Teaching an Old Library New Tricks: An Analysis of the User Experience

of Three Dublin Library Buildings

Abstract

This research endeavoured to investigate best practices in public library design in Dublin, Ireland. It examined how three different library building types fulfil their user's needs.

A predominantly quantitative survey with some qualitative elements was sent to patrons of three selected libraries: the [blinded], a contemporary new-build; [blinded], a renovated Carnegie library; and [blinded], a converted church.

The results demonstrate how these buildings successfully meet the user needs, but different factors must be considered. These include engaging patrons in the design phase of new-builds; the heritage of library buildings; and the perception of the library building in the community.

Keywords: Public library design; user experience; library building; Carnegie libraries; library design.

Teaching an Old Library New Tricks: An Analysis of the User Experience of Three Dublin Library Buildings

1. Background and context

There are over forty public library buildings in County Dublin currently in use that collectively demonstrate Dublin's rich heritage. These range from Charleville Mall built in the late 1800s (FUSIO, n.d.), a collection of Carnegie libraries dating from the early 1900s (Grimes, 1998), art deco libraries from the 1930s (FUSIO, n.d.), to the flat-roofed modernist buildings of the 1960s onwards. More contemporary libraries from the late '90s have been built in shopping centres, while the focus in more recent times has been on renovating old libraries or building state-of-the-art community hubs.

Our Public Libraries 2022: Inspiring, Connecting and Empowering Communities, is an ambitious five-year strategy for Ireland's public library service (Department of Rural and Community Development, 2018, p.3). It was published during a time of economic recovery for Ireland, intending to counter the lack of investment in public libraries necessitated by the global recession. The provision of "fit for purpose library buildings" (Department of Rural and Community Development, 2018, p.33) is considered a 'strategy enabler' for library services required in order to keep pace with the needs of their users (p.33) and consequently the strategy suggests that many library buildings require expansion, redevelopment, or to be rebuilt entirely (p.18).

With that in mind, this renewed investment has seen 45 new or re-developed libraries delivered between 2013 and 2017 (Department of Rural and Community Development, 2018, p.9), with further delivery of additional library buildings planned in the future. This timely research will report on the findings of a study in which three distinct types of library building were investigated in order to ascertain whether particular designs best fulfil the needs of public library users. The research was conducted in three distinct types of library building in

Dublin, each representing a different architectural design and style from the other. These libraries were: Library A, a contemporary new-build; Library B, a renovated Carnegie library; and Library C, a converted church building.

Subsequently, this research takes a different approach to evaluating library design. While it is common for post-occupancy evaluation to take place in recently opened, or re-opened, library buildings (Latimer, 2018, p. 207; Latimer & Sommer, 2015), this cannot be said for research into different architectural styles and designs in respect of impacting and benefitting the library user.

Aims and Objectives

The overall aim of the research was to investigate user perceptions of different library buildings in Dublin, Ireland in order to provide practical advice and guidance about different physical library designs. Taking into consideration the three distinct types of public library building being investigated, the objectives of the research include:

(1) To investigate the design principles used when building or renovating a contemporary library building

(2) To investigate the design principles used when converting or renovating historic library buildings

(3) To investigate the design principles used when converting and renovating a building not originally intended as a library

(4) To investigate how the three different library building designs fulfil the needs of their library users

To provide insight into different user-oriented methods of public library design

2. Literature Review

Official Guidelines

There are numerous official guidelines for public library design. One such document, *The Public Library Service: the IFLA/UNESCO Guidelines for Development* (2001), asserts that libraries should be accessible, particularly for those with physical and sensory disabilities. This includes ensuring the library is well lit and clearly signposted, that it avoids steps where possible, and that furniture and shelving should be appropriately sized for adults and children that can be easily navigated by people using wheelchairs (IFLA et al., 2001 p.43-46). The library should be flexible, that is, able to respond to and accommodate new services required by the community (IFLA et al., 2001 p.11, 30). The library should be available for community use and should have adequate space that is designated for various users (IFLA et al., 2001 p.43).

Irish libraries are built and renovated to the standards outlined in *The National Public Library Standards and Benchmarks*, which states the minimum space that a library is required to provide which is dependent on the population it serves (Department of the Environment, Community and Local Government et al., 2015). The five-year strategy for Irish public libraries, provides further context promising investment in libraries and creating a "bright attractive, trusted, welcoming, civic space" with barrier-free access to spaces, resources, and services (Department of Rural and Community Development, 2018, p.17).

Accessibility and location

Equity of access to all users is one of the most fundamental principles of the public library. All libraries should be well-lit, have clear signage, have adequate clearance between shelves, and be free from steps as much as possible (IFLA et al., 2001). It is also noted that "good design for disabled people is generally good design for the able-bodied" (IFLA, 2007, p.17).

In Ireland, the Disability Act 2005 introduced a statutory requirement for public services to be accessible to all members of society. This legislation ensures that public libraries are built, or renovated, to the principles of Universal Design (Bostick & Eigenbrodt, 2017). Universal Design is a philosophy that the environment should be designed and built so that it is useable by everyone in society "regardless of their age, size, ability or disability" ("What Is Universal Design | Centre for Excellence in Universal Design" n.d.). It asserts that 'good design' is that which can be universally used and enjoyed, and so benefits everyone.

The IFLA/UNSECO guidelines (2001) also make provision for the location of libraries, stating that they should be central and "located close to other community activities, for example, shops and cultural centres" (IFLA et al., 2001, p.11). This means that the fundamental and underpinning principles around access and convenient location are steered by official statutory documentation.

Principles of Library Design

Qualities of a Successful Library

Other principles then complement the fundamental principles where qualities of success are considered. The literature often refers to Faulkner-Brown's 'ten commandments' for library design (Dewe, 2006; Khan, 2009), which suggest that a library should be flexible, compact, accessible, extendible, varied, organised, comfortable, constant in environments, secure, and economic (Bisbrouck & Chauvenic, 1997, p.17; Dewe, 2006, p.218). These commandments are often described as outdated, with a revised edition by McDonald (IFLA, 2007, p.14) being generally preferred.

The revised commandments state that libraries should be: functional, that is, a "space that works well, looks good and lasts well" (IFLA, 2007, p.15); adaptable and flexible;

accessible; varied; interactive so that they "promote contact between users and services" (IFLA, 2007, p.20); conductive, a "high quality humane space which motivates and inspires people" (IFLA, 2007, p.20); environmentally suitable; safe and secure; efficient; and suitable for information technology. The final quality that McDonald recommends is the "'oomph' or 'wow' factor" (IFLA, 2007, p.25). This is where the aforementioned qualities unite to "create inspiring buildings with exciting architectural features and enjoyable internal spaces which capture the minds of users" (IFLA, 2007, p.25). These 'commandments' are a helpful tool when considering best practice in library design as these qualities are often repeated throughout the literature as highly desirable assets.

This revised version brings these 'ten commandments' up to date for modern library design. As Dewe posits, they demonstrate "more concern for people generally (users and staff) and their environment" (2006, p.219). As this research project is centred on the user experience of patrons and how the library meets their needs; McDonald's revised 'ten commandments' is used as a practical framework, through which to investigate the topic.

Space Planning

The planning of space within the library is crucially important in terms of meeting the needs of the library user. This involves the development of how the designated areas within the library space will relate to each other. These designated spaces should flow in a logical way that makes wayfinding easy for library patrons. Kahn notes how users "should not have to understand how the library is structured in order to make use of its services" (2009, p.117). Kahn also discusses the importance of adjacencies, for example, locating the circulation desk and self-service machines close to the entrances. Such planning helps the building to operate efficiently and therefore enhance the users' experience of the building (Kahn, 2009, p.118).

Library Design as the Third Place

Libraries are commonly referred to as the 'third place' within the literature (Florida, 2000; IFLA, 2007). Oldenburg (1999) describes the 'third place' as a place outside of the home and work where the public can relax and interact with one another. Due in part to the digital shift and the prevalence of the virtual library, library users can now access materials more freely. As a result, it is important that libraries position themselves not just as information repositories, but as welcoming and inviting places that people can meet and make conversation (Latimer, 2018, p.204; Oldenburg, 1999, p.26). As McDonald notes, "interiors are becoming more like an extension of the living room, providing the 'emotional space' for social interaction within the community" (IFLA, 2007, p.18). Therefore, the library as 'third place' is an important quality which can enable the public library as a place where the community can gather and interact (Department of Rural and Community Development, 2018, p.30)

User Participation in Library Design and Planning

User participation is a key trend in the public library literature (Koen et al., 2019). Facilitating this user engagement has many associated benefits such as wider support and attracting additional funding (Khan, 2009, p.78), as well as increasing footfall (Latimer, 2018, p.205). Latimer and Niegaard state that consideration of the needs of the end user should be central to the planning process, including early consultation with key user groups (IFLA, 2007, p.68). McDonald notes that "end-users can bring a refreshing and challenging perspective to the design of the library building" (IFLA, 2007, p.107).

Many authors discuss the Oodi library in Helsinki as a recent case study of innovative library design resulting from dynamic user consultation (Hyysalo et al., 2019; Latimer, 2018; Nicholson, 2019). Haavisto et al. (2017) describe the various ways in which Helsinki citizens

were consulted in relation to this building project, stressing the importance of citizens' involvement throughout the entire planning process.

The first instance of this involvement included the 'Tree of Dreams' initiative, where citizens were invited, in person and digitally, to describe their "dreams and wishes" for the planned library (Haavisto et al., 2017, para. 11). Citizens were invited to budgeting workshops and could vote to decide what services to allocate budgets to. The 'Friends of the Central Library' project targeted a diverse range of citizens and was later made a permanent group (Haavisto et al., 2017, para. 13). Proposed architectural plans were exhibited with citizens voting for and commenting on designs. Haavisto, Lipasti and Sauli note that this process resulted in a more democratic process and "new library thinking where the users are active do-ers, rather than passive consumers" (2017, para. 28).

The Hive Library, in the city of Worcester in the UK, is another well-cited best practice case study in terms of collaboration with local communities and how this facilitated a successful library design. The creation of this library is the result of a highly successful collaboration between Worcestershire County Council and the University of Worcester. It includes a public library, archives, and the academic library of the university. Allen, Downes, and Keene, writing in Atkinson's (2018) *Collaboration and the Academic Library: Internal and External, Local and Regional, National and International*, describe this library project as "a physical and metaphorical link between the University and its local community" (p.184) which presents "multiple opportunities for Worcester's communities to come together … [with] equal and seamless access to all facilities" (p.184). As Murvosh noted when discussing the American example of South Mountain Community Library, "blending [public and academic libraries] offers the community access to more resources" (2012, para. 17).

The Hive also collaborated with local business communities. Working with representatives of the various stakeholders, the Hive included a business centre with a

networking lounge, free WIFI, businesses resources and online databases, along with meeting rooms and training events and workshops (Atkinson, 2018, p.190). Not only is this beneficial for local business, but it also benefits students by "helping to bring a real connection with commerce and industry" (Atkinson, 2018, p.191).

Converting and Renovating Historic Carnegie Library Buildings

Carnegie libraries were established and developed all over the world between 1883 and 1929 through funding made available through the philanthropy of Andrew Carnegie. It is widely regarded that during this period, Carnegie libraries were instrumental in setting standards for the design and use of public space (Prizeman, 2016). A history of Carnegie libraries in Ireland was explored, along with literature describing their design principles (Grimes, 1998). The literature refers to how, at the time of their building, libraries represented something very different to their users. Their aesthetic was designed to be imposing, often featuring classical features such as steps and columns (Dahlkild, 2011, p.20). Formal reading rooms were the norm, along with protective measures often restricting patron's access to the books (Grimes, 1998, p.41). Black and Prizeman (2021) assert that the scholarly aesthetic of the Carnegie library is synonymous today with what users consider a library to look like (p.2).

The literature detailing the renovation of the Carnegie libraries to modern standards often discusses the difficulty in bringing them in line with accessibility legislation, not to mention the arduous task of adjusting for the digital age (Black and Prizeman, 2020; Levitt & Sombart, 2016; Schlipf, 2014). These buildings are often criticised for their energy inefficiency (Prizeman et al., 2020), however the consensus is generally that these buildings inspire the goodwill of their local communities. This support from the local community generally allows them to overlook the higher cost and lesser functionality of the renovated Carnegie library in comparison with a new build (Black and Prizeman, 2020; Schlipf, 2014).

Building Libraries in Converted Buildings

The literature reflects contemporary concerns for the environment and the societal benefits of 'recycling' when it comes to the conversion of buildings not originally intended as libraries (Hauke et al., 2021). Latimer explains how, by demolishing an old building, the energy that was used in its original construction is wasted (Hauke et al., 2021, p.32). Smith also refers to this wasted 'grey energy' when arguing that heritage buildings have a high quality of construction and materials, and possibly detailing and craftsmanship which cannot be replicated with modern construction practices (2000, para. 4).

Authors suggest that re-using an old building for modern use may not always be suitable, with much space planning required before approving the project (Franzkowiak, 2017). If the space can be used functionally, the benefits include their usually central location (Hauke et al., 2021, p.16), along with the value to local heritage of saving such a building. As noted by Niess, "heritage value is a cultural value" (Hauke et al., 2021, p.13), Hauke and Werner (2012) also state that the preservation of cultural heritage is also preserving "the historical identity of places and buildings, and preservation of the 'genius loci" (p.61). Suppel et al., writing in Hauke et al. (2021), discuss the importance of buildings as "design landmarks" that are "woven into the fabric of the community" (p.124). It is acknowledged that if these empty buildings can find another use, they can continue to be of importance to that community and their identity.

Summary

Public library design and space planning is well documented both in the critical literature and through guidelines found in official and statutory documents. With this research project in mind and its aim to investigate user perceptions of different types of public library design, the literature about qualities of library design, user engagement in library design and library as 'third place' has been reviewed in order to inform the methodological approach. In addition,

arguments around the heritage of Carnegie library buildings, and repurposing and renovating older buildings as public libraries, have also been taken into consideration.

3. Methodology

The Library Branches

County Dublin is divided into four County Councils which are responsible for the administration of public libraries (see Appendix A for map). The chosen County Dublin libraries for this study were representative of two separate county councils: Library A, Dún Laoghaire-Rathdown County Council ([blinded], n.d.); Library B; and Library C, both branches of Fingal County Libraries (Fingal Library Network, 2021).

Library A, regarded as the "new Central Library and Cultural Centre" ([blinded], n.d.) was opened in 2015 and was chosen to represent purpose-built new library buildings. It was designed in accordance with best-practice guidelines and reflects the view of contemporary public libraries as "interactive knowledge hubs, a place for public assembly and exchange" (Carr, Cotter & Naessens Architects, 2015, p.46). Other Dublin local authorities are currently in the planning stage of their own central libraries, including Fingal County Council's Swords Cultural Quarter (*Design Team Appointed to Swords Cultural Quarter Project*, n.d.) and the Dublin City Library at Parnell Square (*A New City Library for Dublin*, n.d.), so it was pertinent to study this type of building.

Library B was chosen as it is a renovated and extended Carnegie library building, originally opened in 1911 and re-opened in 2008 following an extension that retained "all its architectural characteristics" ([blinded] Community School & Fingal County Libraries, 2009, p.31). Dublin has a rich history of Carnegie libraries, with 21 libraries being built in the early 1900s (Grimes, 1998). While not all these buildings have survived or remain as libraries, the

renovated [blinded] Carnegie library is still a common type of library building in County Dublin and is therefore appropriate to evaluate for the purposes of this study.

Library C was chosen as it represents a library conversion building. An unused church, St [blinded] Chapel, was renovated and converted into [blinded]'s public library, and opened to the public in 2009 (McCullough & Ryan, 2010). The conversion of unused buildings into libraries has gained traction in recent years (Hauke & Werner, 2012, p.60; Latimer, 2018, p.206), a trend demonstrated by the planned location of Dublin City's new central library in a square of Georgian houses (Hauke et al., 2021, p.39).

Survey method design

In order to find out how library users made use of the spaces in their respective local public libraries, a method was required which would allow consistent data across all three library sites to be gathered but would also enable reflective dialogue with users of the representative libraries. A predominately quantitative survey with some qualitative aspects was therefore developed in order to research the user experience of the three libraries. It is important to note that while consistent data was gathered, the three libraries are representative of different Dublin communities which, while being demographically similar, may report differing experiences.

The use of a survey was considered the best method to do this and to address the research objectives, in that it would "allow [the] researchers to collect a breadth of data from large samples and generalize to the larger population from which the sample was drawn" (Leavy, 2017, p.101). A survey could reach a wide number of respondents while also allowing for consistent questions to be put to them, enabling the comparison of the libraries. As stated by Bell and Waters, "the aim [of the survey] is to obtain answers to the same questions from a large number of individuals to enable the researcher to both describe and compare" (2018, p.32).

A section including two open questions was included at the end of the survey, in order to obtain some qualitative data to help further illustrate the user's experience of each library. As Denscombe noted, "the advantage of 'open' questions is that the information gathered by way of the responses is more likely to reflect the full richness and complexity of the views held by the respondent" (2017, p.194).

Recruitment of Participants

Purposive sampling was used to select the three libraries that would be surveyed. These libraries represented some of the different architectural style and design of library building in use in Dublin. These libraries were selected to represent a contemporary purpose-built library, a renovated Carnegie library, and a library in a repurposed building. In order to circulate the survey amongst the patrons of these libraries, convenience sampling was used. A sampling frame was used by way of the email newsletter recipients of each branch, along with those who follow the branches on social media. The survey was emailed to these recipients and shared publicly on social media. Denscombe noted the use of email lists can be a "valuable basis for a sampling frame" (2017, p.51), as they provide well maintained records of known populations. The survey was shared via email and social media with the selected recipients, however there was no control over who responded. Bell and Waters describe this as opportunity sampling, as the research was "dependent on the goodwill and availability of respondents" to respond to the surveys (2018, p.199).

Posters and social media posts were created to advertise the survey. Posters were displayed on notice boards in the branches and promotional images were shared on the social media channels of participating branches. These promotional materials not only contained a link and QR code to the online survey, but also included imagery and text designed to appeal to the goodwill of potential participants.

Data Collection

The framework for the survey (see Appendix B for survey) was based on best practices in library design, as detailed above in the literature review. Special focus was placed on exploring if the libraries were accessible (Department of Rural and Community Development, 2018; International Federation of Library Associations and Institutions, 2007), and if they provided space and facilities required, while adhering to McDonald's revised 'Ten Commandments' for library design (Dewe, 2006; International Federation of Library Associations and Institutions, 2007; Khan, 2009). The survey was pilot tested amongst colleagues and friends before going live to ensure all questions were clear and concise. The survey was created on the 29.06.21 and closed on the 23.08.21.

Online Survey

The research was undertaken via the use of a self-administered online survey, using web-based software Survey Monkey. Survey Monkey was chosen as a simple and well-known tool which could be easily shared online, with the software generating links and QR codes which lead respondents to the survey. It allowed for the design of questions using a Likert scale, asking "respondents to indicate rank order of agreement or disagreement" with given statements (Bell & Waters, 2018, p.196). It also allowed for the export of complete survey data to various programmes for analysis.

4. Findings

The findings are presented using the headings used in the survey: general; accessibility; community spaces; reading spaces; study spaces; technology; and the library building. Each section comprises both the quantitative data from the surveys, along with qualitative data supplied from the open questions at the end of the survey. In the findings of this research, 'agree' and 'strongly agree' responses are often combined to describe positive responses from

patrons. Similarly, 'disagree' and 'strongly disagree' are combined to describe negative responses. When quoting the qualitative data, respondents are referred to as Library A Respondent (LA), Library B Respondent (LB), and Library C Respondent (LC).

Data Analysis

For the quantitative research, the collated data was exported from Survey Monkey and uploaded to Microsoft Excel for analysis. The data from each survey was entered individually according to the library branch it was received from. The 'COUNTA' function was used to calculate the total number of respondents, and the 'COUNTIF' function was used to include only the data that included a response from a respondent , that is, the usable data.
The 'COUNTIF' function was then used to count respondents' answers to the statements, for example, how many answered "strongly agree" to the question. The valid percentage of these answers was then calculated by dividing the number of answers by the number of responses. Charts were then created to visually compare all three branches.

The qualitative data was exported from Survey Monkey into Microsoft Word. After thorough textual analysis, the open text answers were deconstructed into units. Emergent coding was used to generate themes into which these units could be organised (Bell & Waters, 2018, p.152). This was done manually based on the researcher's knowledge and understanding of Dublin libraries. The frequency of the units was then counted, enabling the answers to be quantified (Denscombe, 2017, p.314).

Responses

In total, there were 133 responses to the library space survey. This consisted of 35 respondents from Library A, 48 from Library B, and 50 from Library C. The average daily visitors in 2019 to Library A was 1,684, to Library B was 452, and to Library C was 178.

The majority of respondents were aged between 35 and 54, with Library A having the youngest mean age of 43.6. The mean age for Library C was 50.6, while Library B had the oldest respondents with a mean age of 52.3.

Main Reasons for Visiting Library

The most common patron activities reported across all libraries were, in order, browsing the collections, reading, visiting with children, and attending events for both adults and children. Relatively few people surveyed stated that they use the library for studying (Library A n=7, Library B n=4, Library C n=5). An even smaller number of people saw the library as a place to socialise with others in the community (Library A n=2, Library B n=5, Library C n=1).

Accessibility

Accessing the Building

In terms of accessibility, all surveyed library branches returned mostly positive responses to the statement, "I can easily access all public areas of this building". Library C returned 98% (n=46) positive responses and Library A, perhaps unsurprisingly as the most modern building, returned (97%, n=44) positive responses.

While Library B also had a positive response of 83% (n=40), patrons reported the most difficulty in accessing the public areas, with 12% (n=6) returning a negative response. One respondent noted, "It's a worry when the lift continually stops working. Especially for wheelchair users and the immobile it means we can't attend meetings" (LB22). It is noteworthy that Library B has the oldest respondents, who are more likely to have problems with accessibility (Khan, 2009, p.11).

Accessing the Bathroom Facilities

Participants were asked for their opinions on the statement, "The bathroom facilities are suitable for my needs". Library B's facilities scoring the lowest with 10% (n=5) negative responses, compared to 6% (n=2) in Library A and 4% (n=2) in Library C. Two Library B respondents described the bathroom facilities as their least favourite thing about the library, as illustrated by the comment,

> "my least favourite are the terrible toilet facilities which are on the first floor and there is only 1 toilet. Terrible when you're having to deal with children who think they need to go for a pee 10 times an hour" (LB33).

Transport to the Library

Library C had the highest rate of positive responses to the statement "I can easily find parking at this library", at 97% (n=46) with 'N/A' responses removed. The majority of Library A patrons responded positively to this question with 69% (n=18). However, the open questions revealed that the parking facilities at Library A often hindered access. Six patrons reported it as their least favourite thing about the library. While one respondent praised the electric car charging points, several pointed to the high cost of parking as an issue. For example, "The parking garage attached to the library is expensive and difficult to access. We prefer to cycle or walk there as [a] consequence, which is fine" (LA1).

Only 42% (n=17) of Library B respondents responded positively with four respondents describing the parking as their least favourite quality. For example, "I hate non-library users parking and heading off as the parking is limited" (LB37).

Community Spaces

Space for Activities

All three library branches have dedicated meeting rooms available for patron use, however not all patrons seemed to be aware of this. When asked if they consider the space available for group activities to be enough, Library C received the highest number of positive responses (84%, n=42). Library B received 77% (n=37) positive responses. 69% (n=24) of Library A patrons responded positively.

Space to Meet Others

There were mostly positive responses from all branches when asked if the library was a good space to meet others. There was, however, a high proportion who answered, 'neither agree nor disagree' or 'N/A', suggesting that these patrons do not consider the library primarily as a space to meet people. Library B has the lowest positive responses at 31% (n=15).

      Library A respondents made 12 comments about how their library is a fantastic local amenity, particularly praising the exhibition space. This illustrates how Library A patrons utilise their library space to interact socially with their community. Several respondents describe Library A as an important place for people to gather. for example, "It's at the heart of the community in [blinded]" (LA34) and, "I really love it. Library A is the best library I've ever had on my doorstep. I've even gone on dates in it!" (LA10).

Reading Spaces

Presence of Spaces to Read

When evaluating spaces available for patrons to sit and read in the library, there were mostly positive responses to the statement "I find that there are comfortable places where I can sit

and read" from all three branches. Library B incurred the most negative results, with 19% (n=9) stating 'disagree' or 'strongly disagree'. Six Library B respondents had comments about the seating, for example, "It's strange how they put so much money into redesigning the whole building and it's lacking comfortably [sic] seating to read" (LB46).

While most responses from Library C were positive (82%, n=41), four stated that the lack of comfortable seating was their least favourite thing about the library. For example, "no cosy areas to sit and read. Chairs are in main thoroughfares or beside children's area" (LC31).

Availability of Spaces to Read

Reasons as to why these spaces may not be suitable is explored in the following survey questions. When posed the statement, "I find that there are enough of these spaces" to sit and read, 39% (n=19) from Library B had negative responses. Respondents pointed to the lack of "cosy" seating areas, for example, "would like to see some cosy reading nooks" (LB14). Library A reported 29% (n=10) and Library C 20% (n=10) negative responses to the statement.

Atmosphere of Spaces to Read

Noise levels also presented a barrier to patron's enjoyment of these spaces, with 17% (n=6) of Library A users disagreeing with the statement, "The noise levels in these spaces are acceptable". Seven Library A respondents found the noise levels disruptive, with one describing their least favourite thing as "the noise level once children are in the library – open plan is not very condusive [sic] to having quiet spaces!!!" (LA36). Only 6% (n=3) of Library C and Library B respondents reported negative responses to this statement.

Study Spaces

Presence of Spaces to Study

When responding to the statement, "I find that there are comfortable spaces for me to study", many respondents revealed they do not utilize these spaces. In order to get a clearer picture of the results, the 'N/A' proportions were excluded from the calculations. With these removed, Library A and Library C libraries scored highly with 73% (n=46) and 74% (n=19) positive responses respectively. While Library B also had a majority positive response, the rate dropped to 58% (n=17).

Availability of Spaces to Study

The subsequent survey questions probed deeper into how respondents felt about these study spaces. These findings were also calculated after removing 'N/A' responses. When asked if there were enough study spaces, 0% of Library A users disagreed. 20% (n=17) of Library C respondents had negative responses, while 25% (n=10) of Library B users responded that there weren't enough study spaces. For example:

> "it can be impossible to find a desk or computer to use as they are in use by students
> from the minute the library doors open and while I encourage and applaud the students in
> their dedications it can be frustrating not to get a space!" (LB11).

Atmosphere of Spaces to Study

Noise levels were also flagged as a problem in the study areas, particularly in Library B, where one respondent noted "I love the stairs, but it does mean that the students trying to study can hear the kids downstairs – I'm sure the noise on occasions disturbs them" (LB45).

Technology

Public-Use Computers

When asked if "there are enough computers available for public-use", there was again a significant proportion of respondents who answered 'N/A', which were removed for analysis. Library A had the highest level of positive responses at 74% (n=19), while the rate was 62% (n=26) for Library C. Library B showed the lowest, with only 45% (n=16) answering 'agree' or 'strongly agree'.

Printing, Photocopying, and Scanning Facilities

Respondents from the three branches answered similarly to previous results when asked if "There are adequate printing, photocopying, or scanning facilities available". Library A and Library C had high approval results with 74% each (n=20 and n=35, respectively). Library B again had the lowest result with 58% (n=20).

Self-Service/RFID Machines

The location of the self-service machines had an overwhelming majority of positive responses, with 98% for both Library B and Library C (n=44 and n=46, respectively). Library A users reported 85% (n=28) 'agree' or 'strongly agree', which is notable as the only time that it had the lowest result of the three libraries.

Availability of Electrical Outlets

Availability of electrical sockets for personal use in the buildings was also evaluated. Library A, the newest building, had the highest number of patrons select 'agree' or 'strongly agree' with 62% (n=16). Library C was only slightly lower with a 57% (n=18) approval rating. Library B had the lowest score with only 33% (n=11) agreement.

The Library Building

A Welcoming Space

98% of respondents for both Library A and Library C said they are welcoming libraries. This was expanded on in the open text sections, for example, "It's my happy place. I feel at home there and so do my children" (LA24) and "It's a wonderful addition to the community and the staff are all great at encouraging reading and community spirit" (LC28). Library B also had a positive response of 94%.

An Attractive Space

When asked if "I think that this library building is an attractive addition to my local community", Library A patrons revealed the most fragmented responses. While there were mostly positive responses (88%); the remaining 12% were negative. Respondents criticized the appearance of the building in the open text section, for example, when describing their least favourite things, for example "ugly exterior" (LA8) and "still conflicted about the exterior appearance but the interior is very pleasing" (LA28).

Most respondents considered it a beautiful building, specifically complimenting its space, light, and views of [blinded] harbour.

Library C is similarly complimented for its attractiveness, with 98% agreeing with the statement. It is specifically praised for its calming atmosphere, with five respondents referring to this quality, for example, "I just love the tranquillity of the library. It's an amazing building and I always feel better after a visit there" (LC36). The respondents appreciate that the old church building has been repurposed, with 15 people citing the building as their favourite thing. This is evidenced by the comments; "I particularly admire the beautiful renovation of the old church building into a stunning architectural space that

also provides such an important community asset" (LC3) and "Fingal Libraries saved a beautiful building from being abandoned" (LC30).

96% of respondents described Library B as an attractive addition to their community, with four respondents describing it as attractive in the open text section. This praise, however, referred exclusively to the original Carnegie exterior, for example, "Library B is very attractive outside" (LB17) and "To have a Carnegie library in the town is an asset the brick work and design is lovely" (LB46).

Summary of findings

Library B, while receiving broadly positive responses, consistently has the lowest results of all three libraries. Library A and Library C are largely evenly matched, with some points of divergence primarily due to their location, layout, and scale.

5. Discussion

Library A

The Successful New-build

The research shows Library A to be highly successful at meeting the needs of its users. It had the highest positive ratings in terms of integrated technology and comfortable spaces for patrons to read and study.

A Community Space

The findings demonstrate that Library A particularly fulfils the remit of providing "a welcoming community space", facilitating the sharing of "diverse cultural experiences and perspectives" (Department of Rural and Community Development, 2018, p.30). Ten respondents cited Library A's benefits for the local community, viewing it as "a meeting place, as a place to stimulate creativity and learning or […] as a place to which one can

escape" (International Federation of Library Associations and Institutions, 2007, p.69). This is most evident when one respondent described going on dates in the library (LA10). The patrons see it as a locus for community events, with local exhibitions particularly praised in the open text sections of the survey. This building was designed to be a flagship cultural centre and it is fulfilling that purpose for its community.

Issues

Library A is praised for the central location along with its "sheer scale" (LA17) and "spacious interior" (LA8). These qualities however were also the source of criticisms from some patrons.

Parking issues are the most reported problem, with respondents finding it expensive and difficult to access despite provision for underground parking. While this impacts accessibility, Dewe describes parking as a "community issue", rather than specifically a library problem (2006, p.107).

This library only once produced the lowest rating of the three libraries; in response to the statement "the self-service checkouts are conveniently located". While this library largely meets McDonald's revised 'ten commandments' for library design, this issue suggests a failing to be "efficient" that is, "economic in space, staffing and running costs" (Dewe, 2006, p.219).

User Consultation

The architects behind Library A describe it as "a beautiful space that you can walk into and make your own, because [it] has been built for you" (Carr Cotter & Naessens Architects, 2015, p.65). However, having replaced a small Carnegie library (Grimes, 1998), Library A's modern appearance seems to divide opinion with many respondents describing its exterior as "ugly".

The importance of user collaboration in the design process of libraries is highlighted in the literature. Haavisto et al. note how "participatory projects create opportunities for democratic participation for citizens", creating a "common feeling of ownership of shared public services" (2017, para. 15). While Library A underwent public consultation before finalising its design, it may have benefitted from a more rigorous participatory programme, such as the process Helsinki City Library facilitated when designing the Oodi.

Design proposals for the future Helsinki City Library were curated into an exhibition where the public were invited to view, comment, and vote for their favourite (Haavisto et al, 2017, para. 21). While public opinion was not the deciding factor in the planning process, Haavisto et al. note that the winning design received "barely any harsh criticism of the building itself" and it is likely that "the transparency and inclusiveness of the architectural competition phase might have had an influence on the favourable public opinion" (2017, para. 22). Had Library A undergone a similar process, the local community may have reached a more favourable consensus.

Library C

The Successful Conversion Building
The research findings highlight the affection Library C patrons feel for their library, with the word "love" used 21 times in the open text section. Other recurring aspects were the beauty of the building and the careful conversion of St [blinded] Chapel, which is particularly illustrated by the quantitative findings. Overall, the very favourable results from the survey illustrate that the library suits their needs in almost all respects.

Respondents only reported minor criticisms such as lack of seating, noise levels, and as LC24 noted; "a coffee dock would be a lovely addition". Latimer, in their discussion of other successful building conversions, states how there can be minor complaints regarding a

converted library's design. Providing the example of the "noise and cramped conditions" (Hauke et al., 2021, p.44) of the Storyhouse in Chester, Latimer notes that these incongruities are "a small price to pay for such a wonderfully evocative library" (Hauke et al., 2021, p.50).

The results show that, while there are minor complaints, the Library C respondents are generally contented with their library. As Latimer described, the spectacular nature of the building allows for minor criticisms to be overlooked, showing that conversion libraries can be very successful at meeting the needs of their users and providing the community with a landmark library space.

St [blinded] Chapel and Library C
Library C is a triumph for its community given the building's turbulent history. There was a local outcry in the 1980s when St [blinded] Chapel was to be demolished, as outlined in Moore's (2010) text:

> "St. [blinded] Chapel was very abruptly closed for public worship on Sunday 12 May 1985 after twelve o'clock mass. […] The inhabitants of [blinded] were paralysed with shock upon hearing this devastating news which was akin to a sudden death in the family. […] Our chapel, built on the site of the original penal day chapel, was to be demolished and a new church erected in its place" (p.30).

Moore describes how the community "fought for its survival with tremendous force" (2010, p.34), including forming human chains around the church, protests, and petitions. The building was eventually purchased by Fingal County Council and converted into Library C.

Latimer states that "Historic buildings are valuable because they are beautiful, rare, indeed often unique, and because they tell the story of the world's towns and cultures" (Hauke et al., 2021, p.32). In this way, Library C can be compared to the Mediathek Kirchzarten library in south-western Germany. Here, barns were converted into a community

library with the aim of "preserving significant buildings of importance to the identity of the town" (Hauke et al., 2021, p.126). The conversion of these important local buildings into libraries is a successful way of maintaining them as a resource at the heart of the community.

The Church Library in Ireland

The conversion of a church building into a public library is particularly fitting in Ireland. The Church has been synonymous with Irish society for centuries, with church buildings being a common feature in most Irish communities. There are many examples of successful Irish church conversions (Dewe, 2006, p.143), most notably Buncrana Community Library, winner of the SCONUL Public Library Building Awards in 2001 (*Designing Libraries - Buncrana Community Library*, n.d.).

Regarded as 'the land of saints and scholars', Ireland is known globally for the output of its ancient monasteries, such as the Book of Kells. The conversion of a church to library is evocative of this rich cultural heritage, echoing the peaceful and contemplative atmosphere of the scholarly monks. As Moore notes, "The opposition of parishioners to the destruction of their ancient place of worship is testimony to their deep appreciation and understanding of the role played by this chapel […] in sustaining Catholicism over the centuries" (2010, p.2). Such a setting accomplishes the current vison for Irish public libraries as "attractive and welcoming spaces […] where people can reflect, connect and learn" (Department of Rural and Community Development, 2018, p.15).

Library B

Accessibility Issues

Library B, while receiving broadly positive responses, frequently received the lowest patron satisfaction ratings. This is particularly problematic in terms of its accessibility. This library first opened in 1911 and so it is of little surprise that, like other Carnegie libraries, it is "notoriously difficult to […] align with accessibility codes" (Black & Prizeman, 2020, p.90).

Schlipf lists the many accessibility issues Carnegie libraries have, such as "interior and exterior steps, narrow interior clearances, impressively inaccessible restrooms" (2014, p.557).

The findings of this research reveal that 12% of patrons surveyed could not access all public parts of this library. As noted by LB22, Library B's first floor meeting rooms, only accessible by a staircase and an unreliable lift, pose a danger to patrons with mobility issues and can exclude them from attending events. This is misaligned with library guidelines which stress the importance of accessibility and inclusion (Department of Rural and Community Development, 2018; IFLA et al., 2001; Koontz et al., 2010).

The restrooms also received the lowest score of all three libraries, with 10% of respondents answering negatively. LB3 described their frustration with having to bring children to the bathroom facilities upstairs from the junior library. Khan notes how crucial "appropriate planning of adjacencies" are in library planning (2009, p.118). Khan lists the most common adjacencies, for example, "young children should not have to walk through adult spaces to […] use common facilities like […] toilets" (2009, p.119). The location of the new bathroom facilities, while likely a consequence of the original building's limitations, is ultimately a design shortcoming.

Technology

Library B patrons returned the lowest positive ratings in terms of access to public-use computers, printing, and photocopying facilities (58% positive), and, electrical outlets for patron use (33% positive). It is emphasised in the literature that bringing Carnegie Libraries "in line with the digital age is a considerable challenge" (Black & Prizeman, 2020, p.91). Schlipf notes how they can have "extraordinarily tangled wiring" (2014, p.567), demanding arduous work to bury new cabling into "solid masonry walls" (2014, p.567).

This research reveals that Library B, like other Carnegie libraries, struggles to integrate the technology necessary for a modern library service. This is a barrier in meeting

the needs of its users, particularly as Irish public libraries envision providing "leading edge digital technologies to enhance the service and [to be] available for users" (Department of Rural and Community Development, 2018, p.19). To achieve this vision in a renovated Carnegie library is difficult, with Black and Prizeman noting, "in the digital age, Carnegie's library buildings have become anachronisms" (2021, p.2).

The Carnegie Design

The respondents admire the appearance of Library B, with five respondents referring to its "beautiful" exterior. Carnegie libraries are often described as "monumental and temple-like in appearance" (Dahlkild, 2011, p.20). Black and Prizeman note that their appearance is synonymous with "an abiding notion of "libraryness" (2021, p.2), which is often highly valued by the community. This can be seen in the findings with respondents noting that the Carnegie library is "an asset" (LB46) to the town.

The interior does not benefit from the same consensus, with some patrons confused by its layout. As Schlipf notes, "since most if not all Carnegie-era libraries were constructed with loadbearing walls, it can be difficult to open up larger spaces" (2014, p.565). The necessity of maintaining these smaller rooms is indicative of the multiple reading rooms of Carnegie designs (Grimes, 1998). Library B demonstrates this with a small room welcoming visitors when they enter the library. This small space is used as a reading area which patrons must walk through before entering the main library space. This is unusual in a modern-day library, as noted by LB17 who stated that the entrance area can be "lost except for reading the newspaper". This area reflects the original plans of the library and limits the flexibility of its use (Dewe, 2006; IFLA, 2007; Khan, 2009).

Despite appearing to be the least successful branch at meeting the needs of users, Library B still returned a majority of positive responses to the survey. The community displays a fondness for this library, specifically its architectural heritage and as part of

Library B village's tradition. Black and Prizeman describe Carnegie libraries as "key components of civic identity and local heritage" and therefore garner "strong public interest in the remodelling and extension […] even though final costs and resulting functional efficiency in such projects can be, respectively, higher and lower than expected" (Black & Prizeman, 2020, p.90). It should be noted that, following this research, Library B was renovated.

Conclusion

The three library buildings selected for this study are very successful libraries at meeting the needs of their users. The findings consistently reveal positive approval ratings that reflect users' support and appreciation of these libraries.

However, the results also revealed issues that are pertinent to the distinct library building types. These issues mirror those raised in the literature and can negatively impact the user's experience of the public library building.

The state-of-the art modern library, such as Library A, is designed and built to the very highest standards of contemporary library design principles. As such, the outcome can be an inspiring building that awes users with its architecture and provides a hub for the local community. It allows for a full range of activities required by the modern library user, such as reading, studying, interacting with technology, and attending events and exhibitions. Library A has certainly achieved this; it is a dramatic building that successfully integrates the various spaces that its users require.

The consistent problem that users report with this building is its external appearance. The modern architecture is bold and creative, but this has proved divisive for the local community. In designing a contemporary purpose-built library it is possible that the resulting building may not fit with what the community consider a 'library' to be, or that it does not fit with what they consider their town to be. The new building can be seen as having alienating

architecture and design that is unfamiliar to the user. As highlighted in the literature, a rigorous public consultation period in the design stages can help to ensure the community buys into the vision of the new library. It allows for a sense of ownership of a building that represents them and their community and supports a positive user experience.

The renovated Carnegie library in Library B in some ways suffers from the opposite problem to that of Library A. The building's exterior looks how people expect a library to look, with patrons describing it as a beautiful addition to their area. It has, however, struggled to provide the main tenets of the modern library service inside this old building's constraints.

The literature stresses the difficulty in bringing Carnegie libraries up to modern standards, especially in relation to accessibility and the integration of technology. It is difficult and more expensive to renovate a Carnegie library, and although some anachronisms of the original building may remain, the result is usually met with favourable responses. These buildings are seen as beautiful and important to the local area. Of the three libraries studied, Library B demonstrated the lowest approval ratings, but it still yielded mostly positive responses. While it did not fully meet the needs of its users, it still evoked good feeling from the local community. Despite their limitations in providing a modern library service, Carnegie libraries are well loved in their communities.

The repurposed building Library C received extremely high approval ratings, largely matching that of the contemporary Library A library. The importance of this building to the local community is made clear throughout the findings. This, in alignment with the literature, demonstrates how converted buildings can become an integral landmark library if they can reuse a building that is important to the local heritage and identity. While there can be difficulties in repurposing, the importance of the historic building largely negates any compromises made. The conversion of a church building in particular is very effective as it easily lends itself to becoming a tranquil, peaceful asset to the local community. Library C is

very successful in meeting the needs of the public and it illustrates how a building conversion can provide a great library for County Dublin.

References

A new city library for Dublin. (n.d.). Parnell square cultural quarter. Retrieved July 13, 2021, from

    http://parnellsquare.ie/about-the-project/city-library-services/

Atkinson, J. (2018). *Collaboration and the academic library: Internal and external, local and*

    regional, national and international. Elsevier Science & Technology.

Bell, J., & Waters, S. (2018). *Doing your research project: A guide for first-time researchers* (7th

    edition). Open University Press, McGraw-Hill Education.

Bisbrouck, M, & Chauvenic, M. (Eds.). (1997). *Intelligent library buildings; Proceedings of the*

    tenth seminal of the IFLA section on library buildings.

    https://archive.ifla.org/VII/s20/rep/intlib.pdf

Black, A., & Prizeman, O. (2021). A reassessment of the design of Carnegie public library

    buildings with a view to their future use: The case of Evanston Public Library, Illinois

    (1908). *IFLA Journal*, 034003522110003. https://doi.org/10.1177/03400352211000383

Black, A., & Prizeman, O. (2020). Revisiting the Carnegie public library built form: The design

    and early history of three Illinois Carnegie library buildings. *Library & Information History*,

    36(2), 89–115. https://doi.org/10.3366/lih.2020.0019

Bostick, S., & Eigenbrodt, O. (2017, October 13). Universal design for library buildings. IFLA

    Library Buildings & Equipment Section Blog.

    https://iflalbes.wordpress.com/2017/10/13/universal-design-for-library-buildings/

Carr Cotter & Naessens Architects. (2015). [blinded]: Dún Laoghaire. Gandon Editions.

Dahlkild, N. (2011). The emergence and challenge of the modern library building: Ideal types,

    model libraries, and guidelines, from the Enlightenment to the Experience Economy. *Library*

    Trends, *60*(1), 11–42. https://doi.org/10.1353/lib.2011.0027

Denscombe, M. (2017). *The good research guide: For small-scale social research projects* (Sixth

    edition). Open University Press.

Department of the Environment, Community and Local Government, LGMA, & CCMA. (2015).

    Public library standards and benchmarks.

    https://www.gov.ie/pdf/?file=https://assets.gov.ie/8247/e1d04d52611a46798c6c873a5a505aa

    4.pdf#page=1

Department of Rural and Community Development. (2018). *Our public libraries 2022: Inspiring,*

    connecting and empowering communities. https://assets.gov.ie/4278/111218115931-

    79413828933647aaa21ce9157ee170ba.pdf

Designing Libraries—Buncrana Community Library. (n.d.). Retrieved August 8, 2021, from

    http://www.designinglibraries.org.uk/index.asp?PageID=777

Design Team appointed to Swords Cultural Quarter project. (n.d.). Fingal County Council.

    Retrieved July 13, 2021, from https://www.fingal.ie/news/design-team-appointed-swords-

    cultural-quarter-project

Dewe, M. (2006). Planning public library buildings: Concepts and issues for the librarian. Ashgate

    Pub.

[blinded]. (n.d.). Dlr libraries. Retrieved July 13, 2021, from https://libraries.dlrcoco.ie/using-

    your-library/find-your-library/[blinded]

Fingal Library Network. (2021). Retrieved July 13, 2021,

    https://www.fingal.ie/council/service/fingal-library-network

Florida, R. L. (2000). The rise of the creative class: And how it's transforming work, leisure,

    community and everyday life. Basic Books.

Franzkowiak, A. (2017, March 28). Does it fit? Transforming a heat and power plant into a library

    building. IFLA Library Buildings & Equipment Section Blog.

    https://iflalbes.wordpress.com/2017/03/28/does-it-fit-transforming-a-heat-and-power-plant-

    into-a-library-building/

FUSIO. (n.d.). *Charleville Mall Library, 16-17 Charleville Mall, Dunne Street, Dublin 1, Dublin.*
    Buildings of Ireland. Retrieved August 18, 2021, from
    https://www.buildingsofireland.ie/buildings- search/building/50010075/charleville-mall-
    library-charleville-mall-dunne-street-dublin-1-dublin-city

FUSIO. (n.d.). Inchicore Library, Emmet Road, Inchicore, Dublin 8, Dublin. Buildings of Ireland.
    Retrieved August 21, 2021, from https://www.buildingsofireland.ie/buildings-
    search/building/50080156/inchicore-library-emmet-road-inchicore-dublin-8-co-dublin

Grimes, B. (1998). Irish Carnegie libraries: A catalogue and architectural history. Irish Academic
    Press.

Haavisto, T., Lipasti, P., & Sauli, A. (2017). Working with the citizens: Planning the new Helsinki
    Central Library. *BiD: Textos Universitaris de Biblioteconomia i Documentaci*, *2017,38*.
    https://doi.org/10.1344/BiD2017.38.13

Hauke, P., Latimer, K., & Niess, R. (Eds.). (2021). *New libraries in old buildings: Creative reuse*
    (1st ed.). De Gruyter Saur.

Hauke, P., & Werner, K. U. (2012). The second hand library building: Sustainable thinking
    through recycling old buildings into new libraries. IFLA Journal, 38(1), 60–67.

Hyysalo, S., Hyysalo, V., & Hakkarainen, L. (2019). The work of democratized design in setting-
    up a hosted citizen-designer community. International Journal of Design, 13(1), 69–82.

International Federation of Library Associations and Institutions, Gill, P., & Unesco (Eds.).
    (2001). The public library service: IFLA/UNESCO guidelines for development. K.G. Saur.

International Federation of Library Associations and Institutions. (2007). IFLA library building
    guidelines: Developments & reflections (K. Latimer & H. Niegaard, Eds.). Saur.

Khan, A. (2009). Better by design: An introduction to planning and designing a new library
    building. Facet Pub.

Koen, D., Lesneski, T. E., & International Federation of Library Associations and Institutions (Eds.). (2019). Library design for the 21st century: Collaborative strategies to ensure success. De Gruyter.

Koontz, C., Gubbin, B., & International Federation of Library Associations and Institutions (Eds.). (2010). *IFLA public library service guidelines* (2nd, completely rev. ed. / edited by Christie Koontz and Barbara Gubbin ed.). De Gruyter Saur.

Latimer, K. (2018). 2050: A library space odyssey. Planning the future library. Legal Information Management, 18(4), 203–209. https://doi.org/10.1017/S1472669618000439

Latimer, K., & Sommer, D. (Eds.). (2015). Post-occupancy evaluation of library buildings. De Gruyter Saur.

Leavy, P. (2017). Research design: quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches. The Guilford Press.

Levitt, B., & Sombart, L.. (2016). Library For the Future. ASHRAE Journal, 58(9), 56-58,60,62,64,66. https://www-proquest-com.sheffield.idm.oclc.org/scholarly-journals/library-future/docview/1819108087/se-2?accountid=13828

[blinded] Community School & Fingal County Libraries. (2009). Carnegie Library [blinded]: Centenary celebration, 1909-2009. Fingal County Libraries.

McCullough, N., & Ryan, R. (2010). [blinded] Library. Anne Street Press.

Moore, M. M. (2010). [blinded]: [blinded]. Beta Printing Services.

Murvosh, M. (2012). Better together. Library Journal (1976), 137(9), 20–24.

Nicholson, K. (2019). Collaborative, creative, participative: Trends in public library innovation. *Public Library Quarterly*, *38*(3), 331–347. https://doi.org/10.1080/01616846.2019.1571399

Oldenburg, R. (1999). *The great good place: Cafés, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community*. Marlowe and Company.

Prizeman, O. (2016) *Philanthropy and light: Carnegie libraries and the advent of transatlantic standards for public space*. Routledge.

Prizeman, O., Boughanmi, M., & Pezzica, C. (2020). Carnegie Libraries of Britain: Assets or liabilities? Managing altering agendas of energy efficiency for early 20th century heritage. *Public Library Quarterly*, 1–40. https://doi.org/10.1080/01616846.2020.1826242

Schlipf, F. (2014). Remodeling and expanding Carnegie-Era library buildings. *Library Trends*, *62*(3), 556–580. https://doi.org/10.1353/lib.2014.0002

Smith, S. J. (2000). Blending old and new. American school & university, 72(12), 156-160.

"The Four Dublin Council Areas." n.d. Dublin.Ie (blog). Accessed May 03, 2023. https://dublin.ie/live/life-in-dublin/dublin-council-areas/.

"What Is Universal Design | Centre for Excellence in Universal Design." n.d. Accessed May 03, 2023. https://universaldesign.ie/what-is-universal-design/.

Appendices
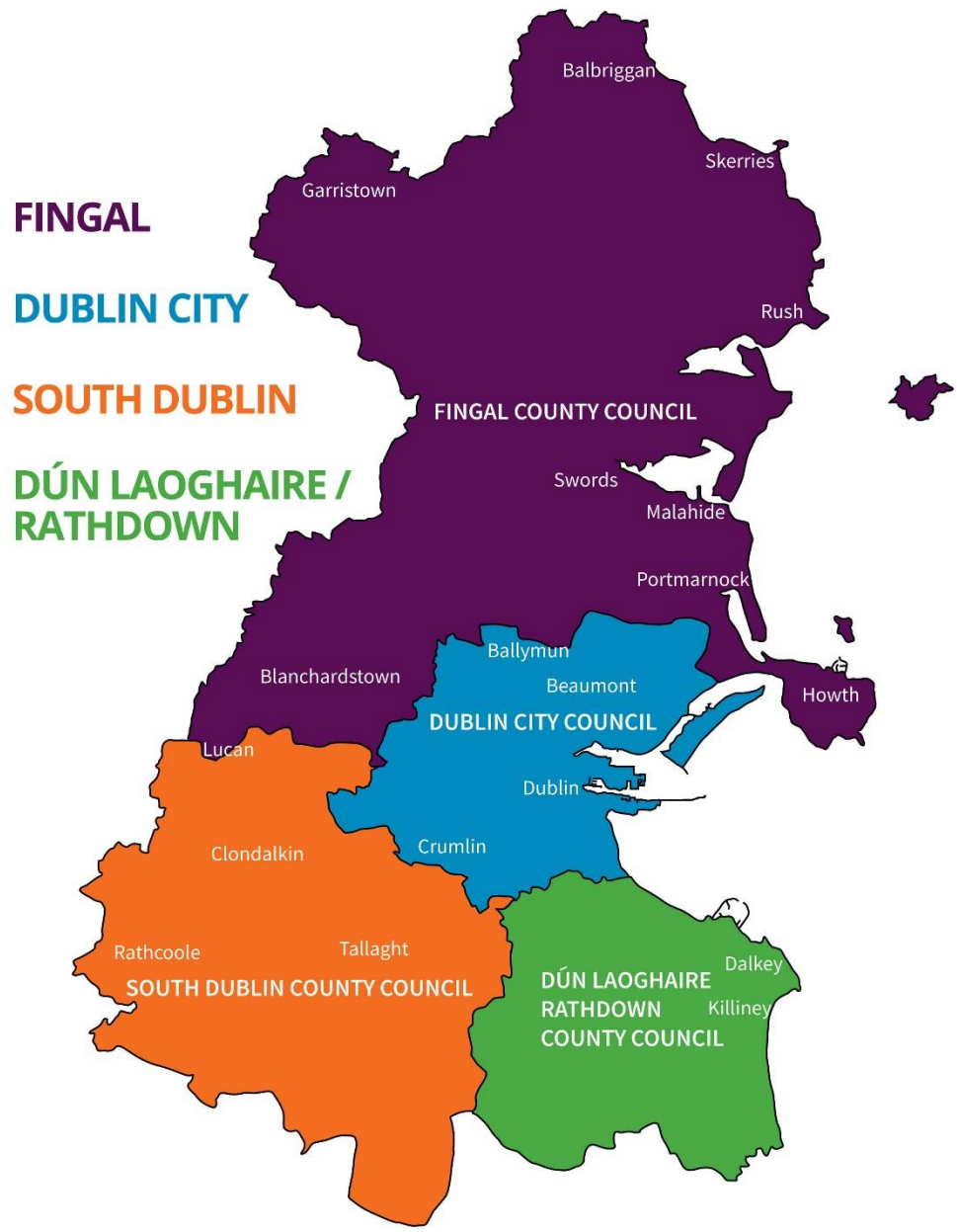
Appendix A:

Appendix B:

Library Space Survey

General:

1) I am answering these questions in relation to

2) What is your age?

3) What are your main reasons for using this library?

   To browse the collections, to read, to study, to use the wi-fi, public computers, or

   printing/photocopying facilities, to socialise with others in the community, to attend

   events for adults, to attend events for children, with children, other (please specify)

Accessibility:

4) I can easily access all the public areas of this building

5) I can easily access the print collections in this library

6) The bathroom facilities are suitable for my needs

7) I can easily access this library via public transport

8) I can easily find parking at this library

Community Spaces:

9) There is enough space for group activities at this library

10) There is a dedicated space, i.e a meeting room, for group activities and collaboration

11) This library is a good place to meet other people

Reading Spaces:

12) I find that there are comfortable places where I can sit and read

13) I find that there are enough of these spaces

14) I find that these spaces are well lit

15) The noise levels in these spaces are acceptable

16) I feel overlooked of overheard by other users in these spaces

Study Spaces:

17) I find that there are comfortable spaces for me to study

18) I find that there are enough of these spaces

19) I find that these spaces are well lit

20) The noise levels in these spaces are acceptable

21) There is space for me to work collaboratively with friends or colleagues

Technology:

22) There are enough electrical outlets where I can plug in my own devices

23) The self-service checkouts are conveniently located

24) There are enough computers available for public use

25) There are adequate printing, photocopying, or scanning facilities available

The Library Building:

26) I think that this library is a welcoming and inviting place that I enjoy spending time in

27) I think that this library building is an attractive addition to my local community

28) Which words would you use to describe this library space? Please select up to 3

   Inspiring, motivating, memorable, relaxing, inclusive, safe, flexible, none of the

   above

29) What are your favourite and least favourite things about this library space?

30) In general, how do you feel about your library and the space it provides?