching space support services* was available;
- the *organisation and delivery of 'fit-for-purpose' space* to end-users was becoming inadequate;
- there was no system for *recovering the cost* of central teaching space from those who used it most.

A trend to transfer 'departmental' teaching space to the 'centre' exacerbated the general problems. This trend followed the introduction of charging for space (as part of an overheads charging model at Leeds). The space handed over has, occasionally, been in poor condition, with no audio-visual facilities and no day – to – day management or support.

Substantial improvements have been made in the standard of accommodation and facilities in many of the central spaces and there is an improved range of support services, but some problems remain. Also, teacher/learner expectations have continued to rise, often beyond the capacity of the university to meet them. Teaching space has become one of the factors included in the scoring for Teaching Quality Assessment.

This report sets out to describe how Leeds identified and then tackled the problems and issues connected with its need to deliver fit – for- purpose teaching and learning accommodation and services. The report, written from the point-of-view of a major service provider:

- reviews the current situation at Leeds;
- sets out the issues associated with developing and implementing the teaching space strategy and outlines the actions agreed to address the issues;
- summarizes the strategic context for our planning.

2 The Current Situation

A strategy has been developed at Leeds, which is providing the framework for the identification and pursuit of objectives leading to the achievement of our aim to provide space and services that are always fit-for-purpose. The Teaching and Learning Committee agreed that the Departmental Support Unit and University Media Services should lead a review of the management model for central teaching space, including options for the recovery of the costs of central teaching space from users.

The strategic aim is clear: to continuously improve the fitness-for-purpose of central teaching space and the services that support it. The mission is to support the aim of the university and its teachers to achieve excellence in teaching and learning. Also, the need to achieve high TQA ratings is increasing the pressure to adopt a quality-led approach to the provision of teaching accommodation and supporting services. There is a range of issues under discussion including integrated management of all services, booking systems for central space, setting and delivering appropriate standards of support services (including AV and computing) and systematic funding. In the future we anticipate more space being released by departments to the 'centre'. A major objective is to recover the costs from users in order to fund the operation.

About 25% of the university's teaching space inventory is classed as 'central'. Some central teaching space has, over the years, deteriorated and is in need of refurbishment and re-equipment. A two phase programme of refurbishment and re-equipment has been completed in the central lecture theatre block (c.3,000 seats), and in a range of other tiered and some flat teaching spaces (c.500 seats) located in other buildings on the campus. Audio visual presentation facilities in two more major lecture theatres (c.1, 000 seats) were replaced over the summer 1997. Plans are in hand to take a phased approach to a rolling programme of further improvements in central and departmental teaching and learning accommodation.

Before refurbishment of the central lecture theatre block (25 theatres and c.3,000 seats), every lecture theatre more or less met the minimum standard of writing surface (all blackboards), slide projector, and OHP. The facilities could be maintained easily by two technicians, with the help of a porter. After refurbishment, things have changed: many of the theatres now have sophisticated presentation equipment, including video and data projection, fixed computers and automatic control systems. This type of equipment presents new problems. Technical staff need to be more skilled and more highly trained, and more technical staff are needed. Also, teachers often need help in becoming familiar with the new systems. The improvements have also raised teacher and learner expectations generally. For example, teaching and learning styles are changing and an increasing number of users expect their teaching spaces and facilities to be adaptable and flexible - capable of supporting a wide range of learning activity from lectures to syndicates. The demand for, for example, large screen computer display has increased to the extent that it is becoming a routine requirement rivaling that for the OHP.

Central Teaching Space Services are provided by the University Media Services. Media Services is an organisation of 79 staff turning over around £3,200k annually. Media Services operates 3 divisions:

1. Printing Services
2. Television Services
3. Photography and Central Teaching Space Services

The university's videoconferencing service is based in Central Teaching Space Services (CTSS), utilizing up to 3 ISDN line pairs via a PictureTel Concord 4500 studio suite (eq. cost 95/96 £50k) and PictureTel Live 100 PC-based equipment (eq. cost 96/97 £4k).

This year (1997/98) the university has funded a budget of £140.5k for CTSS support, provided by Media Services. The Head of Photography and Central Teaching Space Services provides direction and administrative support. An academic related CTSS manager provides line management. They are

responsible to the Director of Media Services for running the services including planning and development, staff management and deployment, maintenance, budgeting and financial control etc. There are 5 staff in Central Teaching Space Services: the academic related line manager and 4 technicians. Permission has also been granted to recruit another technician on a fixed term rolling contract. Additional effort is provided by a student workforce, employed on a casual basis, to provide routine maintenance and user support.

The central administration handles the booking for all the space held centrally and has become involved increasingly in the allocation of departmental teaching space to meet the requirements of the central timetable. The need to match the needs of end-users to the spaces and facilities available, in a timely way, is a non-trivial operational issue. This is viewed as a mission critical objective.

A cross-service management team is being set up for the provision of booking, audio-visual, computing and other support services to central teaching space. Arrangements are in hand for sounding user views on accommodation and services by means of user panels, focus groups etc. Matters of policy and finance are being dealt with jointly by the Teaching and Learning Committee and the committee of Senate with responsibility for information strategy, systems and services (CISSS).

Finally, there are provisional amounts for teaching space development and refurbishment identified in the university's Corporate Plan for the period to 1999 totaling £600k.

3 The Issues

It has been said that the aim of the university strategy for the development and maintenance of central teaching space is to ensure provision of spaces that are fit for the purpose. The strategy is linked with the university mission and other strategic planning issues in the university including its Estates, Teaching and Learning, and Information Strategies.

There are some broad and recurrent planning objectives:

- the need to anticipate future needs for central teaching space - with realistic planning horizons;
- to decide what levels of maintenance and support services will be required;
- to decide how these needs can be met within known resource and other constraints;
- to arrange to implement plans to meet these needs;
- to repeat the process in a rolling programme of building/refurbishment and service review.

These broad objectives throw up a number of related (and recurrent) issues and questions:

- university teaching spaces now – what type are they? Who uses them? What’s wrong/right? What do they cost?
- university teaching spaces in the future – who needs them? What do they need? Where are they? How much will it cost?
- Setting standards of accommodation and facilities - what are they now? What should they be? What do they/would they cost?
- Setting standards of support services - what are they now? What should they be? What are/would be the management issues? What do they/would they cost?
- Strategic framework – where are you going? Where do you start? What are the priorities? Who does what? How do you fund it? How do you know when you’ve got there?

3.1 University teaching space now

The breakdown of central teaching space at Leeds, according to type, is broadly 65% raked floors and 35% flat floors. The total number of ‘centrally controlled’ rooms is 49, and this space provides over 4,500 seat places. There is a total 358 ‘non-central’ rooms listed as teaching spaces (providing an estimated 11,500 seat places), of which only a small proportion have raked floors, and their nature is more normally seminar/tutorial type space than provision for lectures. This excludes ‘specialised’ teaching space such as laboratories, workshops and so on. Preliminary research is indicating that there is felt to be a shortage of medium size, flat teaching spaces. In terms of floor area given over for teaching space, the least area is occupied by central teaching space (at around 5,000 sq. m), with other (departmental) teaching space taking up approximately 15,600 sq.m of floor space.

The condition of most central teaching space is now satisfactory, though pockets remain of space that is below standard. This is also the case in some departments. In order to qualify for inclusion in the (centrally funded) refurbishment programme, it has been agreed that any ‘departmental’ teaching space should meet the following criteria:

- *the central booking system*: the departmental space(s) should be booked through it;
- *the general availability of the space(s) to users outside the department through the central booking system*: a general availability to non-departmental users of 50% during normal teaching hours is the benchmark;
- *frequency of use*: the utilisation rates for the rooms should reflect those of the central lecture theatres, where the average frequency of use is around 60%;
- *the need for it*: a positive view on the likely demand for the type and location of the space in question - some spaces are more fitted to general use than others;

- *standards*: the rooms should be capable of being brought economically up to the minimum agreed standards of facilities and equipment.

It has also been decided that a view should be formed as to the ‘affordability’ of any proposals in the context of the budgets available and whether part or matching funding is available from any source.

Much information is available about existing spaces, but further work is being undertaken to pull these data together and to arrange for collection, analysis and interpretation to be more routine over the longer term. It will also be important to gather a wider range of information, for example on the quality of existing space and the frequency of its use. Clearly, it would be a waste of money to improve poor quality space that is little used, unless it can be determined for example, that its poor condition is the reason for low utilisation. Reliable information on quality and utilisation is, therefore, needed to support the decision to improve. The collection, maintenance and analysis of a wide range of data on space will be essential if a strategy for development is going to be successful. A comprehensive rolling survey of university teaching space is planned which will gather information on all aspects of its condition, use and availability.

3.2 University teaching space in the future

As the need to teach large student cohorts in a modular environment becomes commoner, there is the view that there is an increasing requirement for two particular kinds of teaching space:

- large group (lecture) spaces for 500 plus and
- ‘flexible’ small to medium spaces for 10 to 30.

As class sizes grow, it is becoming more usual for teachers to use a variety of classroom methods. This can include using new AV technology such as large screen data projection, as well as linking together (with television), medium size theatres to produce ‘virtual’ large ones. There is also a growing need by some teachers, to divide large classes into smaller groups (such as ‘buzz’ groups). For example, it is expected that large, flat, teaching spaces will be furnished with lightweight tables and chairs, which can be moved around easily. This would support the use of the space by teachers who may require a large ‘lecture’ environment for part of the timetable period and then its reconfiguration into a syndicate or ‘buzz’ group layout. Connection to the university network is also expected to be a universal requirement.

The technology needed to support classroom teaching increases in scale and complexity. Until only a few years ago, all that a lecture room needed was some seats for the students (facing the front and supplied with a writing surface), and a blackboard and a lectern or table for the teacher. (The laboratory scientists also required facilities for small-scale experiments and demonstrations). Then came the overhead projector, the slide projector and the return of TV with the video player. Now there is the computer and networks and related display tools. The black (chalk) board is being supplemented, and in some areas replaced, by the white (marker) board. From having a next to zero maintenance cost, the teaching room is becoming not only costly to equip, but costly to run and maintain, including escalating the costs of security.

As technology develops, it is having an impact on the type of space needed for teaching and learning. For example, CBL/multimedia is developing - if always more slowly than the enthusiasts predict. There could be a major strategic question here relevant to forecasting likely need for types of teaching space in this respect. The question is - will the requirements of the multimedia computer displace more traditional teaching spaces, or remain an adjunct with no significant impact on the design and supply of teaching space? For example, would the design of learning spaces for a new learning centre (probably with lots of multimedia technology) affect directly the planning for and design of other teaching and learning spaces programmed for refurbishment? This university has invested in a number of learning areas such as the Learning Centre and computer clusters, and it

might be appropriate to consider at an early stage whether the management of these resources should be undertaken alongside the management of central teaching space. As the university moves to the millennium, it may be that it wishes to constrain the creation of degree programmes to suit the timetable and the accommodation available, or specialize in a smaller range of teaching methods to reduce the impact of new programmes on the estate.

A clear picture of future needs is now essential. A wide-ranging user consultation programme is being implemented which will give attention to the full range of likely users and the uses to which they will put the space. A design group has been assembled, which will be responsible for planning and delivering (refurbished) space. The rolling programme will be informed by user views on future needs. Forecasting horizons of 3, 5, and 10 years, with appropriate levels of definition, will be agreed.

3.3 Standards of accommodation and facilities

Connected with the need to take a forward look at what types of space and facilities will be required, is the need to set minimum standards for existing accommodation and facilities. This will be particularly important if it is anticipated that university teaching space is to be managed against a background of quality audits and the operation of the overheads model at Leeds.

Minimum standards of accommodation and facilities have been agreed for:

Lecture Theatres:

- a blackboard/whiteboard;
- a bench, desk or other note-taking surface for students;
- a 250w OHP (moving to 400w as soon as possible);
- a projection screen;
- slide projection equipment;
- video equipment (sometimes by advance request);
- computer display equipment (often by advance request)

Seminar rooms:

- a 250w OHP (moving to 400w);
- a blackboard/whiteboard;
- a bench, desk or other note-taking surface for students;

Following refurbishment over the last four years, these minimum standards have been met in the Roger Stevens Lecture Theatres, the Rupert Beckett Lecture Theatre, the Conference Auditorium and rooms in the Michael Sadler Building. The improved facilities in these areas are increasingly in demand and changes in teaching methodology are putting an additional strain on the rooms with new technology – those with large screen data projection for example. As teaching styles and teaching technology continue to develop, many more lecturers require the higher tech facilities that are only available in a limited number of rooms. Several departments have used their own resources to improve facilities, e.g. Electrical and Electronic Engineering and the Leeds University Business School, but this has not been typical.

A sample of views on recently refurbished space is indicating that the standards set are adequate for undergraduate teaching. Recent quality audits have only once raised teaching space as an issue of concern (although users often highlight the variation in standards across the university). There may be different standards (perhaps higher ones) for post-experience users (for example in a Business School environment). Higher standards still are expected in the Rupert Beckett Lecture Theatre, which ‘doubles’ as an intensively used 350 seat teaching space and as the ‘flagship’ theatre to which the public are invited to attend major public lectures and inaugurals.

Also, the recent improvements to the ‘flagship’ Rupert Beckett Lecture Theatre illustrated to us the difficulty of setting appropriate standards of accommodation and facilities (and hence the cost of providing them), when undergraduate teaching is not the sole consideration in the design of a refurbishment. Our consultants estimated the cost of making improvements of the highest specification at £547.4k. This included improvements to the circulation/entrance areas in and around the lecture theatre (estimated at nearly £127k), and major refurbishment of the fabric and facilities in the theatre (£420.4k) including new seats, carpets, bench - tops and audio-visual systems to the highest quality. The estimates for the theatre alone yielded a cost *per* seat figure of around £1,200. This compared with a cost *per* seat of £350 in the main lecture theatre block (Roger Stevens Building), which is used predominately for undergraduate teaching. In the event, and in the light of budget constraints imposed later, only minimal improvements were made to Rupert Beckett – mainly up-grades to the presentation systems and a small number to the fabric of the theatre (e.g lighting control and health and safety work).

A design and project management team has been put together which will have responsibility for specifying teaching space improvement schemes and managing the programme. They will need, *inter alia*, to pay attention to monitoring demand to modify standards of accommodation and facilities in line with user expectations.

3.4 Standards of support services and their supply

There is a wide range of suppliers of support services to central teaching spaces at Leeds. They are:

- University Media Services (technical staff, AV systems support, health and safety);
- the central administration’s Teaching Space Office (central timetable and booking);
- Academic departments or schools (e.g the School of Chemistry);
- Computing Service (network and communications)
- Works and Services (buildings services);
- Works and Services (portering);
- Security Services (security);
- Commercial and Residential (external marketing/cafeteria/refreshment facilities);

Media Services has been tasked, in addition to providing AV support services, to provide the ‘ownership’ and leadership function in central teaching space service matters, leading and coordinating the development and delivery of fit-for-purpose space and support services.

The Student Office, in the central administration, is responsible, in consultation with the departments, for the development of the timetable, the identification of modules and the enrolment of students. Course requirements for central teaching space are defined and booked by the same office. The arrangements work well most of the time. There are occasional difficulties, however, matching group size to room capacity and facilities required. The most serious consequence of this is where end-users have been led to expect a service or facilities (promised by the booking agent) which, for one reason or another, cannot be delivered. The problem is thought to be located at the break in the ‘order supply chain’, where the space booking function is separated from the actual delivery of suitable space and support services by UMS and other providers, to end-users. A cross-service management team will look at various possibilities including piloting trials for a unified space and services booking and supply system.

A related problem is the difficulty of managing the coordinated delivery of the other services to central teaching space, ranging from complex IT (Computing Services) to changing light bulbs (Works and Services). Unclear ownership of problems can lead to frustrations at minor level (such as who is responsible for securing a building at the end of a session), through to major safety issues including fire and emergency procedures in central buildings

The cross-services management team, representing all service providers, will look at the issues and it will aim to set minimum standards of service in a framework of service definitions for all service providers. Appropriate service descriptions and performance measures will need to be agreed. This management team will propose standards for central teaching space services from a user - focused base, relying heavily on input from users which has been obtained in a regular and systematic manner. The 1997/98 development plan includes in this respect a survey of all central teaching space users, a number of focus groups to get feedback on particular aspects of recent refurbishment and a general consumer panel meeting.

Also, as the central inventory continues to expand, it is not likely that the central services will be able to increase the scale of their operations at the same rate. It may be necessary to consider 'franchising' academic departments and other local providers to do the work. Benchmarking service standards is being actively discussed as a means of achieving consistency of provision in this event. It is clear that whatever the arrangements for dealing with such rapid expansion will be, benchmarked standards of service could be essential to the success of a teaching space strategy that will need to operate in the highly devolved institutional environment at Leeds.

3.5 Funding

There are two funding requirements if all teaching space in the university is to be developed, maintained, and its users supported in a managed way. The first is capital funding for building and/or refurbishment and the second is recurrent funding for its maintenance and the provision of support services. The identification of a constant source for this funding is made increasingly difficult as the university continues to devolve and moves to an overheads model as a means of reducing the central 'top - slice' charges, and where 'space' is proposed as a major driver for cost recovery purposes.

The current situation on capital funding for accommodation and equipment refurbishment has been reported earlier. Top-sliced provisional amounts for teaching space improvements appear in the Corporate Plan for the FY years to 2001 totaling £600k. This will be allocated between central teaching space and some departmental space according to an agreed programme.

It has also been reported earlier that a budget of £140.5k has been set for Central Teaching Space services for 1997/98. The university is considering how best it might deal with these costs for internal accounting purposes and budgeting. There is a range of options under discussion from 'top-slicing', and subsequent recovery by means of overheads, through to a *per capita* charging regime where only user departments pay. A separate charge for the timetabled use of central teaching space has been piloted in the overheads charging model. This was based on the student hours booked through the central administration. The amount recovered for central teaching space use, however, was equal only to the total notional space charge at current rates (£70m² x total CTSm²). This does not include the full costs of service providers including, *inter alia*, the Student Office, Media Services, Computing Services and Estates. Provision is also needed to recover the costs of on-going maintenance, including repairs and the replacement of minor equipment and furniture.

Also, an internal market has been established between departments outside the central booking environment. Departments have been asked to charge the same rate as that used in the overheads model, but many departments (having invested in their teaching areas), would like to be able to charge a premium for their space. In some cases, appropriate space is very limited and other departments are obliged to use some of this premium space.

There is a strong business case to be made for encouraging the departments and other providers in the university to develop new income streams by exploiting all spare capacity – whether it be space or services. The income generated could be used to contribute to the cost effectiveness of space and, therefore, to the level of charges that need to be applied to core (timetabled) users. A marketing plan is under discussion, which will be implemented by the university Conference Office and other interested divisions including External Affairs.

4 The Strategic Context

There is strong commitment at all levels at Leeds to maintain a strategic framework for central teaching space development. 'Fire-fighting' solutions to teaching space problems are best avoided; although it is recognized that they are sometimes unavoidable in view of uncertain planning assumptions at national level.

It is widely recognized at Leeds that the strategic view of teaching space in the university needs to be maintained in order to ensure that provision is always fit for purpose. The strategy needs *inter alia*, to recognise constantly changing user requirements and to support arguments for planning and resourcing the means of meeting them. The 'needs' of classes and the demands of the timetable derive from academic pressures to maintain a range of degree programmes and to provide teaching in many modes, with effective freedom for the teacher to choose the modes he or she prefers. This often creates pressure for more, or for larger, or for better equipped classrooms (which puts demands on the timetable). The university needs a constant sense of the 'space' problems these competing pressures create. The academic bodies that approve new programmes or encourage new teaching methods need increasingly to be aware of the logistical constraints implicit in providing for such activity in a fixed stock of classrooms with a finite budget for their operation and maintenance. The planning and provision of non-teaching accommodation including that for the services which support teaching, also requires careful consideration by its inclusion into discussions which take an holistic view of the processes and requirements associated with the delivery of learning to our students.

It is plain that for the foreseeable future there will be a need for 'traditional' teaching space and a range of appropriate support services. There is no sign in the short term, of a fundamental change in the undergraduate learning experience in this respect. The predicted shift to more 'individual' learning techniques, which employ a wide range of learning methods including IT and screen-based delivery of learning materials, is slower in coming than perhaps we might imagine. Leeds is positioning itself for these developments – it opened recently, for example, the Nathan Boddington Building, a 'virtual' learning centre capable of delivering a wide range of the curriculum to networked learners. Whilst we are investing heavily in the development of forward looking IT-assisted and network-based learning projects such as this, we expect at Leeds to continue to provide high quality teaching environments for groups of students for some time yet.

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Dr.Harry Lewis, Department of Philosophy;

Dr Roger Boyle, School of Computer Studies.

Contacts

<http://www.leeds.ac.uk/>

- David Brook Director of Media Services
 ☎ +44 (0)113 233 2650 E.Mail D.Brook@Leeds.ac.uk
- Eric Daniels Head of Photography and Central Teaching Space Services
 ☎ +44 (0)113 233 2667 E.Mail E.P.Daniels@Leeds.ac.uk
- Andrew Coulson Manager Central Teaching Space Services
 ☎ +44 (0)113 233 2678 E.Mail A.T.Coulson@Leeds.ac.uk