

THE FLEXIBLE CAMPUS – JOINING UP PEOPLE, PEDAGOGY, PLACE AND PROCESS

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ABSTRACT

There is a pressing need for institutions to join up their Estates Strategy, ICT Strategy and Learning and Teaching Strategy to cope with unprecedented change in education practice and to be sustainable, future focussed and student centred. Based on a major development of a new university formed in August 2007 in the United Kingdom – the University of Cumbria - this paper articulates the alignment of learning spaces with infrastructure. It begins to chart how one institution is attempting to plan its Estate Strategy, at a critical stage in its development – the first year of the new University. The key strategies that might deliver optimum space utilisation considering learning principles, planned future growth, resources and institutional mission are uncovered. Consequently an emerging model of a distributed university including the establishment of what is meant by a flexible, sustainable campus in the 21st century is analysed and expressed.

INTRODUCTION

The institution has been through a major transformation, following the gaining of Taught Degree Awarding Powers, and the publication of Sir Martin Harris' Report in September 2005 (Harris, 2005), proposing the creation of the University of Cumbria. Following the amalgamation of St Martin's College of Higher Education, Cumbria Institute of the Arts, and the Cumbria campuses of the University of Central Lancashire, the new University formed on August 1st 2007. The formative years of the University are extremely significant; the institution has many challenges not least serving a population with low aspiration for higher education (HE) due to lack of motive and opportunity. Consequently the University is re-shaping itself to deliver a very different kind of learning experience, across a wide geographical area, including the Lake District (an area of outstanding natural beauty) and sparsely populated centres. Central to the University's aspirations are the county's further education colleges (FECs) which offer progression routes to HE through their varied vocational programmes – some brokered through Cumbria Higher Learning. The latter is one of 28 lifelong learning networks (LLN) in the UK (<http://www.lifelonglearningnetworks.org.uk/>) set up to encourage take-up of further and higher education across the regions.

Consequently the learning and technical infrastructure of the University is being completely re-designed to focus on these new learners to maximise their potential of benefiting from higher education wherever they are and whatever their life stage. The University operates from 17 different locations including in London, Barrow and Whitehaven on the north-west coast. It relies on Information and Communications Technology (ICT) to connect its main campuses, (currently six) and their staff and students in pursuit of its core business.

The University has put together a comprehensive Business Plan to draw down capital funding of £164 million from stakeholders to develop its estate. The latter can be thought of as the University's physical and spatial presence within a diverse community context, its location(s) and campus architectures, the grounds, buildings, layouts and associated infrastructure required over the next ten years combined with the sustainability features needed to 'future-proof' the estate into the longer term. The planning process began with the creation of the University and the first institutional Strategic Plan has been produced. (University of Cumbria, 2007)

This backdrop forms the imperatives for the emerging Estates Strategy, the Learning, Teaching and Assessment Strategy and the ICT strategy of the University. All must develop in parallel and work in synergy. This is recognised as one of the major current challenges and risks in Universities and Colleges (JISC, 2008). It matches closely to the concerns of this paper as seen through the lens of flexible and distributed learning in Cumbria and one institution's approach to managing this change.

The problems this paper attempts to address are:

How to manage the development of a distributed learning network to include personalised learning, workplace learning and campus development including higher education, further education and employer partnerships?

How to manage the processes of change while continue to meet existing expectations of students and staff?

How to align high level vision with stakeholder needs including those of partners in relation to estates re-design including academic profile and learning spaces?

How to align building "shell", "scenery" and "set" of learning spaces with services infrastructure

Because of its nascent stage of development, the University of Cumbria offers a rich field of study to make visible that which is usually invisible and largely internal, not easily captured or explained. This paper describes a change management cycle concerned with how one institution is re-inventing itself using ICT. As such it takes an action research approach as part of an ongoing cycle of organisational development, which began in 2005 when the Higher Education Academy (HEA) Change Academy "project" started. This article forms the first phase of attempting to record the "narrative" that is emerging from the perspective of two senior managers. As such it is open to critique,

disagreement and challenge – itself forming part of the analysis of an action oriented approach. In considering these problems holistically the issues of people, place, pedagogy and process are prime factors.

PEOPLE

With complex problems there are often many competing perspectives offering different insights and solutions which can be both helpful and unhelpful at the same time.

The stakeholder view (specifically funders) is influential. The high level University Business Plan has to interface with the operational planning process and each may speak a different language in terms of scale whilst sharing the same desired outcomes. A key challenge has been therefore to connect the planning timeframes of the “here and now” with the vision of the future for the University makeup, curriculum and estate. These differences are both conceptual and spatial and exist in the minds of key decision makers - people.

Mulcahy highlights the dialogical relationship between managers and their strategic and operational practices:

“relations of spatiality and strategy are created and sustained together and where this complex relationship is understood, space can serve as a ground for critique. If we want to understand either practice then we have to influence both” (Mulcahy, 2007, p.144).

The University takes the same holistic approach to its planning activities by involving a range of staff in “Shaping the University” at a grass roots level. A set of planning assumptions has been formulated drawing on the distinctiveness of existing campuses and on the Business Plan objectives (see process) which are still being tested iteratively.

The University is also able to build on the experience gained by taking part in the Change Academy project, which attempted to initiate complex cultural change via a *Framework for Action*. The latter aimed to further introduce flexible and distributed learning utilising appreciative enquiry techniques (Greenwood, et al 2006).

Arising from this work the institution is debating the extent to which:

the institutional culture, environment and “rules” can actually be a barrier for academics wishing to change their practice towards more flexible forms of delivery using student centred approaches. Kember confirms that “underlying beliefs about teaching cannot be imposed by regulation” (Kember, 1997).

an examination of the learning context and the role of ICT in supporting changes in teaching conception – both in relation to planning,

supporting teacher thinking and delivery is required since: “Literature generally suggests that teachers hold cognitive constructs, beliefs, guiding principles, theories or preconceptions which determine their instructional decisions and technology integration” (Churchill, 2005).

“But for real change to take place, innovators need the support of ‘institutional path clearers’ or task forces to initiate and maintain dialogue between, staff, managers and decision makers” (Beatty & Cousin 2003, p.145 quoted in Hockings, 2005, p.324). The University has a number of these – some set up as formal committees of the Academic Board/Learning, Teaching and Assessment Committee – and informally - think tanks such as the “E-Learning Development Group” and staff members of the “Change Academy” team who are from a number of departments and professional groups including the Centre for the Development of Learning and Teaching.

What we are experiencing in the University is a coherent and unifying approach to implement change across a diverse set of institutions and staff/student groups. The implementation of Flexible and Distributed Learning (FDL) is at the forefront of the University’s thinking and is driving the future shape and structure of the institution and its relationships internally and externally. This is not all plain sailing; there are a variety of challenges – as noted above, the staff conceptions of operating in this new environment are not easily uncovered or understood. There have been many discussions about the definition of FDL, what is meant by each of these terms and what is the role of technology in sustaining learning? These debates go right to the heart of the new identity of the institution.

PEDAGOGY

The synergy between learning, research and knowledge creation is acknowledged by University missions and strategies; teaching is still an important part of the higher education landscape, and further, has assumed a scholarship of its own in the emerging context of blended learning methodologies interfacing with fast moving ICT capabilities. In addition, knowledge transfer and third leg activity, undertaken by all universities is informed by and shapes teaching contexts.

Writers agree therefore that a holistic view of student learning is required. An active model of student learning is purported – one that focuses on the learner rather than the tutor (Brophy, 2001, p.136) and that values the contribution of a much wider team of people in HE. This group includes tutors, librarians, student affairs and administration professionals, ICT staff and the students themselves. Consequently, the modernisation of HE has changed the role of the tutor as a learned professor, re-cast the roles of supporters of learning as major players and accepted that face to face contact is not the only or even the main way that levels of learning are forged or maintained:

“student learning is not only, and probably not mainly a function of teaching. Students develop knowledge by various means and teaching is simply one of these” (Bowden and Marton, 1998) (chapter one).

The development of distributed electronic learning environments, such as that being undertaken in the University of Cumbria offers new opportunities to sustain and nurture relationships thus increasing the range of potential and actual contact points. This is crucially important to the University of Cumbria operating across such a wide geographical area and with a diverse group of learners. Work-based and vocational learning is therefore critical to the mission of the University:

We believe that Flexible and Distributed Learning (FDL) offers the potential for greater progression and student choice and the University has been modelling various scenarios to make this a realistic and shared experience. This thinking is being applied to the various campus types described below.

PLACE

The University began to think about re-engineering its space to deliver the modern student and staff experience with the opening of the Learning Gateway (LG) on its Carlisle campus in 2006 - an example of the creation of a learning environment that is flexible and ICT enabled. This innovative building is at the centre of the institution’s aspirations to build an inclusive and distributed community of practice. Its “learning space” merges formal and informal study space, academic / learner support with wireless technology and digital capabilities. From the outset it has been designed using learner centred principles, based on the pedagogy of flexible learning. It is recognised as a national case study by its inclusion in the JISC infoNet resource (JISC, 2007).

By design, it appears to fit with the hierarchy of building strategies (layering) being employed by HEIs and commented on by the JISC in their review of the creation and management of new age learning spaces in UK educational establishments. A JISC report on the management of these spaces concluded that the structure of the basic building - the “**Shell**” will be difficult to change and “will influence the opportunity of accommodating each of the following sets of building element. The “**Services**” strategy and installation similarly enables and limits what comes next. “**Scenery**” refers to what can be installed and taken down with relative ease to meet changing circumstances, like partition walls; “**Set**” might refer to the particular arrangement of furniture required to meet an immediate need” (Watson, 2007). However the University of Cumbria’s approach has been to build in flexibility in learning and teaching terms from the outset that works within the “shell” because of its dynamic and experimental approach - the philosophy of the space driving its development not the physical construction of the space.

The expectation that high quality support is a feature of that experience is being endorsed and valued by tutors, students and externals and the space is

also providing a “hot desk” environment for University of Cumbria staff who are often on the move between sessions, buildings and campuses. These new ways of working are very significant for the distributed university and its clients and we believe they are scaleable to other University spaces and campuses, such that the “Gateway concept” has been adopted at other campuses and features in the typology of Estate being developed. (See Process)

Space utilisation

Space utilisation is a part of this evaluative process in order to learn from the space itself and as required by the institution’s Space Management committee. However our tools for capturing flexible learning and its spontaneity (loved by learners and one of the pedagogical principles of the space) do not fit well with the sector space management models which are concerned with “seats” and “usage” rates.

In the UK, space utilisation is a serious topic for HEIs. The national Space Management Group (SMG) has been set up by the funding councils to assist institutions’ planning, management and effective utilisation of space. Several studies have been carried out giving guidance and best practice; in these the factors affecting space demand are well rehearsed (SMG 2006a). However the Higher Education Funding Council for England (HEFCE) efficiency norms (SMG 2006b) do not fit with a student ownership model or flexible learning principles that transfer responsibility for learning to the individual rather than the tutor; the tensions inherent in the HEFCE model appear predicated on traditional methods of teaching and a transmissive view of learning whereby large numbers of students are “taught” in rooms that hold large cohorts for maximum times of the day and year. And this is despite a SMG report on the Future of Learning which highlighted that:

“...the future demands for space needs will not depend on relatively simple drivers such as student or staff numbers but on a set of complex factors related to the institution’s mission and aspirations” (SMG, 2006a, p.11).

Based on a major development of a new university the issue that space management needs to address is how to establish a new model of space utilization based on effective use of space rather than purely quantified data. We may never have large cohorts as expressed by the utilization model. A strategic awareness of the role of “place” in the University’s mission is emerging but not separated from learning and teaching or the ICT infrastructure required to deliver the learning experience.

PROCESS

Supporting infrastructure for a Flexible Distributed Learning (FDL) University

The ICT infrastructure is in place for the new University and has been prioritised in University expenditure rounds. The ICT Framework Plan identifies the objectives and key challenges of the distributed University, to:

Ensure that a reliable, resilient, and secure ICT infrastructure is in place

Provide the ICT capacity and capability to meet known and potential future needs and demands

Design and implement the infrastructure to allow for scalability, integration and growth

Maximise user benefits from ICT via customer-facing delivery and high quality support

Provide a transformational, sustainable technical environment of exceptional quality both within and radiating from Cumbria

There is a major opportunity, given the distributed nature of the way further and higher education needs to be provided in Cumbria, to maximize the use of technology in all aspects of supporting the student experience i.e. in e-learning and m-learning, e-administration, creating social and collaborative learning communities, engaging those disaffected with education through the power of ICT, supporting entrepreneurialism and enterprise, reaching new markets and extending the reach and influence of the university beyond the county. Given the disadvantages which some of the target populations experience both socially and economically, it will be essential to ensure that access to technology is not a barrier and that they are also able to participate fully in the opportunities which are on offer.

To implement the Strategic Plan of the University a top level post, reporting to the Vice Chancellor, has responsibility for FDL, widening participation, partnership and strategic academic practice. A supporting infrastructure has been drafted for a Flexible Distributed Learning University that incorporates the elements of people, pedagogy and place. The framework is part of the Estates Strategy Scoping exercise and is leading an institutional discussion on the new University's identity and configuration including implications for the existing key strategies. It is likely that these will be completely re-written to accord with the new direction of the institution. In articulating the new shape of the University in estates terms a briefing document has been drafted to underpin core concepts and terminology. What follows is taken from that document.

The University of Cumbria (UoC) need for a FDL System

The University has stated its intention to think beyond the current curriculum and traditional student body and consider the type of growth areas expected in the medium term future. The growth that is being planned will not make the University a larger version of what is in place now, the growth will come from

new types of courses that are characterised by work-based and flexible study modes reaching across the County and taught in partnership with employers, further education colleges and other learning providers.

There will be a need to have physical space for our full and part time campus based students, and office space for staff, but growth in student numbers that are envisaged may increasingly be in programmes with different kinds of space requirement and for students with different learning needs. These programmes will need campus space but not configured as now. This will make a difference to our assumptions about the amount and type of space and the nature of estate requirements. Flexibility of space needs to be considered to facilitate diverse types of usage alongside specialised spaces and space needs to be designed to enable communication between the University of Cumbria and learners wherever they are. Alongside these different programmes, all students will increasingly use mobile communications and this will have an impact on the working practices of academic and services staff and implications for estate needs including IT infrastructure.

One of the most important aims of our new university is to support the widening participation agenda. Our mission is to embrace regional agendas and acknowledge national trends in demand for tertiary education. In order to be successful, we must focus attention on progression routes from FE to HE. Learners need to see clearly how they can progress through the education system and it will be important for us to connect our curriculum offer with that of our own FE, local schools, FECs and employer training programmes. Our distributed campuses might be considered an advantage, reaching, as they do, across the county and into Lancashire so that “travel to work” and “travel to study” time is about the same. Learners with diverse needs will access our courses and connect to their tutors and peers from wherever they are. In terms of space efficiency this distribution will be a challenge. We must plan carefully where we locate central services and how they connect to our distributed learners, how we design buildings for multiple uses and how we share services with our partners. These decisions will impact on our space needs for dedicated UoC sites. We must ensure that our estate strategy is fit for purpose, affordable and based on an appropriate model of a 21st century university with distributed campuses.

In what follows we outline a model of a flexible and distributed learning for the UoC. In order to assist planning this model offers simple patterns which capture, in broad terms, the variation in our academic offer and the nature of estate needed to support this.

Types of learning modes

Here we have distinguished four types of learning mode where the teaching delivery changes the nature of learner engagement with UoC facilities and support. We have called these **Types of learning mode**. These are ideal typical modes and although we aim to distinguish the main types of

programme currently existing and envisaged, it may be that particular courses may be a hybrid of two or more modes.

Learning Mode 1 **Traditional Face-to-Face model**

Students are mainly campus based and may be resident on campus or nearby. Their courses require a great deal of on-campus delivery to attend classes and use online resources in student areas comprising libraries, flexible and open access spaces with PC/laptops. The students expect to have social space as well as formal teaching space available to them and will use the campus as a “home environment” as well as a “working environment”

Learning Mode 2 **Vocationally Based Blended Delivery model**

Students whose course involves campus based and work-based learning with distributed delivery components. Some teaching is face to face and some of this is in the workplace supported by mentors. These courses involve formal partnerships with a wide range of public sector agencies and industries and involve students gaining practical skills during unpaid placements in the workplace or through their paid employment alongside part time study, and attending short, intensive, practical block courses while using blended learning resources for independent study.

Learning Mode 3 **Networked learning model**

Networked learning students, who mainly access their teaching at home, in the workplace or via curricula and events co-located with other educational providers. _These students may have more workplace experiences and are likely to be accessing ‘skills specific’ programmes, modules or taster sessions on a part time basis. The courses are delivered primarily through on-line delivery with occasional intensive campus based sessions.

Learning Mode 4 **Virtual Delivery model**

Completely off campus learners. This model allows UoC to reach students who are remote from Cumbria including international students who study at a time and in a place of their choice. All courses are online and other services may be provided utilising formal and informal agreements with a wide range of partners. Students are able to access qualifications using web-based learning materials while accessing resources and support from UoC alongside other providers. They are unlikely to use UoC space.

The above typology allows us to discuss the future shape of the University in terms of our student body. At present we have many students in types 1 and 2 learning modes. We have a particular character as a University in that our type 2 learners are responsible for a large amount of our current funding and focus. It is clear that in order to fulfil our mission of reaching out across Cumbria and north Lancashire as well as continuing our national recruitment and meeting the skills needs of our area we will increasingly offer new types of programme in which employers play a larger part. Foundation degrees in particular will require work-place learning and flexible study patterns will be a feature of any continuous professional development programmes. This will lead us further to embrace the opportunities of modern technology for communicating over the web and through video conferencing. We might

expect, therefore, a growth in type three - network modes learners. Our ambition for fully on-line delivery is as yet unproven but one might expect all universities to utilise their expertise increasingly to reach a global market. Thus type four modes will be a possibility for which we will wish to ensure a capability.

Types of estate infrastructure:

The implications of different student learning modes are important for our view of UoC estate. We need a sustainable estate and one which allows us to reach out to learners across Cumbria and beyond and into the workplace. The move to more flexible modes also implies a different usage of space and a need to create an infrastructure fit for this purpose across the county and with capacity to connect globally.

Here we describe four Types of UoC estate infrastructure. This is to help us conceptualise the nature of the difference between our UoC sites and the required services needed at each locale. This typology will also influence the location and organisation of academic and service staff. The facilities available to staff and students would be different and would invoke particular issues around on-line access, 24/7 service support, hospitality and other non-academic service availability.

We cannot afford nor would it be sensible to provide a traditional campus in every community across Cumbria and north Lancashire but we do need to service the needs of all UoC students whether living at their home, accessing learning from within their workplace or travelling to our campuses and partner sites. Thus our educational provision must be capable of supporting mobile learning, afford distributed access and 'travel to study' time equivalent to 'travel to work' time. Each estate type will support different proportions of the above student learning modes.

1. General campus

This will provide the full range of services on site that traditional full time or part time campus based students would expect. It will be within a substantial urban setting and embedded within the fabric of the town/city contributing to and relying on services to the wider local population.

2. Specialised campus

Such campuses might take the form of specialist facilities for a single faculty or part of a faculty. This is a campus that will have some of the functionality of a traditional campus depending on the volume of activity but would not have all facilities on site and some facilities may available through negotiated third party agreements (eg sports facilities, library/network access via public libraries, counselling via health authority, voluntary sector)

3. Gateway campus

This is UoC branded space or dedicated floor of a building belonging to a partner organisation. The functionality supports staff and students of the

University and may be shared with students/staff belonging to the partner organisation but it has some services on site and allows full connectivity to UoC on line. Network sites would also allow University presence alongside other organisations, assisting market penetration in hard to reach areas. Full campus-like facilities might be available through the partnership agreements.

4. UoC on-line

This specifies the availability of support offered by UoC for students and staff off campus – in the workplace or at home or mobile. Connectivity supports students enabling them to access course materials and communicate with other students and their tutors for distance learning, as part of a blended programme or simply as adjunct to campus-based educational experiences. Virtual support services whereby access is via the web, email, telephone, with supported additional guidance, tutoring and advice will be required.

CONCLUSION

There is more work to be done to consider the entitlements and service provision available to students who are not registered with UoC but are studying UoC validated courses at our partner institutions. We are in the process of creating a matrix with the four estate types and agree which site equates to each type of provision. This will support identification of our spending priorities. Other work is being done to map out the entitlements to service by types of student relationship. A further iteration is needed for non-credit bearing students and staff.

Whatever our personal perspective on learning in the University we are all part of an ongoing management of change process as observers, actors and commentators. Further opportunities exist to critically examine how these changes are perceived and acted upon by students and staff to better understand the implications for organisational development through people, place, pedagogy and process.

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