

User Experience in Libraries

Modern library services can be incredibly complex. Much more so than their forebears, modern librarians must grapple daily with questions of how best to implement innovative new services, while also maintaining and updating the old. The efforts undertaken are immense, but how best to evaluate their success?

In this groundbreaking new book from Routledge, library practitioners, anthropologists, and design experts combine to advocate a new focus on User Experience (or 'UX') research methods. Through a combination of theoretical discussion and applied case studies, they argue that this ethnographic and human-centred design approach enables library professionals to gather rich evidence-based insights into what is really going on in their libraries, allowing them to look beyond what library users say they do to what they actually do.

Edited by the team behind the international UX in Libraries conference, *User Experience in Libraries* will ignite new interest in a rapidly emerging and game-changing area of research. Clearly written and passionately argued, it is essential reading for all library professionals and students of Library and Information Science. It will also be welcomed by anthropologists and design professionals working in related fields.

Andy Priestner manages Cambridge University's pioneering FutureLib innovation programme, employing user experience and design thinking to develop new library services across the university. He is the founder of the UX in Libraries Conference and provides training and consultancy on the subject to institutions across Europe.

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User Experience in Libraries

Applying Ethnography and
Human-Centred Design

Edited by

Andy Priestner and Matt Borg

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Preface and acknowledgements

We came up with the idea of this book at the 2014 LILAC conference, by which point we had already started to promote the inaugural UX in Libraries conference planned for the following year. There was some trepidation at the thought of putting together a book as well as the conference given how groundbreaking and interactive we were planning the latter to be – to say nothing of our respective day jobs. As soon as we started talking about such a tome, we realised how valuable it would be to gather together great stories about UX in libraries – stories which would advocate for more ethnography and design thinking, encourage discussion and debate, and help kick-start library UX projects, big and small. Whether we have achieved our aim or not we will have to wait and see, but the contributors to this volume remain convinced that in today’s highly complex library and information world we must adopt user experience research methods to observe, listen to and question our users if we are to understand them more fully and offer services that they need.

We are hugely grateful to all of our contributors, not only for their mindful chapters, but also for their patience – suffice to say we embarked on this book in different jobs to the ones we have now. Thanks also to Dymphna Evans for readily agreeing to publish the book and immediately recognising the need for it in the library literature. One person whose name should probably be on the cover alongside ours is Marisa Priestner, who proved indispensable as eagle-eyed second proofer, queen of reference checking and manuscript preparation – thank you!

Matt’s acknowledgements

I’d like to thank those I’ve worked with in all walks of my professional life. Thanks to Andy for being a genuine friend, supporter and collaborator. Above all, thanks to my family; Rachel, Dylan and Oz. You are, as they say, the best.

Andy’s acknowledgements

I’d like to thank Bryony Ramsden who I hold directly responsible for igniting my ethnography flame, and Donna ‘force of nature’ Lanclos for fanning it. Grateful thanks also to everyone who made UXLibs such a success, especially Georgina

x *Preface and acknowledgements*

Cronin who shared most of the pain. I'd also like to thank her and Ange Fitzpatrick for starting the UX journey with me, for singing with me in the office and for others. As for Matt – back atcha fella!

Matt Borg
Andy Priestner

Contributors

Andy Priestner (editor) is a freelance trainer and consultant specialising in user experience, social media, storytelling, marketing, communications and team-building, working with libraries (academic and public), universities and the private sector in the UK and mainland Europe. He originated the UX in Libraries conference after embarking on several ethnographic research projects at Cambridge University's Judge Business School, where he was Head of Information & Library Services between 2007 and 2015. His interest and expertise in user experience has most recently led to his appointment as manager of Cambridge University Library's FutureLib innovation programme, which employs ethnography and human-centred design to explore and deliver innovative new services and products across Cambridge's many libraries. This is his second co-edited academic volume; the first, with Elizabeth Tilley, was *Personalising Library Services in Higher Education* (Ashgate, 2012). Andy was President of the European Business Schools Librarians Group (2014–2015) and Chair of the Business Librarians Association (2006–2010). He is a trained LEGO Serious Play facilitator and blogs regularly as 'Constructivist'.

Matt Borg (editor) is a librarian, trainer, geek and troublemaker. For over 14 years he worked in academic libraries in a variety of roles. At Sheffield Hallam University he was an academic librarian, where he coded and designed the library website and was a lecturer in the Business School on information management. He also co-created the Information and Creativity in Libraries conference (I2C2). His passion for UX enabled him to initiate a research-based approach to user engagement at Sheffield Hallam, focusing on interaction with library tools. This led to a number of talks and keynotes on the topic, and an invitation to collaborate with Andy by joining the organising committee for the UX in Libraries conference. In September 2014 he moved to ProQuest Workflow Solutions. He works with libraries across Europe on library technologies including discovery systems and library services platforms. Previous academic publications include chapters on responsive web design for libraries ('Best of Both Worlds' in *M-libraries 4: From Margin to Mainstream*, Facet, 2013) and information literacy and discovery systems (*The Road to Information Literacy: Librarians as Facilitators of Learning*, IFLA, 2012). Matt is also a part-time freelance

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on the topic, as well as her engagement in professional organisations. She currently serves as a facilitator and curriculum designer for the Association of College & Research Libraries' Assessment in Action initiative. At IU, Carrie advocates for information literacy assessment across the curriculum to ensure the libraries' centrality to disciplinary discourse and student learning. Carrie's own research areas of interest include the review and reward of librarians' teaching, student-centred learning for library instruction, and critical information literacy. Carrie received her Master of Library Science degree from Indiana University.

Leah Rosenblum Emary is an American librarian who has worked in libraries in Brussels, Berlin, San Francisco and San Diego. Her main research interests are information literacy, user-centred design in libraries, and scholarly communication. She is now an Academic Liaison Librarian at York St John University in the UK, where she lives with her husband and two sons.

Nicola Grayson has worked in academic libraries since 2005. In 2012 she secured a post at the Alan Gilbert Learning Commons which is part of the University of Manchester Library. Nicola is currently a part of the Learning Development Team, responsible for developing the award-winning 'My Learning Essentials' Open Training Programme. She focuses on academic skills and broader student support in her work, designing and delivering workshops, and is also responsible for the library's team of 'Student Rovers' and their research. In 2015 Nicola completed her doctorate in the subject area of philosophy and her research centred heavily on the communication of ideas in the works of Immanuel Kant. In her current position she contributes to key library and strategic projects and works generally to promote and sustain student skills support at the University of Manchester.

Paul-Jervis Heath leads the design studio at Modern Human, a design practice and innovation consultancy. He and his team of researchers, designers and technologists apply human-centred design to imagine future services and meaningful digital products. He is a designer and innovation consultant with 17 years' experience of helping companies make fundamental changes to their business by combining design thinking with business strategy and cutting-edge technology. He has led design on a wide variety of projects including in-car information systems for driverless cars, smart home appliances, future libraries and retail stores of the future, as well as many multichannel services and digital products. Paul works closely with the University of Cambridge on their FutureLib programme, which explores the future of academic libraries at the institution. He continues to be involved in designing future libraries around the changing needs of their patrons through a variety of design and strategy projects.

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often brilliant human beings who might use them and because – until now at least – it hasn't involved writing any biographies at all.

Bryony Ramsden is a Subject Librarian at the University of Huddersfield, and has worked in libraries since the late 1990s. She was research assistant on the first phase of the 'Library Impact Data Project' (<https://library3.hud.ac.uk/blogs/lidp/>) which proved a correlation between library use and level of degree attained. She has also worked as a research assistant on an internally funded library project investigating post-occupancy informal learning space use. The results of the project led to her current research for her PhD on user behaviour in academic libraries, which utilises ethnographic methods to collect the data from a number of universities.

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Elizabeth (Libby) Tilley has successfully managed both a science library and an arts library at the University of Cambridge and has been regarded, in both places, as an expert in the subject. This expertise has come about by being embedded in the life of the discipline, observing what students and researchers 'do', and subsequently leading and adapting library services to better suit user need. A PGCE from an earlier life, librarianship qualifications, and being a Fellow of the Higher Education Academy have contributed to her focus on teaching in addressing the user experience. She currently also manages the School of Arts and Humanities libraries at Cambridge. However, tea@three at the English Library remains her self-confessed number-one opportunity for building relationships with students. A recipient of tea and cake commented recently: 'Thank you for being such a good listener and discussant; I really appreciate your sense of humour and taste in cakes.' It's clearly all about the stories.

Bea Turpin, Deborah Harrop, Edward Oyston, Maurice Teasdale and John McNamara were all colleagues at Sheffield Hallam University and members of the learning centres redevelopment project team. This team, along with others, was responsible for the redevelopment project which radically changed and updated the way learning centre spaces function and feel. The team was also responsible for developing the evidence-based approach which underpinned the project. Edward and Maurice led the project, provided the strategic vision and, working with John in the Estates department, ensured the project's successful implementation. Bea and Deborah led the research into learners' preferences.

David Jenkin, Design Director at Alexi Marmot Associates (AMA), worked in a collaborative way with the SHU team to develop the learning centres. He is a highly experienced architect known for his design and planning of interior space. His skill is as an enabler, matching the complex and changing requirements of users to the building design, recognising the need to be pragmatic whilst maintaining a vision for possible future needs.

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10 User experience beyond ramps

The invisible problem and the special case

Penny Andrews

UX is for everyone, not just those who are deemed to be the majority group. Everyone is entitled to a good user experience, and no user is 'lesser' than another. To adapt Ranganathan (1931): libraries are for use, libraries are for all and we should save the time of the user. Every user.

Many users' experience of libraries is negatively affected by library anxiety and hidden disabilities – problems of which most of the people around them are unaware. This chapter outlines the problems and provides recommendations to address these issues. I am both disabled and have experienced library anxiety, and I take a practical as well as theoretical approach, employing autoethnographic techniques to explore the issues. Autoethnography describes and systematically analyses the researcher's personal experience in order to gain understanding of cultural, social and political experiences (Ellis et al., 2010). While this chapter is predominantly about academic libraries in the UK, many of the UX problems and solutions described here are more widely applicable in other situations. Case studies are used to provide examples of ways in which libraries can work for or against users in this context.

Library anxiety and accessibility

Library anxiety is the name given to the phenomenon of users feeling apprehensive or uncomfortable when using a library (Jiao and Onwuegbuzie, 1999). Users with an existing mental health condition may experience library anxiety, but it also affects large numbers of people who are not otherwise anxious and is sometimes described as a form of 'phobia'. It is one of the key reasons for students avoiding the university library for as long as possible, unrelated to understandable barriers like location and fines, so it is something everyone should want to understand.

Library anxiety can be caused by:

- The size of the library
- Lack of knowledge of where to find things
- Not knowing where to begin
- Not knowing what to do in the library (Mellon, 1986).

In addition to these factors, perfectionism over the ‘perfect’ search process, leading to procrastination and anxiety around the library building and library websites, can be a real problem for postgraduates wanting to use the library (Jiao and Onwuegbuzie, 1998).

Library anxiety can be reduced by:

- Getting to know a librarian, through sessions concentrating on building that relationship rather than instruction
- Feeling that librarians really want to help
- Making library staff visible in the library (Mellon, 1986).

Accessibility is not just about disability. It is about making a building, product, device or service available to and usable by as many people as possible.

Many of the problems faced by users who find libraries to be inaccessible relate to the problems faced by users with library anxiety. Where to go, what to do, where to start and the barriers to answering these questions are common to a lot of people. More importantly, if a user feels that their needs are not met by the library or they do not know for sure what will happen, whether that is due to disability or misunderstanding, they will experience library anxiety and not want to go to the library or use its services.

Hidden disabilities

Hidden disabilities are disabilities and chronic mental and physical health conditions that are not immediately apparent to other people. You cannot tell from looking at me that I have autism and cerebral palsy, unless you are familiar with these conditions. Libraries know they must cater for users with visual impairments, d/Deaf¹ users and users in wheelchairs. However, most people with mobility impairments do not use a wheelchair or mobility aid. While dyslexia is increasingly accepted and understood by a mainstream audience, many other conditions such as autism, rheumatoid arthritis, fibromyalgia and ME are not. People with hidden disabilities deal daily with the assumption that they are not disabled, and the effects of stereotyping and misinformation. People with mental health conditions are also more likely to receive this kind of treatment.

Many of these disabilities seriously affect user experience in libraries and little provision is made for these groups. Autistic people commonly have problems with sensory integration (Griswold et al., 2002). They can be over- or under-sensitive to sensory stimuli such as lights, colours, sounds, smells, touch and taste and have difficulty in filtering desirable from undesirable input. For example, flickering lights can be unbearable, bright colours can confuse vision, and it can be difficult to hear what someone is saying if there is any noise in the background. This means that autistic people can become easily overwhelmed, which can lead to meltdown – where their minds and bodies can no longer cope with the situation, and they experience severe emotional and physical distress. These problems

can also occur for people with mental health conditions, neurological disabilities, visual or hearing impairments and so on.

So modern academic libraries, with their busy study areas, overhead lighting, coffee shops and bright furniture and carpets can be a nightmare for some. These modernisations were mostly carried out with the aim of attracting young students, but can exclude a lot of people. This means that the affected users will avoid the library where possible, just like the anxious users. It is rare for building design to consider the sensory impact of aesthetic choices on disabled users in any real depth.

Disclosure

Please note that many disabled students will not disclose their condition. This does not just mean that they do not disclose to their friends or lecturers, but also they do not wish to tell the university itself, for a number of reasons, including not identifying as disabled, having a poor experience with disability support in the past and feeling either that they would be ineligible for support or do not need it. Relying on the numbers of students registered with Disability Services is a poor measure of disability within a university.

Clashing priorities

It is inevitable that improving a space for one group will disadvantage another. For example, visually impaired users with some vision often prefer brighter lighting and bolder colours and patterns, whereas autistic users can find bright light painful and prefer ambient light from lamps and softer colours. The key is to try to balance the needs of both by engaging in consultation with those affected and trying to find a mutually agreeable solution, rather than throwing hands up in despair or privileging one group over the other as more deserving.

Beyond ramps

The usual approach to accessibility for businesses and organisations is to meet legal requirements by providing lifts, ramps and (potentially) facilities for users with visual and hearing impairments. Understanding of disability beyond this is poor, and often even these basic provisions go wrong, such as ramps that are at too steep an angle for wheelchair users to access. Meeting legal obligations is not enough. There is not space here to go into the social and medical models of disability, and why the latter is problematic, but the Scope charity's website (Scope, 2014) has good explanations of the social model.

Traditionally, support for students with disabilities in the UK has been provided by Disabled Students Allowance (DSA), which pays for equipment, resources and non-medical helpers to adapt the student to university. The largest group of students claiming DSA is students with dyslexia, followed by other specific learning difficulties such as autistic spectrum conditions, ADHD and dyspraxia. Changes to the system mean that the university is now responsible under the Equality Act for

funding and providing this support, instead of DSA. This is a difficult transition period for disabled students. However, it is also an opportunity for the university and the library to meet their obligations beyond building regulations and the law, to make their buildings and practices inclusive and accessible instead of expecting the students to adapt.

A short tale of two libraries

An autoethnographic approach was taken, as it was my wildly different reactions to these two library spaces that in many ways led to the writing of this chapter. Please note these are honest reactions to the libraries as a disabled user and not an attempt at objective observation.

Case study 1

I walk up to the library. I already have a headache from the violent hue of the building in the sunlight. The turnstiles are very close to the doors; I can see them from the glass. I have no time to gather myself when I get in, I have to scramble for my student card and take a couple of attempts with my shaky hands to swipe my way to entry. As soon as I get through, I am faced with a sensory assault. I can smell the café, which is serving food and coffee. I can smell the toilets, which are disgusting. I can hear a thick wall of noise that buzzes around my head and makes me feel woozy. The lights are harsh. In front of me is a staircase, which I usually prefer to the lifts because I get anxious that the lifts will break down. Before I can walk any further, I am distracted by some sort of abstract painting or design in lurid colours that makes my eyes wobble. I make it to the stairs. They are very narrow and I struggle to get past people up to the top.

I reach the floor I need. I can't work out where I am meant to go to find books or anything else; it's like a confusing maze and the signs are not very clear. I try to find the toilets to gather myself. The doors are heavy. I feel physically sick and have a headache. I need to leave as soon as possible. When I leave the toilets, there is more noise and more smells and more bright lights. The website says the building is fully accessible. I just feel like I never want to go back. It takes me over an hour to recover when I get out.

Case study 2

I enter the building. There is a quiet area with tables and chairs after the building doors but before the library doors. All the doors are glass and I can see what is happening. There are several choices of door – one that opens with a button, one that is a revolving door and 'normal' push/pull doors. I like this because revolving doors make me anxious and if the normal door is too heavy, I can use the button door. Plus if there are a lot of people, I can choose the least busy door.

I go through the library door and again there is some space before the turnstiles. The barriers are open, as the library is available to the public for most of the day

without needing to sign in or swipe. This saves me the fumble for my card, but there is plenty of room if I do need to swipe.

The ground floor is in calm colours. There are big signs everywhere telling me what things are and where to go. I can see the stairs ahead of me through a glass door and they are wide. There is a sign for the lifts behind them and the toilets are at the back. I can't smell anything or hear much apart from low-level chatter.

I go upstairs and every floor has the same clear layout and simple signs. There are also unambiguous floor plans available on a display on every floor and as a leaflet in an obvious place. I do not get lost. There are signs explaining where books are. The toilets are near where the lifts and stairs come out. On one floor there is a room just for disabled students. Where there are computer rooms, there is a sign saying what software is on the computers. All the computers in the library have assistive software. I don't have to go to a special room.

One floor has brightly coloured carpets on part of the floor, in a pattern that makes my head hurt. I avoid that area. All other colours are used for colour coding or are much calmer shades. I feel comfortable here.

Comments

Case Study 1 is not the worst library ever. It is constantly packed with users who can cope with its idiosyncrasies. However, as the main library for the institution and home to most of the available study spaces, and as a model for other buildings at the university and elsewhere, it fails because it is an actively horrible and/or inaccessible place for many students.

Case Study 2 is not the best library ever. However, it is built around the idea of including everyone, rather than appealing to a particular group, and its management is much more open to changes that are user-centred.

The 'special case'

It is difficult as a member of library staff dealing with many queries and complaints to realise that most users will not speak up and will either have to absorb the additional cognitive load of 'coping' with problems or engage in avoidance tactics at their own expense. Those who do complain or ask for help dread becoming the 'special case', where something may be fixed for them (often in a way that does not achieve real equality) but the overall problem is not tackled and things are not changed for the next person. Usually getting the special case requires research, support from others and a 'fight' that demands highly developed self-advocacy skills – something that is rarely taught in learning environments or explicitly supported by libraries.

I have experienced many special case situations as a disabled library user, who also experiences library anxiety and social anxiety. The library described in Case Study 1 has rooms where non-library lectures and seminars can take place, which is not uncommon for university libraries. While generally and understandably avoiding this library site as a student, as others were available, several lectures for

one of my modules were booked into one of these lecture rooms. Explaining the problems with accessing these lectures to the lecturer led to an awkward meeting with the manager of that site and a diversity manager, where eventually it was agreed that a side entrance intended for deliveries, which opened close to the lifts and stairs that led to the lecture rooms, could be used as a quieter alternative. My student card would be updated to allow swipe access.

This side door was incredibly heavy and I was not allowed to ask friends to enter the building with me to make opening and closing this door easier, as this entrance did not have a turnstile, and I was only permitted to use this entrance during staffed hours for security reasons, even though the building was open 24 hours a day. Additionally, no changes were made to website text or information made available to disability advisors and lecturers, so this only solved the problem of access (in a fairly poor and less than equitable way) for me and not for anyone else with similar problems. No assurance has been made that the problems with the entrance to this building will not be replicated in future library and study space building projects.

Even simple tasks like reserving a book can be difficult. If the book is not in stock, and the user placing the reservation is only able to get to the library on an irregular basis, the item may well become available and the reservation period expire before the user is able to collect it. Library staff may well be happy to extend the reservation period if the user emails or telephones the library, and will indeed do this on a regular basis. However, many users will not contact the library, as this just adds to the transactional costs of being a ‘non-standard’ user, and the work of processing the reservation will be wasted as well as the inconvenience worsening the user’s perception of the borrowing experience.

If it is possible to extend lending and reservation periods automatically for users who do not live near campus or who have other barriers to accessing the library, do this. If your system does not allow this, speak to your vendor.

Fix for one, fix for many

If a user alerts you to a problem that you can fix or know you need to fix, make the solution available to everybody and tell everybody that it exists. Either the issue was a problem for a lot of people, in which case the solution becomes the new norm and it is a good job you fixed it, or it was a problem for a smaller group who will be grateful not to go through the same process as the first user. The library will not suddenly be inundated with inconvenient requests or ‘too many’ people using the alternative provision you have highlighted – and if they are, something is already wrong with your building and/or service provision.

The special case harms everybody’s experience of the library. The first user to raise the issue will probably not get an entirely satisfactory solution. Library staff will have to repeat the extra/alternative process instead of it becoming part of the library workflow, creating extra work. And future users with a similar problem will either have to start the process again themselves, ‘cope’ without a solution (adversely affecting perceptions of the library and their ability to do their work) or avoid the library altogether.

Real inclusion and a better user experience for all

Understanding user experience principles and employing ethnographic approaches to find out about our libraries lets us see beyond all doubt that users of even the most specialist library are a heterogeneous bunch. No, we cannot think of everything and no, people do not always know what they want and need. However, that does not mean we can continue to design services for one majority group (e.g. ‘18–25-year-old students’) and treat other groups such as disabled users, part-time students, older users, non-native English speakers and so on as add-ons – the ‘non-traditional students’ or the ‘socially excluded’.

Imagine you are a mature, international research student with a chronic health condition who commutes from a city an hour or two away. The university library does not know what to do with (or how to support) someone who experiences a number of hardships at the same time. It is designed for the young, non-disabled undergraduate student living locally and speaking English as a first language. Everything else is an add-on or extra – the Distance Learning department (which does not really apply to the commuting student), Disability services, International Student services, services for postgraduate students and researchers, initiatives aimed at part-time students or students who are parents and so on. All of these services tend to be poorly integrated with each other and into the whole.

Real inclusion is not about separation and othering of any user. Huzar (2014) discusses the library as a radically inclusive space. He argues that targeted initiatives aimed at marginalised groups make libraries less inclusive, as they feel they have done their part or ticked that box for inclusion, and yet those who do not meet the criteria for the initiative are excluded and the concept of a place that assumes equality for all its users is eroded. Part of the reason why public libraries are so attractive to minority groups is that they do not try to police communities in the same way as services aimed solely at those groups, and have to include everyone by default. There is no single assumption of what the ‘general public’ means. This should be the same for every library and its community.

Often if you solve a problem for non-traditional or minority users, you have solved a problem for many users. Lots of things we provide or fail to change as librarians, deliberately or inadvertently, users can just about ‘cope’ with, except for the users with conditions and disabilities that mean that they cannot. For example: non-ideal lighting, heavy doors, noise where there should be none, smells, inconsistencies in processes and layouts, chairs too uncomfortable for anyone to sit on for a long time, awkward positioning of facilities. Why do we accept this, even when we know (1) some people cannot deal with it at all and (2) nobody *likes* it?

We need to get better at enabling independence for all our users, in this self-service, 24/7 culture. Providing a mobility-impaired user with someone who can carry their books for a few hours a week does not solve the issue that the books are too heavy for most people to pick up and use comfortably and no e-book was available, or that there is often no way for students to move several books around the library themselves without discomfort or pain. We need to be better at challenging

vendors to provide us with formats that work for our users, as well as business models that work for our budgets, and we need to get better at challenging our idea of what users should be able to put up with before they complain.

Positive actions

1) The quiet entrance

Physically getting in to the library comes with many potential barriers (see Case Study 1). Make it easier for users by making sure at least one entrance to the library is ‘quiet’. No toilets or café, no group study or seating area near the doors, no bright colours, artwork or startling lights. It is helpful to provide something of a buffer zone before entering the library, so people can gather their thoughts before being faced with turnstiles and counters. If at all possible, users should be able to see lifts and stairs from the entrance and access them with no barriers or diversions once they have entered the library (see point 2).

2) Paths, consistency and codes

Desire paths (or lines) are the journeys people take through a built environment in order to get to their destination or achieve a task as quickly as possible and with minimal effort, even if this is not the way the environment was designed. You can see ‘alternative footpaths’ everywhere, where walkers take shortcuts across the grass instead of the winding, paved route.

Good user experience design looks at the paths currently taken by users, and examines how the potentially shortest route is currently blocked or could be compromised by furniture or shelving or other barriers. The designer then aims to remove them in order to make the space more effective for the users, even if the original idea was to make users take a longer route to ‘discover’ other features – the latter tack being one often taken by supermarkets to encourage impulse purchasing behaviour.

The need for unimpeded pathways goes double for anxious and disabled users, who have enough barriers in their way already. It is especially important that the quickest route is also wide enough to allow easy access by users of wheelchairs and mobility aids – and of course this will also help parents with buggies, users with big bags and so on.

Other helpful practices include:

- Promoting your facilities and services – do not make it hard for people to find out what is going on and how you can help (see point 6).
- Making help obvious – where is the help desk or counter? If there are several, is it really clear which one somebody should use?
- Very clear signage, including the use of unambiguous pictograms to explain food and drink policies (Belger and Chelin, 2013).

- Consistencies of layout – do not change the layout of a space regularly, and replicate layout of rooms, equipment, facilities and so on where possible on different floors.
- Locating toilets sensitively – plumbing is an issue, but putting toilets right at the entrance causes problems with noise and smell. Equally, placing them too far away makes it difficult for users needing to access them in a hurry.
- Understanding routines and sensitively managing expectations – if a student with anxiety or an autistic spectrum disorder likes to regularly use a pod or a particular study room, problems will ensue if it is suddenly unavailable.
- Zones and flooring – use changes of flooring colour, pattern or material to indicate a change of use or specific facilities (e.g. a printer area or silent study), rather than purely because it is aesthetically pleasing. Visually impaired users with some vision use these signals to navigate, and it is confusing if they are used for other reasons.
- Coding zones of the library and book sequences by colour (Lanfeard, 2008). This helps dyslexic and visually impaired users to navigate. Where possible, also use unambiguous patterns with the colours to avoid issues of colour blindness and ambiguity.

3) Choices

Offer disabled users in particular a real choice of study space. Some universities have individual or group quiet study rooms for the exclusive use of disabled users. This works against the idea of avoiding segregation, but for some disabilities existing choices of spaces and rules do not really work well. A study of a sample group of libraries in England and Wales reported that individual bookable study rooms would be very popular with dyslexic students (Belger and Chelin, 2013). Bodaghi and Zainab (2013) found that carrels set aside for visually impaired users led to a greater sense of belonging and security, which is particularly important for groups who are vulnerable and feel marginalised. Additionally, autistic users describe their difficulty with the volume levels in group study areas (Martin et al., 2008), and yet silent study areas are too quiet and the pressure to refrain from any noise is uncomfortable (Madriaga and Goodley, 2010).

It is not possible for most academic libraries to widely offer single-user study rooms and most require more than one user's student number in order to book a group study room – which are in high demand for most of the year for planning group work. However, many students with autism and other disabilities would prefer to work alone or with a companion in not-quite-silence, and these policies work against their needs, so a pragmatic solution like study rooms for students declaring a disability is required, or a disability resource area (Lanfeard, 2008). Please note that many students with disabilities do not disclose their disability to their peers, and therefore booking and access systems must be sensitive and discreet.

4) *Get out of the silo*

When planning changes to library spaces and services, do not just talk to experts within the library and the Estates department, but also outside it. For example, speak to disability advisors, the local disability assessment centres, the International Students office, the Art and Design department and Equality and Diversity staff groups. Build a good business case for changes that are related to accessibility but are not legal requirements.

Please note that it is not a good idea to carry out all your consultations with users and non-users of the library in the library building itself. This excludes anyone who currently has problems accessing the library, or has anxiety relating to the library as it stands, from taking part.

5) *Skills*

We can only solve the problems we know about, and we only hear from users brave enough to articulate their problems well and advocate for their needs. Universities should be encouraged to teach self-advocacy skills for learning and living. Remember from earlier in this chapter the issues around library anxiety and information literacy teaching and the struggles of some groups to participate in sessions. Learners with strong self-advocacy skills have better outcomes academically, socially and economically. Provide resources and sessions on this topic. (Do not call it self-advocacy! Integrate it into other sessions.)

6) *Better information*

Do not claim that your library building is ‘fully accessible’. Many libraries and public buildings include language of this type in their communications, but it is not the case or indeed possible, and it shuts down conversation with those who disagree because their needs are not being met. The Library of Birmingham’s visitor guide says the library was designed to be ‘accessible to all’. However, despite the presence of lifts and wheelchair accessible toilets, visitors blogging and tweeting about the library describe getting lost and confused, even when following this guide. This is due to routes designed to encourage ‘discovery and serendipity’ (Gambles in Prospero, 2013). These routes are prized over convenience and accessibility. Additionally, this library made some opaque choices over the naming of areas, failing to make explicit which collections were held under these names in the visitor guide. In the rush to create a unique user experience, the basic functionality of the library can be compromised and users alienated.

A better approach is to communicate well what the library does (and in some cases does not) have, in terms of facilities and services. Display this information in an easy to read way, with pictures if possible, in a basic manner outside the entrance as well as in full on the website and in leaflets, so people can make their own decisions. Make this section of the website obvious from the front page, rather than buried in a special section, as the information provided is not just applicable to

those who identify as disabled or outside of the ‘norm’. Each item could then link to more detail where relevant, but at least people with multiple needs and concerns then only have one place to check.

Presentation of the information is key: group the information in ways that make sense and use web design features such as the ability to expand or collapse threads under headings instead of chunking the content into separate pages. Try to use headings that describe what the information is about rather than who it is supposedly for. Examples could be:

Getting around

- We have an alternative quieter entrance (insert location) that you may prefer to use.
- Follow the star path on every floor to get straight to the lecture/computer rooms without travelling through busy or noisy areas.
- We have two lifts on each floor, each of which is wheelchair accessible. The call buttons are accessible from a seated position.
- Most public areas of the library are wheelchair accessible. At the moment areas X and Y are more difficult to access, particularly in larger vehicles such as powered chairs and mobility scooters – please let us know at the desk if we can help you.
- Registered assistance dogs are welcome in the library, but no other pets or animals can be admitted.
- All our permanent signage has tactile text and Braille elements. We keep printed posters to a minimum, as they are not often accessible to visually impaired library users.
- The green baskets on wheels are there to help you carry books around the library. The red and blue trolleys are for staff, so please let us know if you can’t find a basket rather than use those. ☺

Being understood

- The counter on the ground floor has a hearing loop. Please switch your hearing aid to the T setting, if available, and press the bell by the loop sign for assistance.
- Some library staff can communicate via British Sign Language (BSL) and they wear a blue ‘ear’ badge on their lanyards.
- The self-service machines can be accessed from a wheelchair and can be navigated via audio or on-screen options.

Facilities

- All desks on the second and third floors have individual reading lights. The light on these floors is softer than on the first floor, which has mostly overhead fluorescent lighting.
- There is assistive software (specify) on all computers and a small number of height-adjustable desks on every floor.

- There is a small prayer and meditation room on the third floor that is available to all library users, including non-religious people.
- We have male (3 cubicles, 4 urinals), female (5 cubicles), wheelchair accessible (1 cubicle), and gender-neutral (2 cubicles) toilets on each floor of the library. Other toilets are available in X location(s) nearby.
- Children under 14 can enter the library if an adult accompanies them at all times. We have no special facilities for childcare, buggy storage, baby changing or heating milk or food.

Final thoughts

Even just knowing what is and is not there can reduce anxiety for many library users and visitors. Offer ‘low barrier’ ways – incurring minimal transactional costs for the user – to contact the library that recognise the difficulties users with anxiety or additional needs may well have in contacting you and the inconvenience it causes them. Users with problems or concerns who cannot ‘just give us a call!’ on the telephone or drop in to speak to staff can lose out in terms of response times via email or other means.

However, if you make it as easy as possible for everyone to use the library equally without having to contact you (thanks to considerate provision of information and services), and you make it as easy as possible for users to contact you when they *do* have to and with a guaranteed timely response, library anxiety for all groups and individuals will be reduced.

Note

- 1 Small ‘d’ deaf indicates a person who views their hearing loss as a medical problem and wishes to identify with hearing people, whereas big ‘D’ Deaf people identify as culturally Deaf and part of the Deaf community.

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