Introduction

There is no doubt that the environment for libraries, and particularly for library development, in the UK has become really tough since the economic crash of 2008. Over the past 15 years there has been a traumatic shift from a period of boom to one of bust in the financial environment, which has affected resource availability. This period of fiscal constraint is a key factor influencing the continuation of library as place, and sits in a broader global context of major technological, informational, societal and behavioural change discussed in Part 2 of this book, and questions the need for physical library spaces. Judging from press and television reports in recent years, it seems that funding is the biggest single most important factor faced by UK libraries – particularly small local public libraries. Public libraries show around a 13% reduction in income between 2008/09 and 2011/12 (LISU, 2013). These same press and television reports also indicate that libraries have changed little over the past 50 years, which is confirmed by those protesting against library closures or service restrictions; these protestors build their primary arguments opposing these changes around the library as book repository and place of reading (Horn, 2008). It is easy to see how government and local authorities might dismiss such protests in an age when more information than ever before is available through more channels than ever before to more people than ever before. ‘Between the birth of the world and 2003, there were five exabytes of information created. We [now] create five exabytes every two days’ (King, 2013). And thanks to a mixed economy of paper and e-books, more people are reading than ever before (Sweeney, 2011). An important consequence for libraries of this massive increase in information resources on the internet is that
it creates more opportunities for informal personal learning than ever before – there is an unmet need for learning facilitation and support, potentially giving libraries an important future.

Despite the tough financial climate there have been many new library developments in the UK, particularly in the university sector, in recent years including refurbished and repurposed space as well as completely new buildings. Some of the buildings described in the case studies below were built in the pre-austerity years of the 21st century when funding was more easily available; others were embarked upon at a time of financial plenty but completed only recently. These UK case studies illustrate a range of ideas that are current in library space development in the UK in academic and public libraries, and the directions that library space development and use is taking in the UK at present. The building in each case study is a response to its locality, organizational need and the resources available, and each exists in the context of the broad global factors that are mentioned above. To quote Stewart Brand (1995), each is a ‘prediction about the future’ as, although new spaces have to be fit for purpose on their first day of opening, they must also be fit for an unknown future. Being fit for the future is the biggest challenge facing any new development especially, as Brand also writes, as ‘predictions [about the future] are always wrong!’ So – there are no right answers here, just some examples of work in progress to make us think and better understand what is happening to library and learning space in the UK.

Case studies

Ayr Campus Library – Scottish Agricultural College and University of the West of Scotland

Keyword: integration

Ayr Campus Library (www.uws.ac.uk/about-uws/campuses/ayr/) is a shared library between the Scottish Agricultural College (SAC) and the University of the West of Scotland (UWE). It is housed in a new £81 million building, which opened in August 2011.

The campus is a large horizontal black box set in a riverside landscape with the library occupying 1326m² or 8% of the building. Many of the group rooms in the building have woodland and river views and other windows look out over internal courtyards with white façades. These features, combined with the glass roofs in the three-storey sections of the building, give the interior of the whole campus a light transparent feel, making the most of natural light and landscape.
The entrance to the library (Image 1.1) is at a key point in the overall campus space. From the campus reception a bridge crosses the main refectory and café areas providing a view of all three floors of the library through the glass walls, and also of the computer labs, meeting rooms and other classrooms, making the library feel an integral part of the overall campus facilities. This transparency and resulting vicarious observation of others opens up the library and signals the range of environments provided on campus. The base for the shared service team in front of the main entrance is also clearly visible and welcoming. The library security gates light up the entrance inviting the visitor to enter.

Low-level furniture in the entrance area is used for casual individual breaks in study, to review the recent library purchases and journals available there, or as a place to meet various academic support services for drop-in questions. The area has a relaxed feel, enhanced by warm wood tones and colours. There is little evidence of this being a shared library other than a display of SAC and UWE t-shirts and other branded items. On this entrance floor there is also a small, learning-commons-style group of 15 computers. The stairs to other floors are discrete and well positioned, giving maximum open flexible space on each floor. The middle floor entrance to the building reduces vertical traffic through the building by requiring users to choose their destination on entry to the building.

*Image 1.1* Entrance to the Ayr Campus Library with a window onto the group learning floor above (copyright University of the West of Scotland)
Other floors

The upper ‘group study’ floor is a busy open area for 40 people, which can also be used as a presentation space for around 20–30 people. There are five glass-fronted group study rooms surrounding the open floor with a capacity for 64 people in total. These rooms are furnished with moveable tables and smartboards and plasma screens.

The lower floor is the ‘quiet study’ space and has large open tables equipped with power, making laptop computer use popular in this area. The collection of 50,000 volumes is distributed across the upper and lower floors in traditional blocks of high-level shelving, which is light and accessible.

There is limited but high quality signage in the building supplemented with a small number of information plasma screens. The ‘light touch’ signage adds to the calm atmosphere as unnecessary information does not flood the space.

The building successfully integrates labs, studios, computer labs and social learning areas within the library. The overall feel is of a well ordered easily understood space that integrates two discrete student populations successfully.

The Forum – University of Exeter

Keyword: identity

The previous library at the University of Exeter was a tired 1980s building that would have required demolition and rebuilding if it were to house additional services. Adjacent to the library the University also had a well used but outdated row of student shops. This was a difficult, uninviting site with the library separated from the other facilities by a set of steep outdoor concrete steps. The challenge for the University was to find a way to develop the whole site and create a central focus for the campus. Initially two projects were considered – a library refurbishment and the Forum project to develop an integrated home for services for students.

These two projects became one. The resulting £48 million project has created a stunning curved glass mall joining together the library and the Great Hall of the university. The Forum (www.exeter.ac.uk/forum) has a complete range of services for students, including a student information desk, IT help, careers zone, group study rooms, a 400-seat lecture theatre, technology-rich exploration labs and a large retail outlet and café laid out along a covered street that provides social space and an exhibition space – and integrates all of this with, but not in, the library. The result is an exciting, vibrant place, which provides a real heart to the campus combining key services for students with academic and study facilities. The co-location of these facilities has been
designed in such a way that, although each functional area has differing requirements for factors such as noise levels, privacy and group size, they can all operate successfully. The library, in particular, has benefitted enormously from this project being part of that vibrant heart of the community and yet retaining those characteristics of the academic library that Exeter students value highly.

The library

The University of Exeter has managed to preserve the identity of the library alongside modern space that has significant additional functionality and services that are closely located but do not interfere with the group, quiet and silent study spaces the library provides. All floors of the library have been given a modern, bright feel and the project has extended the library to provide more space for books and study, including formal and informal study space. The interface between the refurbished library and the Forum services mall is a buffer zone with study spaces on the ground and first floors of the building that both unite and separate the quieter library world from the vibrant busy Forum space (Image 1.2).

Image 1.2 View through the Forum showing library ‘buffer zone’ on the right (courtesy of Jisc infoNet)
This idea of integration with separation works well in providing a central heart to the campus, which includes but does not intrude on the identity of the library. Also on Floor 1 of the library at the interface with the Forum there are group study and meeting rooms, which are open to the Forum but can also, by closing off a set of doors in the corridor, become part of the library when such rooms are in high demand – for example at pre-examination, project completion or assignment hand-in times. Further extension of the influence of the library into the broader project is the creation of external piazza space. This stunning external space achieves the two major goals of the Forum project, providing a sense of arrival at the campus and also, and equally importantly from the library perspective, extending the social learning space to the exterior of the building. The Forum provides excellent access to the widest range of services while preserving the identity of the library for the academic community.

The Hive – University of Worcester and Worcestershire County Council

Keyword: inclusion

Between a railway viaduct and the sombre 1990s Crowngate shopping centre in the UK city of Worcester stands a bright shiny 21st-century building. It is the Hive (www.thehiveworcester.org), a building that houses a university and public library, archive and archaeology service and local council enquiry service. The building, which cost £60 million, is resplendent in shining glass and golden external cladding. It is a partnership between the University of Worcester and Worcestershire County Council – the first such partnership in Europe.

Most areas of the building that are accessible to the public are open plan and simply but elegantly finished with white walls, plain white shelving and glass display cases. The use of wooden cladding on the stairs and ceilings gives the space a clean Scandinavian feel enhanced by the commissioned artwork, providing interest and visual stimulus (Image 1.3).

Three of the five floors, levels 1 to 3, are arranged around a central stairwell. Level 0, the floor for ‘young people, social study, games and film and music’, covers a smaller footprint than the main upper floors and is open to the other parts of the building via the stairs. Level 4 contains special collections and journals and is a quiet study area housed in self-contained space not open to the other floors of the building. This monastic space is accessed by an enclosed stairway or by using the lift. Separation between noisy activities and the traditional ‘quiet’ library has been successfully achieved with this design. The ‘sound gradient’ of the building, noisy (active)
from the bottom of the building to quiet on the top floor works well for
the clearly designated quiet space
on Level 4 but less well for floors 2
and 3, which along with floors 0 and
1 share the open stairwell.

The social study space on Level 0
has informal seating, group
workspaces and gaming stations. The
area feels both spacious, because of
the floor to ceiling exterior windows
along one side, and intimate at the
same time.

Level 1, although open plan, has
been designed with some separate
discrete areas. For example the café
and the extensive children’s library
are ‘rooms’ with open entrances
from the main floor space. If there is
a theme for this floor it is activity. It
is the arrival point for all users,
location for the Worcester Hub (a one-stop shop for access to all council
services), and houses the main self-service book issue and return points and
library enquiry services. This is a busy purposeful space.

Level 2 houses part of the collection and has a range of formal study space.
This floor gives public access to the Worcestershire archaeology service,
meeting rooms and a business centre. To one side of this floor a walkway tells
the audio story of the history of the city using a number of overhead sound
domes activated by movement, and nearby tables have touch sensitive surface
technology for exploration of a range of related material. Most of the
collection along with a variety of formal and informal study spaces is found on
Level 3, where a glass façade provides great views across the city.

The partnership
The Hive is the result of a unique partnership between the University and
Worcestshire County Council. Some of the services provided have separation
of responsibility simply co-habiting the building, but for the library service
there is integration. A striking feature of the way in which this building works
is that library services are provided from minimal desks (pods) on each floor
from which small numbers of library staff provide users with help and advice,
giving an expert service that has a delightful informal feel. Walking around
the Hive and seeing the mix of public and university users and the diversity of
services and facilities on offer it is clear that the building is open to all,
excludes no one, and is well used and liked.

Leeds Central Library

Keywords – user as producer

Leeds Central (www.leeds.gov.uk/leisure/Pages/Central-library.aspx) is the main
library within a network of 40 smaller public libraries situated in the central
business district of Leeds beside other municipal buildings, including the
attached Henry Moore Sculpture Gallery. Nearby is Little London, an area of
multiple deprivation. The library building is late Victorian with an Arts and
Crafts interior. Some aspects of the architecture – such as the life size stone
mythical dogs and other creatures that feature at the end of each banister, the
high-vaulted oak-panelled ceilings, or the completely tiled and stained-glass
windowed rooms – are breathtaking, but most of the many rooms are best
described as basic.

However, the sheer number of rooms in the building proves ideal for the
natural zoning of activities. And zoning is needed – people are everywhere in
this building. Quieter individual activities are focused at the top of the
building, with specific centres of activity sited on the middle floor and general
public service areas on the ground floor. This building works hard. Some of the
major successes include Studio 12, a place where those in the 18–30 age group
engage in creative projects using state-of-the-art technology with access to a
level of support that enables them to gain professional qualifications in the
development of multimedia products. The Studio 12 atmosphere is active and
alive with people working together in groups and teams.

In the local and family history room couples actively engage in working with
computers and maps while others work alone. Behind this activity is a large,
global network of users of the service – the digitized web-based collection of
local photographs receives over 40 million hits a year. The power of the web
brings far-flung people from Leeds closer to their city.

A range of IT-based information sessions is offered on demand, from
knitting to CV writing, meeting identified needs determined through
conversations with library staff, which establish learning needs and suggest
ways of meeting them rather than fitting people to a menu of defined courses.
A strategic decision was taken some time ago to prioritize changing team roles over spending on new furniture or any interior makeover, prioritizing service over space development. The team was trained in a range of areas from basic computing skills, to teaching skills for the lifelong-learning sector to support the strategy.

This is an amazing old building with old furniture that is comfortable and welcoming, and new furniture suitable for working with computers. On the entrance level, and now shared with the museum, is a recently renovated Victorian majolica-tiled café (Image 1.4). The profits from this beautiful, busy space – which is always absolutely full of people meeting and working on laptops – are used to supplement non-funded community learning activities.

The data collected in regular surveys of all services indicates that take-up of services in the library closely matches the social and ethnic makeup of the area, an indicator of the success of the project in being socially inclusive. This is a space that focuses primarily on evolving and changing its service portfolio to remain relevant – and developing its space to support this.
The Saltire Centre – Glasgow Caledonian University

Keywords – learning, orality and sociality

The £23 million Saltire Centre (www.gcu.ac.uk/theuniversity/universityfacilities/thesaltirecentre/) has been a reference point for the discussion around libraries and learning in the UK since its opening in January 2006. The building focuses on providing extensive learning and library space and is also a campus hub with a one-stop shop for access to all student services. It is situated between, and connected to, the main teaching buildings of the University. This position on the campus symbolically unites the processes of learning and teaching. The building provides a large number and variety of learning spaces connected by direct indoor pedestrian access to faculty labs and teaching spaces.

The Saltire Centre has five floors and is entered by a bridge to Level 1, which arrives at a mezzanine level providing views over the Level 0 services mall. Level 1 is a busy space traversed by those using the library and others passing through to the teaching buildings – it is modelled on an airport departure lounge. A large touch screen enables people to interact with information about the University and the building, and a cluster of display screens models an airport departure board giving information about what is happening inside and outside the building. There is a small group study area, a seminar room, a print service and places for librarians to meet students. There is also open space that can be used for exhibitions.

Level 0, the services mall, is a large multi-functional space, primarily for ‘social learning’, set up with formal tables, informal sofas and other comfortable group seating (Image 1.5). A single point of access to many of the student services of the University is provided at the Base, the main service desk for the building. Much of the collection is housed on this floor in electronically controlled rolling stacks. There is also a café on this floor. Recently individual study carrels have been introduced, which are popular with laptop users who work quietly amid the buzz of conversation around them.

Access to other floors is by a central stairway, which spirals around the public lift. Each floor of the building is separated from the ground floor social learning space by a wall that runs from Level 0 to the top of the building, ensuring effective sound insulation on each floor.

The upper floors of the building provide a mixture of desk seating and informal furniture, much of which provides built-in power sockets. There is a sound gradient in the building from the active group work of the services mall to quiet study at the top of the building. Generous numbers of desktop computers are available on all floors. Each floor has a graphic ‘identity’ and colour theme, which aims to speak to users and set the tone for group or
individual quiet study. The graphic content is humorous and evokes some of the subject themes for each floor. The recent addition of study carrels in places has increased the capacity by around 20% but has had little impact on the feeling of spaciousness. The Saltire is a very busy building with many areas often fully occupied, a feeling that is increased by the number of people moving through the building to access other facilities in adjacent buildings.

On higher levels of the building, with identities such as ‘the home’ or ‘garden’ defined by graphics and colour schemes, the spacing between desktops is also generous, and the space – although often fully occupied – is very quiet. On the quiet floor (Level 4) many individual study booths have recently been added and are often used by people with their own laptops. Since its opening the Saltire Centre has, not surprisingly, been modified to reflect student demand and staff opinion. As a result of its open plan nature and inherent flexibility it is a building for learning that has the potential to learn itself in the process of ageing.

**Trends**

These UK case studies are of three types – new builds (Ayr, the Hive and the
Saltire Centre), a refurbishment (University of Exeter Library integrated with the Forum new build) and repurposed (Leeds Central Library).

**Open plan space**

In the new-build category the common approach has been to provide open plan space. Open plan brings the promise of ongoing reconfiguration as the building learns, through use and emerging trends, what is required of it as a space. Flexibility for the future is the key desirable feature of these spaces, exemplified by the services mall in the Saltire Centre and the large open floors of levels 1 to 3 in the Hive. Most importantly, in all cases, there has been careful consideration of how the areas connect but also avoid unnecessary traffic through the buildings with ‘feature’ stairs, or ill-conceived mezzanines or lightwells overwhelming open spaces simply for architectural effect. It is harder to be wrong about the future with open space that offers endless possibility, but open plan is not without its critics, who focus on the potential for noise and lack of privacy. However, careful selection and positioning of furniture and location of book stacks in all the examples we have used serve to contain noise and provide semi-private space (see Chapter 9).

Importantly, open plan also provides the opportunity to regularly ‘redesign’ the space by introducing new structures and items of furniture or rearranging existing furniture (relatively straightforward) and book stacks (more difficult and resource intensive), to create quiet and noisy zones, for example. Ayr, the Hive and the Saltire Centre all have endless possibility for reconfiguration and even the refurbishment at the University of Exeter Library, restricted by the existing architecture, still retains some possibility for change. At Leeds Central Library the Victorian building provides more restricted scope for change but has an accidental advantage of providing its own inherent zoning, similar to the example of the Carnegie libraries described in Chapter 2, which can serve the library well. Open plan is an important feature, which brings the prize of flexibility, but this has to be balanced by a zoning strategy; this is provided naturally in some older buildings.

**Technology-rich space**

Jisc’s (2008) work on learning environments highlights the importance of learning spaces being technology rich. Each of these case studies features
technology-rich space built on a wired and wireless infrastructure, which supports widespread use of computers and portable devices. All the case studies provide a variety of technology choices for those using the library. Machines are provided for specialist purposes such as the shared use of smartboards in open pod configurations; laptops are loaned in some cases and those bringing their own devices are welcomed. All these case studies provide a range of technology for individual and group use. Leeds, in particular, provides targeted technology with the specific purpose of social inclusion to enable all members of the library to experience the value of current music and video technology in a collaborative open learning environment. The trend for libraries wishing to explore aspects of cultural specificity or the new media-rich information environment (see Chapter 19) is to provide a diversity of technology options for specific purposes. Just as open plan provides flexibility of space, so the ways in which a space deploys technology is subject to continued change. Porter (2013) observed:

Users will increasingly have integrated devices that they use for many different social and leisure pursuits as well as for their education and paid work. Smarter devices will be worn, and be voice, [eye] and even brain activated, giving the user the ability to access content and services from the networked, immersive environment of multimedia content in which they move.

In our case studies the emphasis continues to move from libraries providing device access to the provision of high quality network and data access. Open plan technology-rich spaces such as Ayr, the Hive and the Saltire Centre present minimal challenge to ubiquitous networking as compared with older buildings such as the Exeter and Leeds libraries.

**Service-rich environments**

Space and service are symbiotically linked and service change and improvement is always possible in any library, but a rebuild or refurbishment enables more extensive experimentation with the range of services provided and how these are provided. In common with all UK libraries, the case studies show improvement in the delivery of services through the use of self-issue and self-return facilities.

In the UK service improvement is focused on greater degrees of self-help where possible, removing barriers to service access and integration of services. For example, by providing a larger number of service points than
usually needed the service desk on the ground floor of the Saltire Centre was designed to expand and contract in order to respond to demand for services. The central desk (a seated desk, for staff and users) has two satellite desks so that if queues develop additional staff have somewhere to work, and when these satellites are not being used library users occupy them. In order to reduce the barrier effect of the desk it also has low-level seating built in. However, despite these efforts to make the desk more of a shared facility between the user and staff, it is still a real barrier between the two. The aspiration to reduce the impact of service desks and bring a sense of partnership to service delivery (see Chapter 24 for examples) has been taken further at the Hive, where small informal pods are used at key points in the building. These small pods are also moveable, providing the possibility for ‘pop-up’ delivery points. The service strategies at the Saltire and the Hive, which are enabled by the space, encourage staff to switch from roaming duties to desk duties as required, providing an enhanced service for users that responds to needs in a timely way.

Service integration

Another feature of the case studies is integration. The Saltire Centre brings together a range of services for students within the library whereas the Exeter University Forum project brings together university services and facilities in one venue that adjoins the library, allowing it to retain a distinct identity. The Hive provides even greater integration, bringing together the University of Worcester library and Worcester County Council library and services into one space on Level 1 of the building. Service integration is an important attractor, which is essential to development of the library community (see Chapter 17).

Developing learning communities

Community development is not just concerned with service integration. All the libraries described here are active in developing and maintaining a community of users around their learning activities, including students and staff in the academic libraries described and lifelong learners in Leeds Central Library. The development of library learning space is essential to these activities. However, just as many websites deploy resources in the promotion of their services so that users identify with their site and services, so libraries also need to link their physical outlets to the virtual, exploiting
the potential of combined online and physical environments to create and maintain their learning communities. For example, massively open online courses (MOOCs) and the flipped classroom will be more effective if local networks operate to enhance the experience. The more libraries can do to create technology-rich spaces with learner-focused service provision for all, that links seamlessly to their online provision, the greater role they can have as open learning environments enabling learning communities to develop. Steps are being made towards this in all the examples in this chapter, and indeed, in some cases, the library members are doing it themselves.

References