

An Evaluation of Public Library Local Studies
Websites in the United Kingdom

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Abstract

The aim of this study was to establish whether current public library websites are meeting the needs of their local studies users. A quantitative approach was used as the study involved using collected data for generalisation.

The study consisted of three phases. The initial phase involved reviewing the relevant literature to discover established criteria for evaluating website usability, and the information needs of local studies users. The findings of this review were then used to inform the second phase. This consisted of designing an evaluation framework and instrument for assessing the websites.

The literature review revealed that many local studies library users come from outside of library authority's region or choose to access the collection and services remotely. However, many users are willing to travel to gain access to unique material relevant to their research. Therefore local studies websites should supply information and services for those planning to visit the library and provide access to resources for their remote users.

Aspects such appearance, layout, navigation, and readability are important factors to consider when evaluating usability. Web users have short attention spans and need to be able to access the information they require with minimum effort. Accessibility issues are also essential as information needs to be available to users of all abilities.

A random sample of 50 public library authorities was chosen for evaluation. Two of these did not contain local studies pages. 48 websites were visited between July 15th and August 5th 2007. Data was gathered and analysed. Results indicated that most libraries met usability criteria, although there were problems with readability and navigation. Most libraries supplied at least a basic level of information to enable users to plan a visit. Less than half of the sample provided access to digital collections, but the majority provided links to useful websites.

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1 Introduction

1.1 Research Background

Local studies topics, especially family history and genealogy, are currently very popular pastimes. This has been prompted by the success of television programmes such as the BBC's *Who Do You Think You Are?* and the History Channel's *Hidden House History*. The increased availability of records online through websites such as Ancestry.co.uk, Genes Reunited, the Church of Jesus Christ and the Latter Day Saints' IGN website, www.familysearch.org, the release of the 1901 census returns, and more recently the availability of census returns from other years, have also proven to be extremely popular. In the month of April 2005, for example, 1.7 million people, approximately 7% of the total online population in the UK, surfed family history websites. This was an increase of 44% on the previous year (Nielsen/NetRatings 2005).

Webster (2005) advises that this will affect the number of users of local studies libraries as more and more people become aware of the variety of resources available and that local studies staff should prepare for this increased demand on their services. Barber (2002) and Reid (2003) both advise local studies libraries to use the Web to exploit the new market of online family and local history enthusiasts. Bever (2003) recommends that the needs of users should be anticipated to improve the quality of service provision. At a time when users increasingly expect remote access to resources, local studies libraries can use their websites to provide access to unique material and help users to sort through the multitude of material of uncertain quality available on the Web. Reid (2003) suggests various methods of using the medium to serve different customer groups.

There have been few attempts to address whether local studies libraries have heeded these recommendations.

1.2 Aims and objectives

This study aims to assess current public library local studies web pages in order to discover if they are meeting the requirements of their local studies users. The objectives are;

- To conduct a review of the relevant literature in order to establish appropriate criteria for use in evaluation
- To design an appropriate and effective instrument for gathering data

Specific research questions to be addressed are

- Do public library local studies websites meet usability criteria?
- Do public library local studies websites meet accessibility criteria?
- Do public library local studies websites provide appropriate information for those wishing to visit the collections?
- Do public library local studies websites provide access to services and material for remote users?
- Do public library local studies websites provide any additional features to attract users?

1.3 Dissertation Structure

This chapter has presented the research background to the present study and introduced the aims and objectives of the study. Chapters two and three will present the findings of the literature review. Chapter two focuses on local studies libraries and their users. Chapter three reviews the literature on website design and usability. Chapter four discusses the methodological approach adopted for the project, and outlines the methods used. Chapters five and six present and discuss the results of the evaluation. The final chapter draws conclusions and makes recommendations.

2 Literature Review: Local Studies Libraries and Users

2.1 Introduction

This chapter presents the results of a review of the literature focusing on local studies libraries and their services, their users and the existing literature on local studies library websites.

2.2 What is 'local studies'?

The term 'local studies' is often equated with the term local history. However 'local studies' is much broader in scope, encompassing many more elements. Reid (2003) explains that a local studies collection should

“cover all aspects of the locality, both the physical and built environments, and all aspects of human activity within that locality in the past, present and future.” (Reid 2003: 2).

The geographical area considered to be 'local' is frequently defined by the political boundaries covered by the library authority. Topics covered include family history, archaeology, oral history, landscape history, industrial archaeology, population studies and local environment issues (Dewe 2002). Local studies collections include a great variety of material relating to the local community such as books, maps, newspapers and periodicals, ephemera, illustrations, audio and visual recordings etc. (Martin 2002). They are often located within a single building, such as the library authority's central library or within a dedicated local studies or local history centre, which are often combined with archive services. Alternatively collections may be spread between different library branches (Reid 2003).

Although the term 'local studies' has been in use since the 1970's many library authorities do not use it, instead choosing to use terms such as 'local history', 'family history', and 'community history' as titles for their collections and services (Dewe 2002). However, for the sake of simplicity, the

term 'local studies' is used throughout this dissertation to indicate any collections falling into this area.

2.2.1 Popularity

Current events and popular media often influence interest in local studies. A current resurgence of interest was recently sparked by the BBC's '*Who Do You Think You Are?*' programme, which followed the efforts of celebrities to trace their ancestors. It frequently attracted more than 5 million viewers, leading to a 25% increase in the custom of local records offices and a live show at London's Olympia in May 2007 (Grice 2006).

Improvements in technology facilitating easier and wider access to records and resources also leads to increased activity. Many of these records are now available online, opening them up to anybody with an Internet connection, encouraging people to get involved when they would previously been deterred. As Tony Robinson, an amateur genealogist put it

"I have been doing my family tree for 30 years ... My partner, who I introduced to family history 18 months ago, has already reached the same point as me and has never moved out of our study" (quoted by Whittaker 2007).

The existence of hundreds of websites offering access to sources and providing advice demonstrates the popularity of family history and genealogy on the Web. The 1901 census proved so popular when launched in 2002 that it couldn't cope with the amount of traffic and crashed within days (Busch 2003). More recently it was reported that 1.7 million users visited the website Ancestry.co.uk during the month of September 2005 (Keegan 2006). Webster believes that this can only have a positive effect on the number of people choosing to avail of local studies library services,

"increasing use of the internet for family history research is likely to encourage more use of the other genealogical materials freely available to the public at their local library, particularly when we alert users to the wide variety of resources that exist" (2005: 43).

2.2.2 User groups

Local studies libraries attract many different types of users. These include, lecturers and students, teachers and school children, local historians, family historians, folklorists, geographers and geologists, archaeologists, tourists, and those with commercial interests (Martin 2002). Additionally, there are many courses offered on subjects connected with local studies, attracting those engaged in lifelong learning (Dewe 2002).

Thus, the local studies services are utilised by a wide spectrum of age groups from different sectors of the community. However there is some evidence that suggests that local studies issues are particularly of interest to older adults. For example 37% of those who visited British archives in 1998 were retired, while MLA statistics for 2005-2006 show that 58% of those who used archives were over the age of 55 (Dewe 2002; MLA 2006). This is also reflected in those who use the Internet for research, as 42% of those who surf genealogy and family history websites are over the age of 50 (Nielsen/NetRatings 2005). Interest is almost evenly divided between the genders, with men accounting for 50.5% of those who visit archives, and 56% of those who surf related online resources (MLA 2006; Nielsen/NetRatings 2005).

Many of those who wish to use local studies collections come from outside the locality. Richards (2006) surveyed the views of 99 family historians in Derbyshire and Warrington and discovered that 56% of them would be willing to travel to access collections necessary for their research, with 20% even willing to travel overseas if necessary. In the survey of visitors to 100 British archives in 1998, 12% had come from abroad and 33% had travelled over 20 miles (Dewe 2002). Improvements in communication technology now enable many users not to visit the library at all and exclusively access services and collections remotely, as they

“can be accessed with equal ease from around the corner or from the other side of the world” (Reid 2003: 19).

These different groups may have different information needs and different service requirements.

2.2.2.1 Family History and Genealogy

There is evidence that suggests a large portion of those interested in local studies are actively concerned with family history and genealogy. A 1994 survey of Bolton's Archives and Local History Unit customers revealed that almost 40% of customers were researching their family history or genealogy. Similarly 61% of 11,000 visitors to 100 British archives in 1998 were conducting family history research (Dewe 2002). Recent MLA statistics showed that family history was the main motivator of 36% of those using archives in the year 2005-2006 (MLA 2006). The popularity of this hobby led Simon Busch of The Guardian to observe that,

“every second person, it seems is scrubbing about in her little patch of historical soil to expose the tangled roots of the family tree” (Busch 2003)

This area, therefore, should receive a lot of attention from local studies libraries.

The information needs of family historians differ from those solely concerned with genealogy. Genealogists are primarily concerned with requiring accurate documents to construct a family tree. Family historians on the other hand are also interested in finding out about the lives of their ancestors and attempt *“to put flesh on their bones by investigating the social history surrounding their lives”* (Barratt 2007). Richards (2006) found that the family historians in Derbyshire and Warrington, while primarily concerned with constructing their family tree, were also interested in tracing their geographic roots and finding out about the place, learning about what the lives of their ancestors were like and finding out about their occupations. She found that family historians normally consulted a number of different information suppliers during their research. The majority (89%) used the local studies library, followed closely by consulting with relatives. They also used archive collections and records offices to a lesser degree. They favoured the use of reliable and accurate sources, preferring to access documents that were free or good value and preferred electronic formats to hardcopy.

2.2.2.2 Local History

There are many other aspects of local studies collections that engage users. For example users are often interested in local architectural history. Barber (2002), for example, points out that many breweries like to display a history of the pub and old views of the area, while interior designers might consult the collection if decorating old buildings. There has also been some interest in people tracing the history of their houses, for example the History Channel airs the television series *Hidden House History*. This has prompted several people to find out about the history of the building and the lives of its previous occupants. Interested users consult old maps, census returns, trade directories, electoral registers etc. (Schuler 2000; Adolph 2006).

Other local history activities relate to its inclusion in the curricula of many courses, such as primary and secondary schools and various life long learning courses. Local studies libraries and local societies run “a range of events, taster sessions and courses” that encourage users to explore different resources and topics (Archdeacon et al 2005).

Those interested in local history are also concerned with the provision of online resources. Bayliss (2004) interviewed 20 users of Derbyshire local studies libraries and found that 60% of them felt that this was very important, 40% claimed to access these resources at least once a week and 90% said they would access library services from home if available.

2.2.2.3 Academic and Other Interests

Many different professions use local studies collections as part of their job. This includes local media who may want to use old photographs, recordings or local statistics. Similarly local businesses may also make use of resources such as statistics, electoral registers, newspaper collections etc. (Martin 2002). Council employees such as town planners, economic development officers, tourist officers or market researchers may need to consult maps, and other documents when compiling reports (Barber 2002). Archaeologists may consult Ordnance Survey maps, historical information and existing archaeological reports when assessing sites. Many academics also use the collections.

2.3 Local studies library websites

It is agreed among the profession that the existence of a good local studies website can promote services to users and provide access to information and resources for users who can't or won't come into the library. The Reference and User Services Association (RUSA) section of the American Library Association recommend the creation of a separate area on the library's website for local history collections in their *Guidelines for Establishing Local History Collections* (RUSA 2006). This is similar to the physical separation of the collection from other areas of the library's general collections, enabling users to readily recognise it. This allows the local studies staff to focus the design and content of the website to their target audience. Barber recognises the potential of this development

“the exploitation of this new market is one of the major challenges facing local studies libraries today, with the pace of change in the 21st century bringing ever-expanding opportunities” (2002: 147).

Reid (2003) and Falk (1999) caution that these websites should take care to serve all potential users, local and remote, seasoned local studies enthusiasts and novices, as well as attracting non-users.

2.3.1 Content

Local studies library websites, like general public library sites should provide some basic information for the user, such as addresses, contact information and opening hours for its collection (Hildebrand 2003; Solomon 2005). This may be different to that of other sections of the library as local studies collections are often housed in their own area or building and may not have the same level of staffing (Melrose 2002). Due to this Watts (2006) recommends that even if the local studies collection is available at the same hours and building as the main collection, this should be explicitly stated on the local studies page. Any other information likely to be required by new users, especially for those unfamiliar with the library and locality should also be provided, e.g. facilities available in and around the library. Information on events and activities should also be provided (Hildebrand 2003). Information

about any charges the user may encounter should be clearly displayed, as well any library policies, e.g. prohibited use of ink pens in the collection rooms etc (Watts 2006).

2.3.1.1 Resources and services

Details of available resources is key to the success of the website, as

“An essential part of any local studies website should be a thorough explanation of all the types of and categories of resources available in the collection as well as the provision of details about how to use local history resources” (Reid 2003: 86).

The provision of enquiry services is an issue for all public libraries, but is especially relevant to local studies libraries as they receive many enquiries from users who may never visit in person. It is also a source of income generation for a lot of local studies service providers. The most frequently provided method is e-mail, but Reid warns against the many problems this may entail;

“Many users of e-mail regard it as much more informal than a conventional letter. This often leads to enquiries being expressed poorly or inarticulately, lacking clarity and detail” (2003: 63).

The use of online enquiry submission forms may help users to structure their questions. Reid also proposes the possibility of providing real-time enquiry help by providing an Internet Relay Chat (IRC) facility. He suggests this may be useful for quick reference enquiries.

Smith (2002) warns that the popularity of e-mail has led to staff being bombarded with so many enquiries that it is impossible to deal with adequately. She recommends that libraries supply users with the means to help themselves, through the inclusion of Frequently Asked Questions and the provision of guides to the collection. She also suggests that access to a good library catalogue would be helpful. Users of Derbyshire local studies libraries agreed, with 35% of interviewees requesting that the local studies card catalogue be put online (Bayliss 2004). Access to library provided databases might also help users to locate sources of benefit to them (Watts 2006; Hildebrand 2003). However, providing guidance should not involve

putting existing leaflets and brochures on the website (Barber 2002, Hildebrand 2003). These pdf/Word documents look dull when on screen and create problems for users who need to download them. Instead they should be rewritten in a form more appropriate to the medium (Barber 2002; Nielsen 2003). Another option considered is the inclusion of online tutorials (Reid 2003; Watts 2006).

Remote access to the library's digital collections is considered beneficial to the success of the website as they provide global access to often unique material. They generally consist of digitised images from the library's collection, which appeals to the visual aspect of the Web (Reid 2003; Litzer and Barnett 2003). Providing access to digital image collections has been very successful for some libraries, e.g. after Tameside Local Studies and Archives put over 12,000 images online they received comments from people all over the world including the U.S. and Canada (Local Studies Librarian 2002). Other material digitised by local studies libraries include audio recordings, and ephemera. However, there are still some problems with the provision of digital collections including problems of copyright. Users should be reminded that not all material is available digitally and that additional material is available in the library (Hume and Lock 2002).

2.3.1.2 Provision of External Links

The inclusion of links to external sites is considered to be an important additional service to provide for users,

"It is vitally important to think carefully about the quality of links provided on the site. Links should be made to sites that will appeal to and assist both the local and remote user" (Reid 2003: 106).

Users appreciate links to websites that provide access to accurate records such as online census returns, e.g. the National Archives website (www.nationalarchives.gov.uk), 1837 Online (www.1837online.com), the International Genealogical Index website (www.familysearch.org) which provide transcriptions of parish registers etc. (Richards 2006). Other national providers such as National Burial Register are also useful sites for family historians (Smith 2002; Reid 2003). Links to sources of local resources are

also important, e.g. the website of the local Records Office, local history societies, museums or archives etc. (Reid 2003).

Users also consider the provision of a dedicated subject gateway to be a useful feature. This provision of librarian-assessed websites enables users to locate useful resources without facing the large number of hits of uncertain quality that Internet searching may uncover (Blue et al 2007). Bayliss (2004) found that 70% of local studies users interviewed considered the provision of a subject gateway in their topic to be very important.

2.3.1.3 Additional information

Providing narrative information about the locality is considered a useful way of disseminating information to users while advertising the contents of collections. For example the library staff of The Gold Coast local studies library in Queensland have used library resources to write many profiles about different topics, places or people in response to reference requests. Fischer recommends making these heritage profiles available online for a wider audience, using the medium to

“bring new life to the material through the use of colour graphics, images, and the ability to associate topics using programming links” (2002: 26).

Bever (2003) also recommends this practice for helping family historians,

“People interested in your area’s local history aren’t always local. Providing the background information specific to your service area gives your users the context needed to overcome the obstacles in their research” (2003: 50).

Providing a timeline of events, especially fatality-producing events, may help users to narrow their search by estimating the time of death of their ancestors.

2.3.1.4 Library 2.0 features

In a recent article, Linda Berube advises, *“Libraries should stop worrying and learn to love the Internet”*. She states that they need to be aware of technological advances and integrate them into their services (Berube 2006). This is advocated by the Library 2.0 movement, which

recognises the value of Web 2.0 to the library and information field. Maness explains that

“Library 2.0 is not about searching, but finding; not about access but sharing” (Maness 2006)

This can be achieved by embracing features such as synchronous messaging, podcasts, blogs and wikis, social networks, user tagging, mashups and RSS (Really Simple Syndication) feeds (Maness 2006; Casey and Savastinuk 2006). These encourage feedback from users and enable users to interact and exchange information and ideas (Curran and Murray 2006). This can be beneficial to those engaged in local studies research as they often experience isolation, and the *“loneliness of the long-distance digger”* (Welford 1999). Discussion groups and bulletin boards allow users to exchange search tips and suggest alternative resources. Many of those interviewed by Bayliss (2004) requested that this service be provided. However, Reid (2003) warns that any user generated material needs to be monitored carefully and users need to be aware that the content is supplied by other users and not necessarily library approved.

2.3.1.5 Interactive features

According to Reid, there are two types of local studies websites; informative and interactive but that

“The more interactive a site is the better. Users like to feel that sites are inclusive and participative (2003: 104).

Interactive websites allow material from the collections to be exploited to create virtual tours and exhibitions, quizzes, and games etc. These features are especially affective for encouraging children to use the website.

2.3.1.6 Location of the website

The content and services provided on the website will not be of any value unless users are aware of its existence and are able to find it. The location of the local studies website within its parent library authority website may create problems for users,

“All too often local studies sites are buried in the depths of the library services pages, difficult to find and difficult to navigate” (Reid 2003: 115)

This is often exacerbated by the fact that public library websites are generally part of local authority sites and are themselves frequently hard to locate. Watts found that this was a significant problem for local history collection websites in the U.S.A. Although the majority of the websites in her sample of 50 public library local history collections could be located by entering the library authority name the term ‘local history’ into Google, it was significantly more difficult to navigate to the website from the parent library’s homepage, with 72% of her sample located within three clicks (Watts 2006).

2.4 Summary

This chapter presented the findings of a review of the literature relating to local studies libraries, their user groups and current recommendations for local studies websites.

- Many different groups use local studies collections, these include those in formal education, archaeologists, historians, etc. Studies show that genealogists and family historians account for a large portion of the usership.
- Users come from all age groups, but the majority appear to be over the age of 50.
- Many users come from outside the locality, and are willing to travel to access resources when necessary. They favour the use of accurate electronically available records, and frequently use the many family history websites on the Web.
- Local studies library websites should provide adequate information for those wishing to visit the library, such as contact information and details of resources. An online enquiry service, and remote access to resources such as the library catalogue and digital collections should be provided for those who can’t visit the library.

- The provision of additional features such as Web 2.0 applications, and interactive content should be considered to attract more users to the website and inform them about the collection.

3 Literature Review: Usability

3.1 Introduction

This chapter presents the findings of the literature review carried out during the first phase of the study. The aim of this phase was to gather background information on issues of website design and usability deemed to be important in the current literature. These findings were then used to inform the criteria included in the evaluation process.

3.2 Usability

Usability can be defined as

“a quality attribute relating to how easy something is to use. More specifically, it refers to how quickly people can learn to use something, how efficient they are while using it, how memorable it is, how error-prone it is, and how much users like using it. If people can’t or won’t use a feature, it might as well not exist” (Nielsen and Loranger 2006: xvi).

There has been a great deal written about creating good quality useable websites both in print and on the Internet e.g. Nielsen (2000); Nielsen and Tahir (2002); Nielsen and Loranger (2006) Head (1999), Krug (2006) etc. These works all stress the importance of elements such as the layout and readability of the website and its information architecture, i.e. the use of *“effective navigation, organization, labelling, and search systems”* (Usability First 2007). Ensuring the website is accessible to people of all abilities also receives a lot of attention and is especially relevant for public sector websites. These different elements will be discussed individually.

3.2.1 Aesthetic Appeal

The first thing a user is faced with upon entering a website is its general appearance and layout. It is important in forming the users’ first impression of the website and the organisation as a whole (Norlin and

Winters 2002). Head (1999) explains that aesthetics, such as the presence of images, multimedia and the use of colour and their layout on the screen, impact the way users interact with an information interface. She notes that it affects *“their attention, comprehension and ability to read a screen’s content”* (Head 1999: 57).

Users are not impressed when confronted with cluttered web pages and dense blocks of text, as it creates the impression that they will have to work hard to find the information they want, and they may decide that it’s not worth the effort (Nielsen and Loranger 2006: 81). Williams and Tollettt (2000) recommend the use of graphical elements such as photographs to break large blocks of text. However, moderation should be employed. Too many graphics can be distracting and slow to download. Nielsen and Tahir (2002) recommend using between 5% and 15% of the display on images. Allowing for ‘white space’ i.e. areas on the page with no text or graphics is also recommended to reduce visual crowding. This helps people to process the information and reduce eyestrain (Nielsen and Loranger 2006: 347).

The judicious use of colour can be an effective method for attracting the user’s attention and highlighting certain content and segmenting the screen into different sections (Head 1999; Preece 1993). However, many experts in this area urge caution about which colours should be used for example the Preece (1993) discourages the use of red on blue, and Norlin and Winters (2002) warn that too much red can leave people feeling angry and agitated. Colour-blindness is also an issue that web designers should consider, as 8% of men and 0.5% of women experience difficulties differentiating between colours, with red/green deficiency the most common (Nielsen and Loranger 2006). The number of different colours used is also important in presenting an aesthetically appealing and useable website as too many colours can be distracting and create a cluttered effect. Jasek suggests that those involved in creating library websites

“Use only three or four matched colors in the design of your website to make it more aesthetically pleasing and prevent a circus-like appearance. ... By using complementary colors and few graphics, a library website can enhance its appeal” (2007: 11).

3.2.2 Layout

Nicholas et al (2002) point out that consumers of digital information have short attention spans and tend to 'flick' away if they don't immediately find what they are looking for. They found that 80% of website visitors get no further than a single page. Therefore it is important that the content of the page is logically organised to facilitate users quickly finding the information they need. Krug agrees, suggesting that users typically just

"glance at each new page, scan some of the text, and click on the first link that catches their interest or vaguely resembles the thing they're looking for. There are usually large parts of the page that they don't even look at" (2006: 21).

Krug's first rule of usability "don't make me think", takes this into account. He recommends that pages should have a clear visual hierarchy, with the most important information at the top of the page. This is important as it ensures priority content will be seen on the initial screen, as many users are reluctant to scroll beyond the 'fold' and may miss important content (Nielsen 2000; Nielsen and Tahir 2002; Maxymuk 2006).

Most experts recommend against designing web pages that require a lot of scrolling. The need for horizontal scrolling is especially frowned upon. This contradicts conventional web behaviour where vertical scrolling is predominant and therefore goes against expectations and creates confusion. Sites that require both vertical and horizontal scrolling are especially difficult for users, as they then need to move in two dimensions (Nielsen and Loranger 2006; Williams and Tollett 2000). Research has shown that users are very reluctant to scroll through very long pages. Nielsen and Loranger's study, involving 69 users who visited 3,992 pages that were more than one screen in length, found that more than half didn't scroll at all, and only 14% viewed more than two screenfuls. Therefore it was concluded that

"any page longer than 2.3 screens risks being overlooked, even by those few users who care enough about the page to scroll to it" (Nielsen and Loranger 2006: 45).

One solution to this problem is to divide the material into multiple pages. However this can also create problems as users then have to click through several pages. Both scrolling and clicking require mouse manipulation, which

may be problematic for those with motor difficulties, such as the elderly (Middleton 2001). A balance between extremes is the best practice, ensuring that it is appropriate for the content (Cooke 2001). Williams and Tollett (2000) warn designers to ensure pages are worth linking to, i.e. that pages contain relevant content and are not whole pages with one or two lines or a picture.

3.2.3 Readability

This is an important aspect of website usability as studies have shown it to be an issue of concern to users. Nielsen and Loranger's study found that poor readability ranked third in a misery scale of website problems encountered by users (Nielsen and Loranger 2006: 133). Reading from a computer screen is 25% slower than reading from paper and leaves many users reporting, "*they feel unpleasant when reading online text*" (Nielsen 1997). Efforts to improve readability concentrate on limiting the amount of text on screen, ensuring it is scannable and presented in an accessible format. Experts agree that the amount of text on a page should be limited, with Nielsen recommending that websites should use 50% less text to convey a message than would be used in a hardcopy (Nielsen 1997). Splitting up text by using short paragraphs, headlines, bullet points, bold text etc. facilitates scannability, allowing users to skim through the content (Krug 2006; Nielsen and Loranger 2006). The form text is presented in also affects readability, e.g. uppercase text takes 13% more time to read than conventional upper and lower case text (Preece 1993). Nielsen and Loranger (2006) recommend using font size of 12-14 for websites that include senior citizens and people with visual impairments and/or young children or others with low literacy skills among their usership. The use of strong contrasting colours also improves legibility and readability, with black text on white yielding the best results. San serif fonts are better for legibility, with Verdana the most readable online font (Williams and Tollett 2000; Nielsen and Loranger 2006). Evenly spaced text with adequate spacing between lines is also necessary (Preece 1993). The language used should be considered as websites, especially library websites, target a wide spectrum of the population including people with different reading levels and people whose first language may not be English. Language should be kept simple, using

short sentences (Nielsen and Loranger 2006). Jacek (2007) points out that many library users “do not understand simple library terms like catalog, resources, online databases, citation, reserves, reference or special collection” (2007: 4). He advises that such terms should either be avoided or explained.

3.2.4 Navigation

The provision of good navigation aids and website structure are essential for good usability as,

“if you go to a site and can’t find what you’re looking for or figure out how the site is organized, you’re not likely to stay long – or come back” (Krug 2006: 51).

Good navigation helps users to orientate themselves within in the site, by letting them know where else they can go and where they have already been. Common forms of navigation aids include navigation bars, a group of buttons providing access to other pages within the website. These are usually located on the left-hand side of the screen, and remain consistent across multiple pages. Sitemaps, diagrams that depict the position of different pages within the website are also frequently used. Recently many websites have adopted the use of ‘breadcrumbs’, a line of hyperlinks usually located at the top of the screen, which show the path from the homepage to the user’s current location (Krug 2006). Other navigational aids often encountered include the use of tabs, drop-down menus and ‘you are here’ indicators.

Nielsen and Loranger explain that one of the essential aspects of a good navigation design is to ensure users know where they’ve already been.

“A good grasp of past navigation helps you understand your current location, since it’s the culmination of your journey. Knowing your past and present locations in turn makes it easier to decide where to go next. ... Most important when users know which sites they’ve already visited, they are less likely to unintentionally revisit them” (2006: 60).

This is generally achieved by ensuring that visited links change colour when visited. This is especially useful for users who have memory functioning

problems. This is feature of the aging process and many older web users experience difficulties remembering which pages they have already visited (Middleton 2001). The changing colour of hyperlinks can act as a 'memory jogger' to aid recognition. However, it is not a complete solution as Mead et al observed the behaviour of eleven older adults and fifteen younger adults asked to navigate through a site and found that

“only older adults were observed to follow a hypertext link, use the back button on the Netscape web browser to return to the previous page, then select the same link again. Older adults made this error despite the change in hypertext colour (from blue to violet) that occurs when a link is followed” (1999: 560).

Nielsen, Krug (2006), Head (1999) and others agree that the consistency of navigation design across all pages is vital to the success of the user. It is also important that it follows general Web conventions, as users spend more time on other sites, and have already formed expectations about how things should operate (Nielsen 2000). For example Nielsen and Loranger (2006) suggest that all hyperlinks be presented in blue font and underlined, and change to violet when accessed, as this is the convention commonly in use across the Web. However, others disagree, claiming that as long as links are clearly identifiable by the use of different colour of text and are clearly labelled they should not present users with problems. Using familiar conventions saves the time of the user and reduces frustration as they then won't have to learn how to use a new interface every time they enter a new website.

The methods discussed above relate to ways of browsing through websites, however some users prefer to go directly to the content they require and therefore desire a search facility. This accounts for just over half of all users (Nielsen 2000). This is normally provided for in the form of a search box on the top of the page. Nielsen recommends that this appear on all pages. He recommends against scoped searching, i.e. the facility to search sub-sites, as users are often confused by the structure of the site and may not be searching the correct area to retrieve the results they are looking for. Scoped searching should only be used if *“special areas of a site are*

sufficiently coherent and distinct from the rest of the site" (Nielsen 2000: 225).

If scoped searching is provided it should be clearly indicated which subsection of the website is being searched, and this information should be clearly displayed on the results page.

3.3 Accessibility

Accessibility to information for all is an important element of public library services and is included in Framework for the Future, the government's strategic vision for public libraries,

"Libraries have a central role to play in ensuring everyone has access to the resources, information and knowledge they need – particularly those groups in society who will otherwise be disadvantaged" (MLA 2003: 6).

This is just as important in the digital world as in the physical world as for many housebound individuals, it is their prime mode of accessing services.

The Museum Library and Archive Council (MLA)'s audit of websites in their sector recommend that museums, libraries and archives should,

"make web accessibility an integral part of their web development process [and] establish the current state of accessibility of their websites and develop policies, plans and targets for improvements to the accessibility of their websites" (Petrie et al 2005: 5).

Guidelines for accessibility are produced by the World Wide Web Consortium (W3C). They have produced long checklists of aspects that designers should consider. These are ranked into three priority levels, and consider issues such as the provision of text alternatives for media, and the use of colour (W3C 1999).

There are several conditions that can affect how users perceive and interact with content on the World Wide Web. These include visual impairment, auditory disabilities, motor disabilities and cognitive and learning disabilities (Loomis and Flatley 2003).

Visual impairment affects c. 10% of Internet users. Websites need to be accessible to assistive technologies such as screen readers, touch screens and head pointers (Owen 2003). All text therefore needs to be

accompanied by alternative text labels that can be read by screen readers. Navigation is also affected by the use of screen readers as they tend to interpret content in a linear manner, and may require the user to backtrack in order to reach the desired point (Craven 2003). Users also need to use the keyboard rather than a mouse to navigate (Loomis and Flatley 2003). Visual impairment affects c. 10% of Internet users, therefore every effort should be made to make the website accessible to partially sighted users. This can be assisted by the use of large text, employing strong colour contrast and minimising unnecessary background 'noise'. This also improves readability for people who are dyslexia (Wilkinson 2004).

Any media using sound should be accompanied by a text alternative for those with auditory difficulties, or those with no access to sound equipment. Nielsen (2000) suggests that this may also benefit non-native speakers.

People experiencing motor difficulties may encounter problems with using a mouse and/or keyboard. For example studies have shown that older adults cannot effectively select targets below a minimum size, experience difficulties positioning targets contained within text, and find double-clicking with the mouse difficult (Middleton 2001). Designers can help by reducing the need for fine mouse movement and by examining their use and placement of navigation links and other targets.

Guidelines also require that elements of the website can be adjusted to the requirements of the individual, e.g. adjusting the size of text, change the display to text only etc. This is normally available to users by changing the settings of their browser. However, this is not always appropriate. For example a study of older adults by Ellis and Kurniawan (2000) found that despite 12 weeks of training participants found it difficult to remember how to adjust their browser settings. They recommend that designers take responsibility for accessibility. Nielsen (2002) agrees, recommending the inclusion of a button to change the style if the website targets senior citizens or other visually impaired individuals.

3.3.1 Consistency

Consistency of design elements such as the position of navigation aids, general layout etc. is important in reducing the learning curve of users. Users need only learn once what facilities are available where, e.g. the position of the search box, home button, print etc. This enables users to concentrate on completing their task (Head 1999). Similarly conforming to general web conventions, such as the position of the search box on the top right of the screen, further reduces user frustration (Nielsen 2000). As Maxymuk puts it

“The less one has to master to search the resources effectively is a plus that is highly valued by users” (2006: 88).

Nielsen and Loranger (2006) classify inconsistency within a website as a medium impact usability problem.

3.4 Currency, maintenance and authority

Cooke (2001) and Wilkinson et al (1997) recommend that users critically assess the quality of the information they find online. This includes assessing aspects such as how current the information is, the author of the content and the authority of its author. The currency of the website can be assessed by the inclusion of a date stamp on each web page. This can include information about when the page was last modified or when the content was added. Hallam (2003) surveyed 49 library authorities and found that currency was the second most important criteria they used to assess websites. This is important as *“outdated information can become useless as well as inaccurate or misleading”* (Cooke 2001: 75). Nielsen and Loranger (2006) classify outdated content as a medium impact usability problem that increases as the information becomes older but continues to be presented to the user as new. Similarly poor maintenance of a website, e.g. the presence of broken links creates a poor impression of the organisation, and may lead users to question other elements of the website and the services provided by its parent library authority. As the webmaster of Cleveland Heights-University Heights Public Library explains library websites

“need to let our visitors know that we are paying attention to our web facilities just like we do our physical ones, especially nowadays where are customers are more likely to see the web one first” (Solomon 2005: 10).

Cooke (2001) suggests that the inclusion of contact information for site maintainers also gives the impression that site maintenance is important.

3.5 Summary

This chapter presented a review of the literature in the area of website usability and accessibility.

- It was found that the appearance of a website is important in that it forms the user’s initial opinion of the website. Experts such as Jakob Nielsen frown upon sites with dense blocks of text but equally warn against the use of too many graphics and colour.
- Users rarely scroll beyond the first screen, therefore it is important that information is logically laid out, scannable and readable.
- The use of consistent and simple navigation is important because if users can’t find what they’re looking for they won’t come back. The use of general web conventions help ease user confusion and reduce their learning curve
- The compliance with accessibility guidelines and recommendations is necessary to ensure that users of differing abilities can use the website. This includes providing text alternatives for all media.

4 Methodology

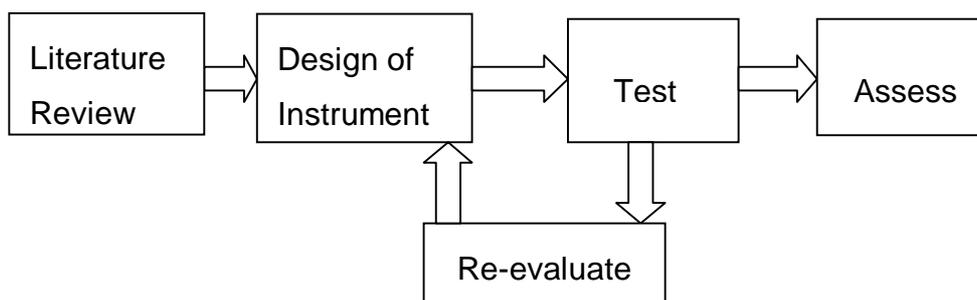
4.1 Introduction

This chapter explains the methodological approach and research design chosen for the study. It outlines the research methods used and discusses their limitations.

4.2 Research design

The methodology employed in this study is predominantly positivist, deductive and quantitative in nature. This indicates an approach “based on the assumption that knowledge can be discovered by collecting data through observation and measurement and analysing it to establish truths” (Somekh and Lewin 2005: 347). A quantitative approach is appropriate, as the aim of the study is to discover the current state of a sample of existing public library local studies websites, and using this data to draw general conclusions about the larger population of public library websites.

The research consisted of three phases. The initial phase called for a review of relevant literature to discover the established criteria for evaluating website design and usability. A review of the literature was also needed to establish the information needs of local studies library users. This information was then used to inform the second phase of the study. This entailed designing a framework and evaluation tool for assessing the quality of the websites. A preliminary instrument was tested and re-evaluated to include elements not initially considered before a final version was accepted. Websites were then assessed using this framework and data was gathered and analysed during the third phase of the study.



4.3 Literature Review

A literature review can be defined as

“the selection of available documents (both published and unpublished) on the topic, which contain information, ideas, data and evidence written from a particular standpoint to fulfil certain aims or express certain views on the nature of the topic and how it is to be investigated, and the effective evaluation of these documents in relation to the research being proposed” (Hart 1998: 13).

This process involves identifying key texts and authors in a subject by carrying out keyword searches of tertiary sources to locate secondary and primary sources. It also draws attention to information gaps and can identify appropriate methodological approaches and methods that are suited to the topic (Pickard 2007; Burns 2000). The purpose of the literature review in a quantitative study is to allow the researcher to use the information learned *“deductively as a framework for the research questions or hypotheses”* (Cresswell 2003: 32). In this case the information gathered in the review was used to inform the next phases of the study. A thorough exploration of the literature related to local studies libraries and website design and usability was therefore essential to the success of the project. The databases Library and Information Studies Abstracts (LISA), Library literature & information science full text and Web of Knowledge were searched using appropriate keywords. Google Scholar, STAR, the University of Sheffield library catalogue and various public libraries were also consulted to ensure all relevant material was included.

4.4 Evaluation Framework

This study sought to discover whether public library local studies websites meet the needs of their users. Specific research questions to be addressed were:

- Do public library local studies websites meet usability criteria?
- Do public library local studies websites meet accessibility criteria?

- Do public library local studies websites provide appropriate information for those wishing to visit the library?
- Do public library local studies websites provide access to services and material for remote users?
- Do public library local studies websites provide any additional features to attract visitors?

These objectives fall into two main categories, the functionality of the website and its content. Criteria for inclusion on the evaluation framework were selected on this basis.

4.4.1 Section A

This section examined factors affecting how easily the visitor can use the website. The following criteria were selected for inclusion on the evaluation instrument.

- Location: The first aspect considered was the location of links to the local studies section. This is important as it does not matter how well the website is presented if the visitor cannot find it (Reid 2003).
- Aesthetics: The first aspect of the website that the visitor encounters is its appearance. Therefore the aesthetics of the site needs to be considered (Head 1999).
- Layout: The layout of the site and whether it makes sense to the user, and whether it is logically organised to help the user locate what they are looking for is considered (Nielsen and Loranger 2006).
- Readability: How easy the site is to read is very important as poor readability will frustrate the user (Krug 2006).
- Accessibility: Public library websites need to be available to all members of the public, therefore it is necessary that it is accessible to people of all abilities (Petrie et al 2005).
- Navigation: Once a user has located a website, it is vital that they can easily move between pages and locate material (Nielsen 2000, Krug 2006)

- Consistency: Pages adopting the same design features, e.g. position of navigation aids, reduce the need for users to 'learn' every page (Head 1999)
- Currency and maintenance: Broken links and outdated content can hinder navigation and frustrate users and lead users to mistrust its content (Nielsen and Loranger 2006, Cooke 2001).

4.4.2 Section B

This section examined the information content of public library local studies websites. The following criteria were selected for inclusion on the evaluation instrument

- Contact information: Information on the location of local studies collections, when they are accessible, and what facilities if any the visitor can expect to find there (Hildebrand 2003; Watts 2006).
- Library policies and charges: Information on issues such as what charges if any there are for different services and whether there are any considerations the user needs to be aware of prior to visiting the library/collection (Watts 2006; Hildebrand 2003).
- Events: Information on events such as workshops, lectures etc. that are of local studies interest (Watts 2006)
- Enquiry/Reference services: Provision of facilities for contacting local studies staff with questions (Hildebrand 2003; Smith 2002).
- Guidance Material: Information on how to use the library resources for different purposes (Smith 2002; Reid 2003).
- Remote Access: Provision of access to resources such as library catalogues, databases (Smith 2002; Hildebrand 2003).
- Information of local interest: Information relating to local history or other local studies topics that may be of interest to visitors (Reid 2003)
- External Links: Provision of different categories of links to external sites of interest to local studies library users (Barber 2002; Bayliss 2003).

- Additional Features: Provision of additional features such as interactive features or the use of Web 2.0 technology (Reid 2003; Maness 2006).

4.4.3 Design of the evaluation tool

Once the evaluation criteria had been selected an instrument for evaluating the websites was designed. Initially a checklist was designed. This recorded the presence or absence of different features, e.g. each different navigational aid provided was recorded. This was tested on a number of the websites under investigation. However, this proved to be ineffectual as it was a lengthy and laborious process that produced detailed descriptions of each website and made comparisons difficult. This approach was therefore abandoned, and the evaluation tool re-designed.

An alternative approach, similar to that employed by Syn's (2001) evaluation of multi-national charitable organisation websites was adopted. She encountered similar problems and discovered that

“Although the details of one web site may differ from another, many of these observations could be grouped together for having similar characteristics. Details such as the specific positioning of links, the colours of the text and layout of images ... were removed and many of such information were generalised” (Syn 2001: 46-47).

The technique of content analysis was adapted for use in this study. This research method can be defined as

“an approach to the analysis of documents and texts that seeks to quantify content in terms of predetermined categories in a systematic and replicable manner” (Bryman 2001: 180)

This involves creating a coding manual, where codes are assigned to different categories. These codes are then recorded for later analysis. The advantages of this method are the transparency it enables as the coding scheme is clearly laid out and allows for replication at a different date. However, it calls for some interpretation of the codes, which may introduces an element of subjectivity into the study (Bryman 2001).

Using this method, a new evaluation tool was designed. Criteria were arranged into categories and an alphabetical code applied. An example of the coding system for enquiry services and guidance material is presented in Table 1 below and its application to the evaluation tool is presented in Table 2.

Table 1 Example of coding system used

13. Enquiry Services	A	E-mail an enquiry
	B	Synchronous help, e.g. IRC
	C	General enquiry form
	D	Local Studies Enquiry form
14. Guidance Material		
	A	Comprehensive hints/tips on family and local history issues
	B	Brief tips
	C	Local Studies FAQ
	D	Online tutorial/ interactive help
	E	No help provided

Table 2 Example of application of codes for Flintshire Local Studies Website

13. Enquiry/reference services	A
14. Guidance Material	E

This example illustrates that enquiry services are available through e-mail, while there are no guidance materials for local studies topics available on the Flintshire public library local studies website.

This provided many advantages over the original evaluation tool, and comparatively saved a lot of time. The evaluation tool and codes are presented in Appendix A and Appendix B.

4.5 Population and Sample

The aim of this study is to examine the current state of a sample of existing public library local studies websites, so that a view of all such websites can be identified. However, to ensure the study can be generalised the sample under investigation needs to be truly representative of the defined population (Burns 2000; Preece 1994). It is, therefore, first necessary to clearly define the population. For the purposes of this study the population of public library websites is supplied by the website UK Public Libraries. This site, compiled by Sheila and Robert Harden, presents a list a hyperlinks to public library websites throughout the United Kingdom and Ireland. As this study is only concerned with public libraries within the United Kingdom, the population under consideration is confined to the 220 library authority websites listed.

The size of the sample is important, and generally the larger the sample, the greater the precision and accuracy (Bryman 2001). However, time constraints need to taken into account, as

“thorough and rigorous analysis of a smaller sample is always more worthwhile than sloppy analysis of an enormous sample” (Pickard 2007:99).

Therefore a sample size of 50 websites was selected.

Burns explains that reducing bias in selecting the sample is more significant than sample size. It is important that the sample is representative of the population as one

“cannot make any valid generalisation about the population from which the sample was drawn unless the sample is representative” (Burns 2000: 83).

A random sample, where every member of the population has an equal chance of being selected is one method of increasing representativity. The list of public library websites was arranged in alphabetical order, and numbered from 1 to 220. The Research Randomizer website was then used to generate a random set of numbers. These were then used to select the websites for evaluation.

It should be noted however, that despite efforts to select a truly random sample, it may not be completely representative of the population, and sample error should be considered (Burns 2000; Preece 1994). The sample size applications provided by The Survey System website were used to calculate the confidence interval associated this study. Consequently for a population of 220, and a sample size of 50, results can be generalised with 95% confidence and a confidence interval of 12.2, where $p=0.5$.

4.6 Data Collection

The sample of 50 websites was assessed between 15th July and 5th August 2007. Evaluations began at the parent library authority homepage, as provided on UK Public Libraries. Links were followed to locate the Local Studies pages. All sites were accessed through the default settings of Internet Explorer, using a broadband connection of 100MB/s. All sites were viewed on a 15” wide screen monitor, set at a resolution of 1280 x 800. A full list of websites in the sample is provided in Appendix A.

4.7 Analysis

The results collected were entered into Microsoft Excel. The statistical applications supplied by this program were used to examine the data. Graphs and frequency tables were also produced using Microsoft Excel.

4.8 Limitations

4.8.1 Usability testing

The purpose of usability testing is to “*evaluate the Web site from the users perspective*” (Norlin and Winters 2002: 3). As no two users are identical, there are many variables affecting their experience and interpretation of different aspects of website design (Nielsen and Loranger 2006). In order to accommodate these variations in human behaviour website designers have turned to user studies as a method of testing website usability. These tests focus on how users interact with a computer interface. Representative samples of users are monitored through observation, questionnaire and/or interview and their behaviour and satisfaction with the interface is recorded (Head 1999). Common usability tests involve setting specific tasks for participants to complete on the website and recording and comparing their experiences (Owen 2003). The results from these user studies are then used to inform and improve the usability and functionality of the website.

Results of the present study would therefore be more accurate if a number of different individuals had been observed using the websites in the sample. However, due to time constraints this was not possible. In an effort to overcome this limitation, criteria for evaluation were selected on the basis of guidelines consulted during the literature review. These were selected to reduce subjectivity, with the focus on the presence or absence of features rather than the quality of each criterion. However this was not possible in all cases and a level of bias was unavoidable.

4.8.2 Content Analysis

Content analysis normally requires the use of more than one coder to increase the reliability of results. This was not possible in the context of this study and the absence of this form of replication may call the validity of the findings into question. However, consistency of the results across the sample was aided by the fact that the study involved a single researcher applying the

evaluation tool across the whole sample. This ensured a constant interpretation of the categories included on the evaluation tool.

4.8.3 Subjectivity

Some of the criteria included for assessment are unavoidably subjective. The aesthetic appeal of a website's appearance for example is entirely reliant on the opinion of the individual user. However by focusing assessment of this aspect to issues specifically mentioned in the literature it was hoped to reduce this bias.

4.8.4 Downloading Time

The evaluation of websites in this study did not account for download times. The time required for websites to load, and for images to appear is an important factor for visitors to a website as long download times try the patience of users and can be expensive for those using a dial-up connection (Reid 2003; Head 1999). However there are many variables that affect loading speed. These include speed of connection and server traffic. In order to fully assess this issue each website would need to be visited on several different occasions, using different connection speeds. This was not possible within the timeframe of the current study.

4.9 Summary

This section outlined research approach used. A quantitative methodology was chosen, as the aim of the study is to discover the current state of a sample of existing public library sites local studies, and using this data to generalise to the larger population of public library websites.

- The research consisted of three phases, a literature review to establish criteria for use in evaluation, design of an appropriate evaluation tool, and the application of this tool to a representative sample of websites.

- The research methods used are outlined.
- Details of the sample and population are discussed.
- The limitations of the methods used in the study are discussed

5 Results

5.1 Introduction

This section presents the results of analysis of data gathered through the evaluation of a sample of public library local studies websites. The results were analysed using the features of Microsoft Excel. Descriptive statistics were used to produce percentages, frequency tables etc. All the graphs depicted in this section were also produced using Microsoft Excel.

The results are presented to reflect the evaluation tool used during data collection, i.e. in two sections and following the order in which they were displayed on the evaluation instrument. The results will be discussed in greater detail in the following chapter.

5.2 Sample

As outlined in the previous chapter the population under investigation in this study is defined by the list of 220 United Kingdom public library websites provided by the UK Public Libraries website (2007). A representative random sample of 50 was selected for assessment. However, upon investigation it was discovered that two of the library authorities selected did not provide pages providing information about their local studies collections and services.

The Fife Council's public library website, for example did not provide any information related to this area. Upon further exploration of the Fife Council website a brief mention of the availability of local studies material is contained on their Local History and Heritage page;

"Fife has a rich history and local heritage. And a wealth of local history material is held in Fife Council's archives, in Fife's museums and in libraries' local studies collections" (Fife Council 2007).

However, as no further details are provided, it was decided that this did not constitute as a website to be included in this study. Consequently it was not included for analysis.

Similarly the library pages of Douglas Borough Council, on the Isle of Man, did not contain any information about their local studies services or resources. Keyword searches of the council website also did not retrieve any relevant results. Therefore it was decided not to include this library authority for analysis.

Therefore the results from the 48 remaining websites were analysed and all of the following results are based on this figure.

5.3 Section A

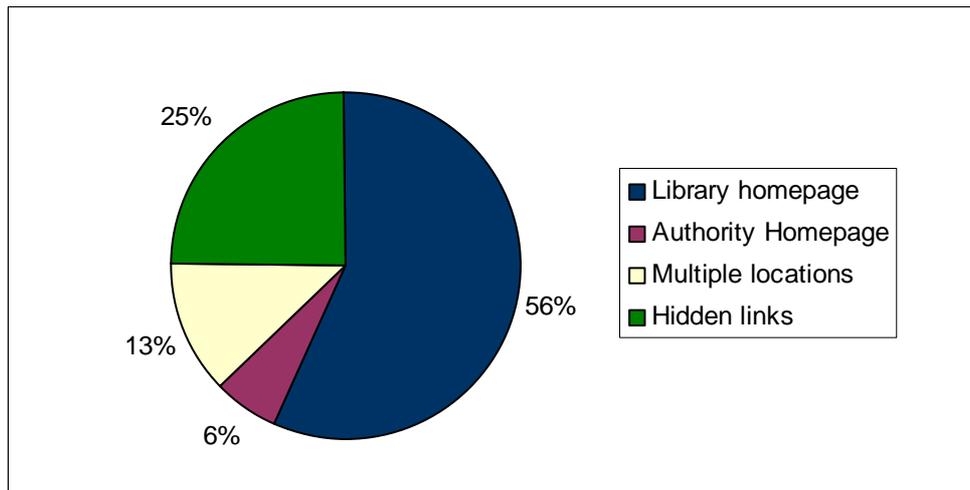
This section of the evaluation was concerned with how the website functioned and the efforts made by designers to make their website user friendly. This section consisted of nine main aspects with a further eight sub-levels. The results for each criterion will be portrayed individually.

1. Location

This looked at the provisions used to help users to find the local studies section of the website. The location of hyperlinks to these pages were recorded, noting its inclusion on the library homepage, on the local authority homepage, whether there were links from multiple locations i.e. on the library homepage, and additionally on the local authority homepage, and/or elsewhere or whether the web pages were difficult to locate, requiring the user to navigate through more than three links to find the local studies page(s).

It was found that 56% (27) of the 48 websites included for analysis included a clearly labelled link on their homepage; 6% (3) a link to the local studies page was only accessible through the local authority homepage; 13% (6) contained links in multiple locations; 25% (13) had 'hidden' links.

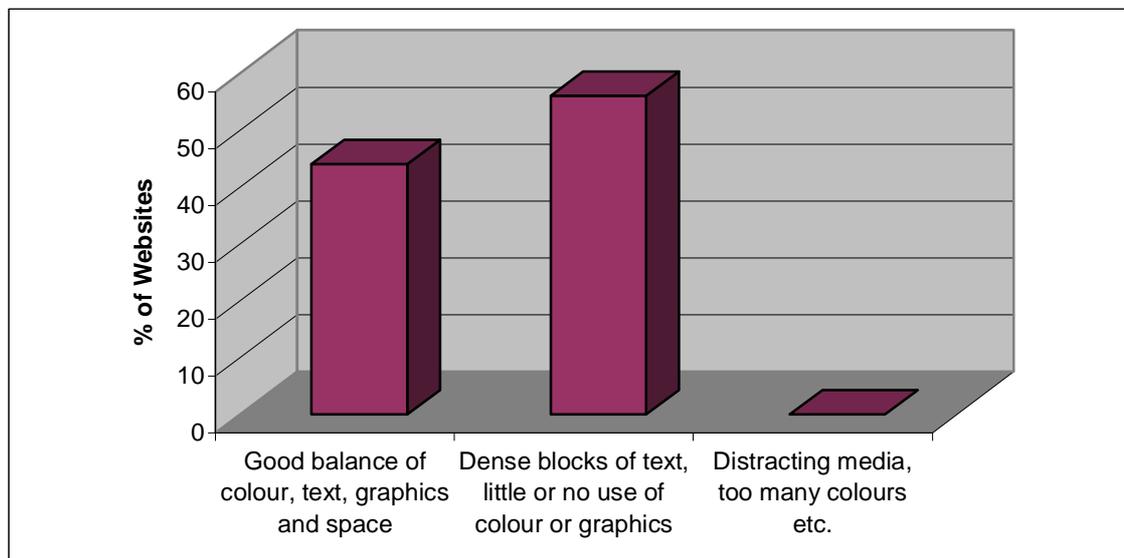
Figure 1 Location of Links to Local Studies Pages



2. Aesthetic Appeal

This section was used to note whether the local studies website was aesthetically appealing through use of a good balance of colour, text and images and space; or if the display consisted of dense blocks of text with poor or no use of graphics or colour; or if the site uses too many different colours and/or distracting graphics or images.

Figure 2 Aesthetic Appeal



It was found that 44% (21) of the sample of 48 used good balance, 56% (27) didn't and none of the websites used distracting media or too many colours.

3. Layout

This section observed how the website was laid out. This was done by looking at general layout of the text and graphics. It was also noted how content appeared on the screen and whether scrolling was required to view all of the material on a page. Similarly the presence or quantity of nonessential pages containing only a few lines of text was also recorded.

- General Layout

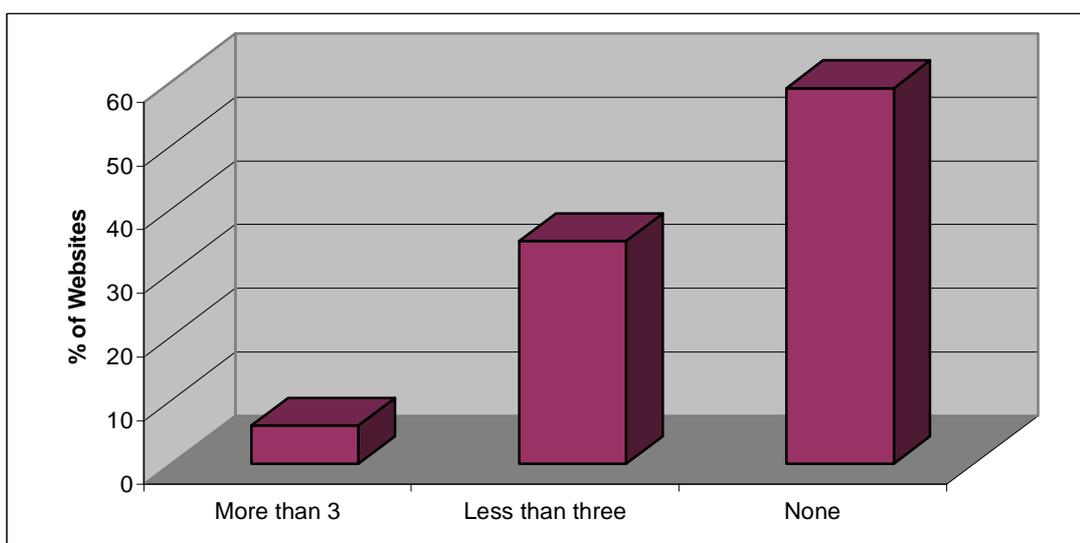
77% (37) of the sample of 48 websites were found to have a clear logical hierarchy, with the most important at the top of the page etc. Conversely, 23% (11) were found to have an unclear or illogical layout.

- Scrolling

This section was used to record the type and level of scrolling required to view the material on each page. It was found that 50% (24) required only minimum vertical scrolling, i.e. less than two screens of material on each page. Vertical scrolling of more than two screens worth of material was required by 50% (24) of the sample. None of the websites evaluated required any horizontal scrolling at the settings used for the study.

- Nonessential Pages

Figure 3 Occurrences of Nonessential Pages

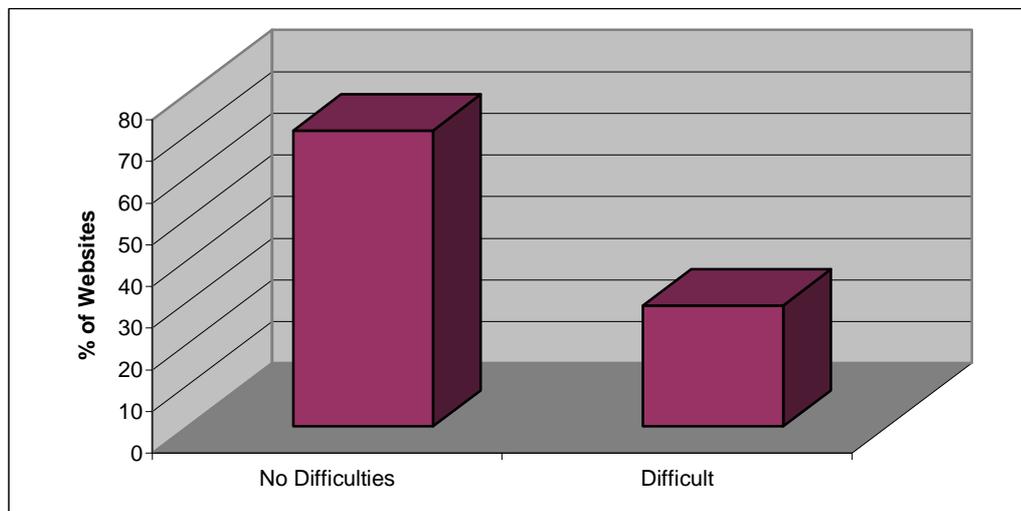


This section noted whether the local studies website included any pages containing little content of less than five lines of text, as these require users to click through several pages with little reward and are often found to be frustrating (Reid 2003). It was found that 6% (3) included more than three such pages, 35% (17) included less than three, while 59% (28) did not include any.

4. Readability

This criteria examined the general readability of the website. 71% (34) of the 48 sites analysed were found to have no difficulties, i.e. the text is written in clear simple language with adequate spaces between the words, graphics do not interfere with the text and the page is scannable through the use of headings, bullet points etc. On the other hand 29% (14) were found to present some difficulties in this area.

Figure 4 Readability



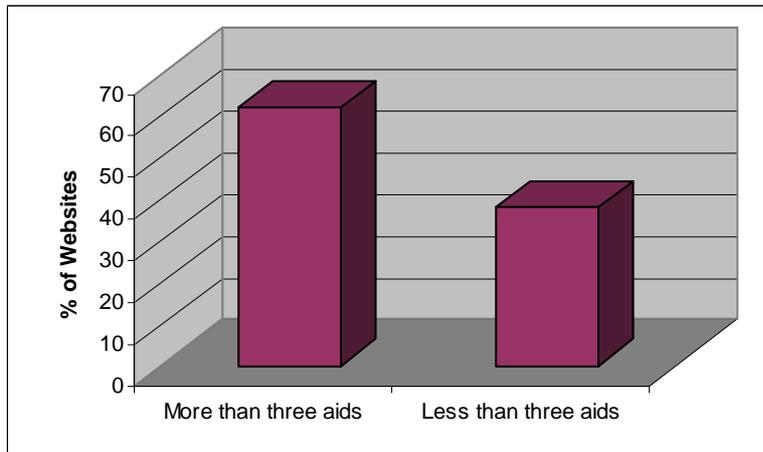
5. Navigation

- Navigation Aids

The number of navigation aids, such as site maps, navigation bars, breadcrumbs, you are here indicators etc, used to help users move around the websites was also recorded. It was found that 62% (30) of the sample

used more than three navigation aids, while 38% (18) used less than three different aids.

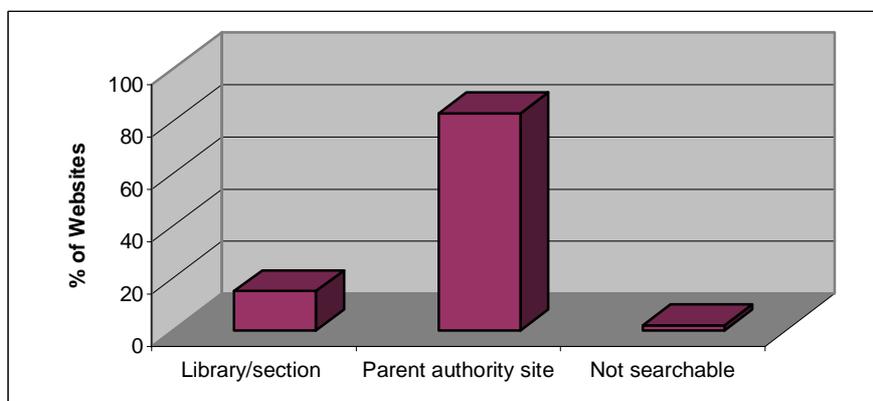
Figure 5 Navigation Aids



- Search Facility

This section was used to record whether or not a search facility is provided for the library or local studies library website or for the parent local authority website. The results showed that 15% (7) enabled searching to be restricted to the library web pages, 83% (40) only allowed searching of the parent website. A further 2% (1) did not provide a search facility.

Figure 6 Search Facility

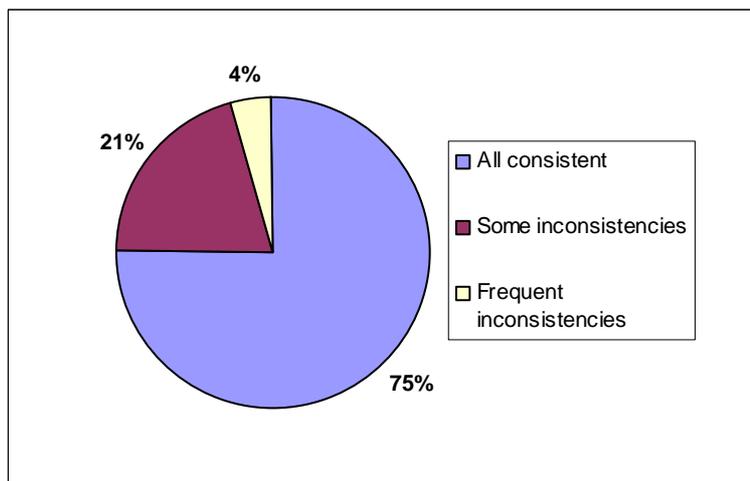


6. Consistency

These criteria were used to measure how many websites in the sample ensured that design features such as the placement of navigation aids, page titles etc. were consistent across all pages, reducing the need for users to 'learn' how to use each page.

The majority of the sample 75% (36) maintained consistent design elements across all pages, 21% (10) contain some pages with inconsistencies, while frequent inconsistencies were encountered across the pages of 4% (2) of the sample.

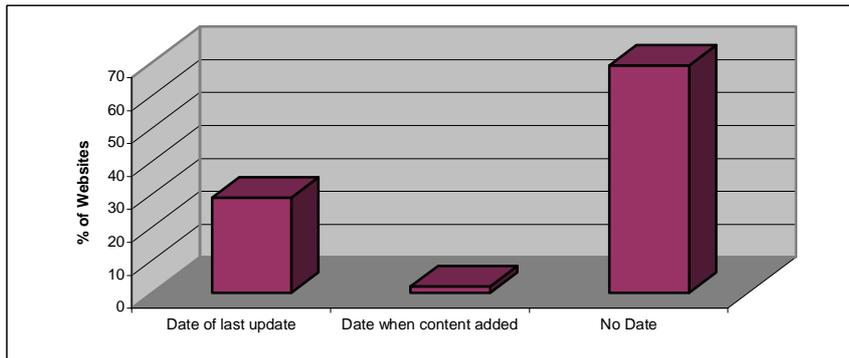
Figure 7 Consistency of design elements



7. Currency

This criterion was used to establish whether public library local studies web pages inform their users of when the site was last modified, and/or when the content was written. Just one of the websites assessed provided information on when content was added, while only 29% (14) of the sample of 48 websites displayed the date of when the site was last updated. The remaining 69% (33) did not provide any date information.

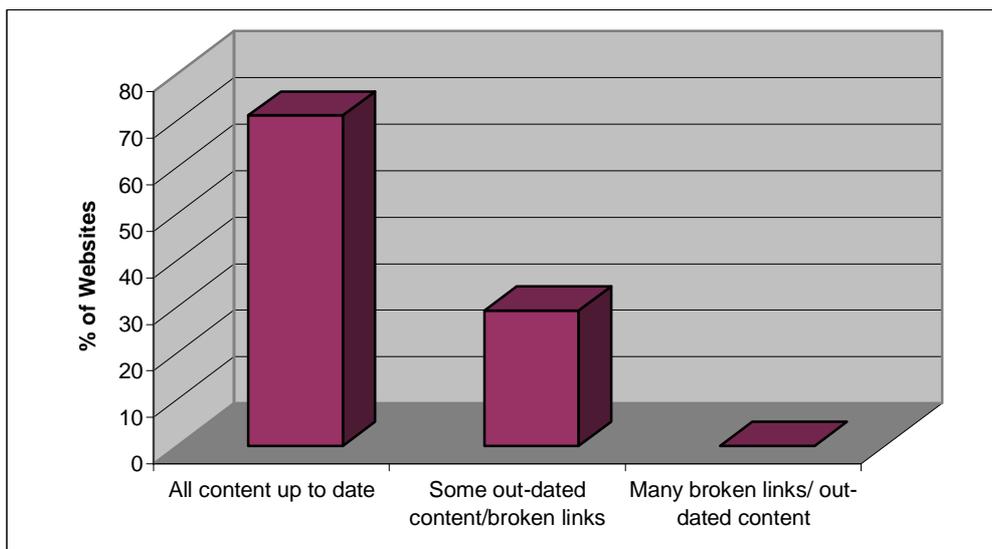
Figure 8 Display of a date stamp



8. Maintenance

The purpose of including this criterion in the evaluation was to discover whether the websites under investigation are well maintained. It was recorded as well-maintained if all the links on the website were working and no out of date information was displayed. It was found that the majority of the sample 71% (34) were well maintained, while 29% (14) of the sites contained a few (less than five) broken links and/or some outdated content. None of the sites assessed contained many broken links or a lot of out-dated content.

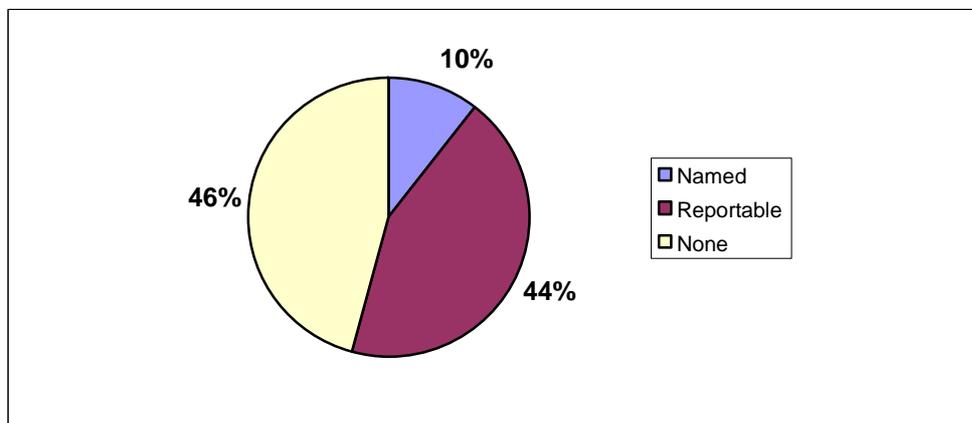
Figure 9 Maintenance of content



- Responsibility for maintenance

This criteria was included to establish whether the websites being studied provide a facility for users to contact those responsible for maintaining the site in order to report errors, or enquire about any aspect of the website. It was found that 10% (5) websites provided the name and contact details of the individual or group responsible, 44% (22) provided the facility to report errors without supplying any further details, while 46% (22) did not include this facility on their site.

Figure 10 Responsibility for maintenance



9. Accessibility

This section investigated the features used to ensure that the website is accessible and useable by people of differing abilities. This was evaluated by looking at the accessibility of text, images, and links separately. It was also recorded whether facilities were provided for the user to adjust the website to their individual needs.

- Text

The majority of the websites in the sample displayed text in a fully accessible format, with 79% (38) using a San Serif font of size 12-14, and

colours, which contrasted with the background. However the remaining 21% (10) did not display text in an accessible form in their default setting.

- Images/Media

This noted whether images and other media were accompanied by a text alternative. Alternative text was supplied for, all images in 50% (24) of the websites and for most but not all of the images on 40% (19) of websites. 10% (5) of the sample did not supply any alternative.

- Links

This section was used to record how identifiable and accessible the hyperlinks on each page are. It was found that 36%(19) of the pages presented links in a fully accessible format, i.e. they are clearly labelled, use a different colour text and change colour when accessed. 60% (32) of the pages used links that were partially accessible, i.e. they were identifiable but failed to change colour when accessed. The links presented on 4% (2) of sites were difficult to differentiate from surrounding text and/or badly labelled.

- Adjustability

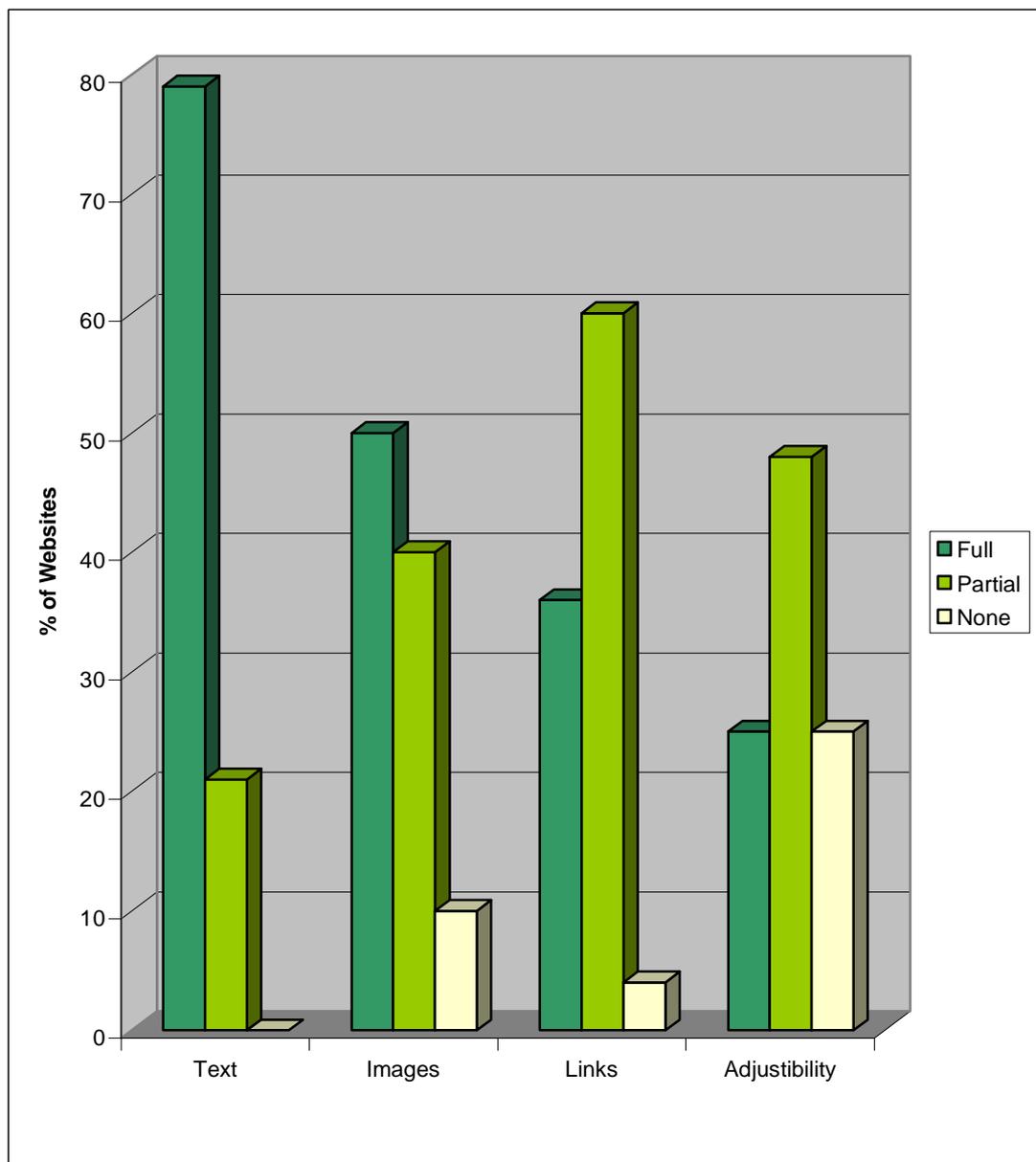
The existence of facilities to help the user adjust the settings of the site to their individual needs was also recorded. 25% (13) of the sites evaluated contain facilities on screen to adjust the size of the text and/or switch to text-only display etc; 48% (23) provide a link to an accessibility page providing instructions on how to change the display etc. while 25% (12) of the websites were only adjustable through adjusting browser settings.

The overall results for accessibility, depicting full, partial and non-accessibility are summarised in Table 3 and Figure 5.

Table 3 Summary of Accessibility

Accessibility	Full	Partial	None
Text	79% (38)	21% (10)	-
Images	50% (24)	40% (19)	10% (2)
Links	36% (19)	60% (32)	4% (2)
Adjustability	25% (13)	48% (23)	25% (12)

Figure 11 Accessibility



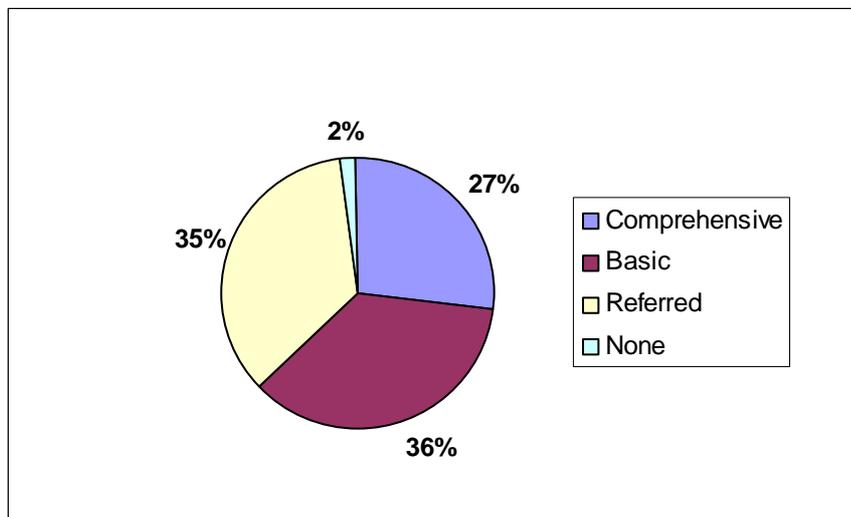
5.4 Section B

This section of the evaluation was concerned with the information content of the website. This section consisted of eleven main criteria. The results for each criterion will be presented individually.

10. Information about the local studies library

This section was concerned with information relating to the physical local studies library, its location, and/or the locations of its collections and facilities. It was noted that 27%(13) of the websites provided comprehensive, detailed information about these issues, 36% (17) provided basic information, i.e. the address of the local studies library and its collections and their opening hours only. A further 33% (17) referred the user to other sections of its parent library website, while 4% (1) did not provide this information.

Figure 12 Information about the local studies library

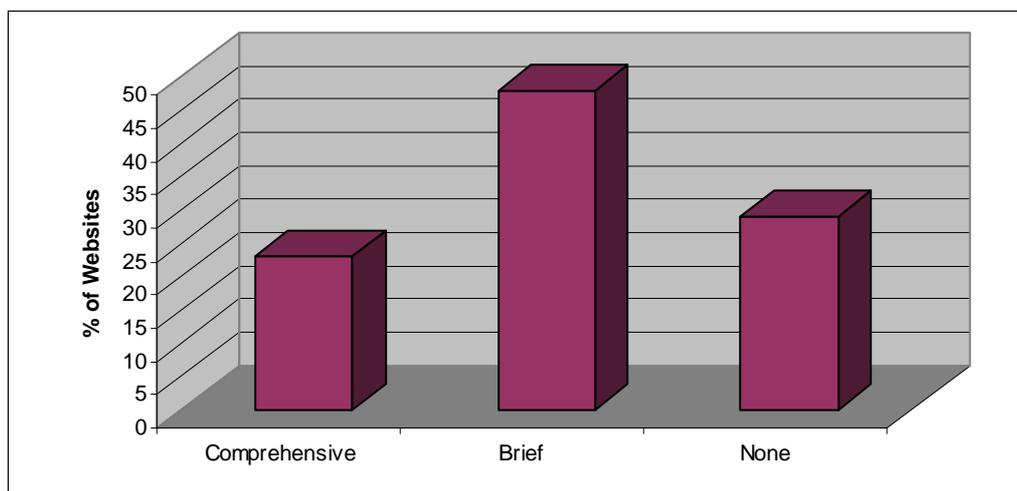


11. Policies and Charges

This section was concerned with the amount of information provided about details such as library charges, and any policies or procedures the user should be aware of prior to their visit, e.g. e.g. the need to book machines such as microfiche readers in advance, or the need to make an appointment to access some of the library collections. 23% (10) of the websites in the current study provided comprehensive details of these issues.

48% (23) make brief references to these issues, e.g. mentioning that there is a charge for photocopying without further details. 29% (14) did not supply any information related to these issues.

Figure 13 Information about library charges and procedures



12. Information about upcoming events

This section was used to record whether the website provided any information about up-coming events of interest to local studies users e.g. courses, lectures etc. It was found that the majority of the sample (79%) did not supply any information related to events.

Table 4 Information about local studies related events

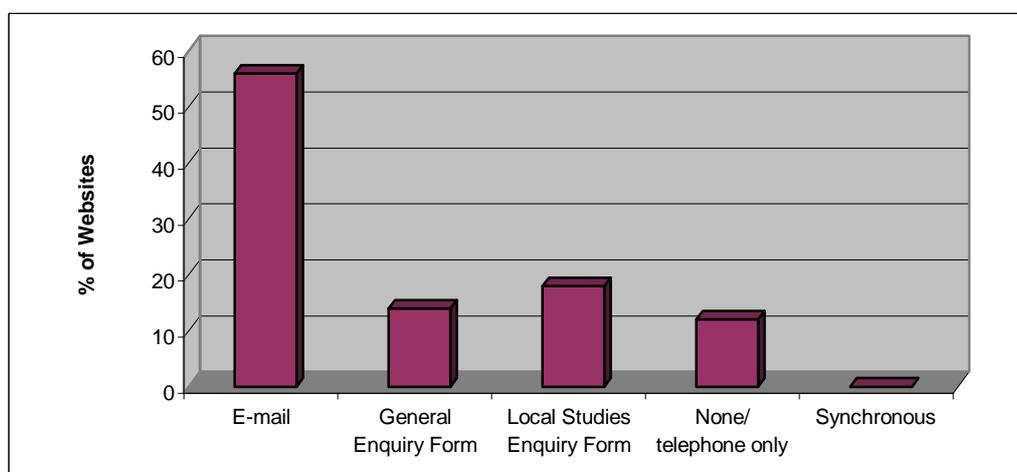
Information about Events	
Library Events Only	21% (10)
Library Events and Community Events	4% (2)
No Information about Events	75% (36)

13. Enquiry/Reference Services

This section was used to record the different methods of local studies enquiry and reference help made available online through the website. None

of the websites sampled provided a synchronous enquiry service, i.e. a real-time service such as Instant Messaging. Over half of the sample, 56% (28) enabled users to e-mail a member of the local studies library staff with their questions. 14% (7) supplied a general library enquiry form that they could fill out and submit. 18% (9) provided a specific local studies enquiry form. 12% (6) did not supply a method of contacting staff over the Internet, or supplied a telephone number only.

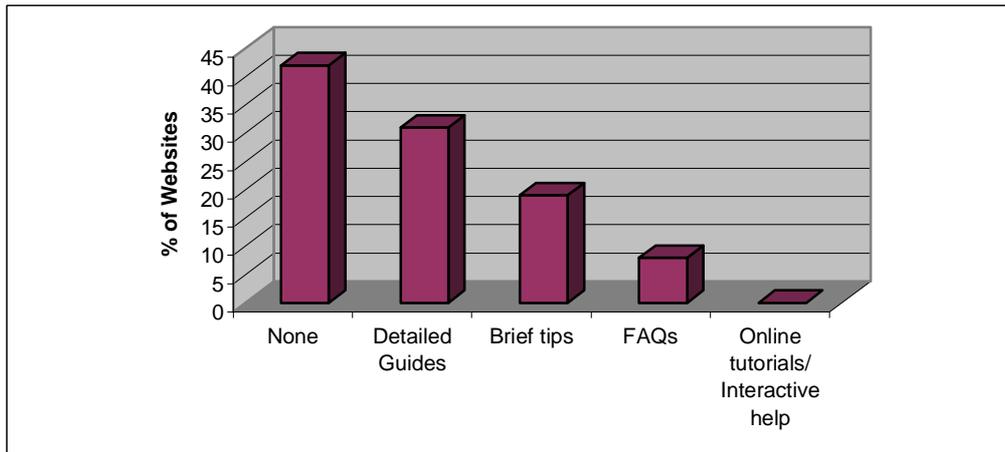
Figure 14 Enquiry/Reference services



14. Guidance Material

Guides are produced for library users on many different topics to enable them to access resources on their own. It also enables any basic questions to be answered without the need the need to approach the librarian, who can then focus on more detailed enquiries. This section was included to record whether local studies library websites provide any guidelines or help to their online users. 31% (15) provided comprehensive detailed guidance material; 19% (9) provided brief tips or helpful hints; 8% (4) provided a Frequently asked Questions page. However 42% (20) did not provide any form of guidance materials.

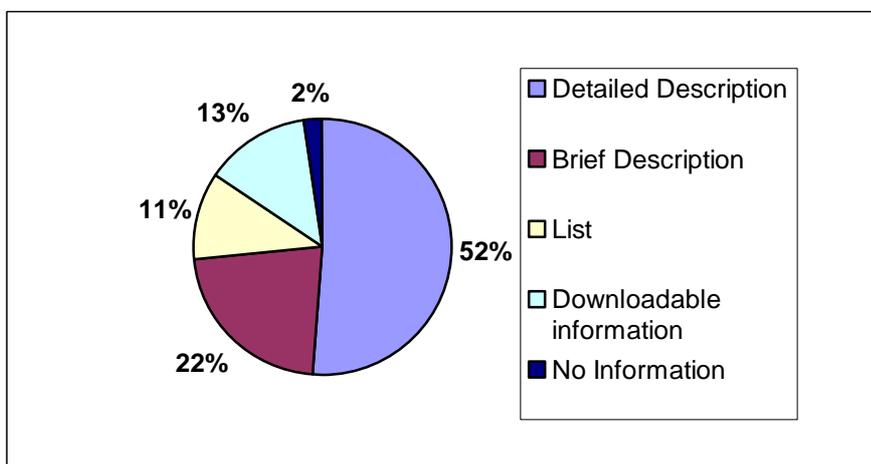
Figure 15 Provision of Guidance Material



15. Library Resources/Holdings

This section looked at the information provided about the available local studies material and library resources. This is an essential element of any library website. 52% (23) provided a detailed account of their holdings, i.e. the name of the collection or type of record plus a description of its content and information about where they can be found. 22% (10) provided brief descriptions and lists of the types of holdings and resources available; 11% (5) provided a simple list of materials available without supplying further details; 13% (6) of the websites provided further details of library holdings on downloadable pdf or Microsoft Word documents while 2% (1) did not provide any information about local studies holdings or resources.

Figure 16 Information about library resources/holdings



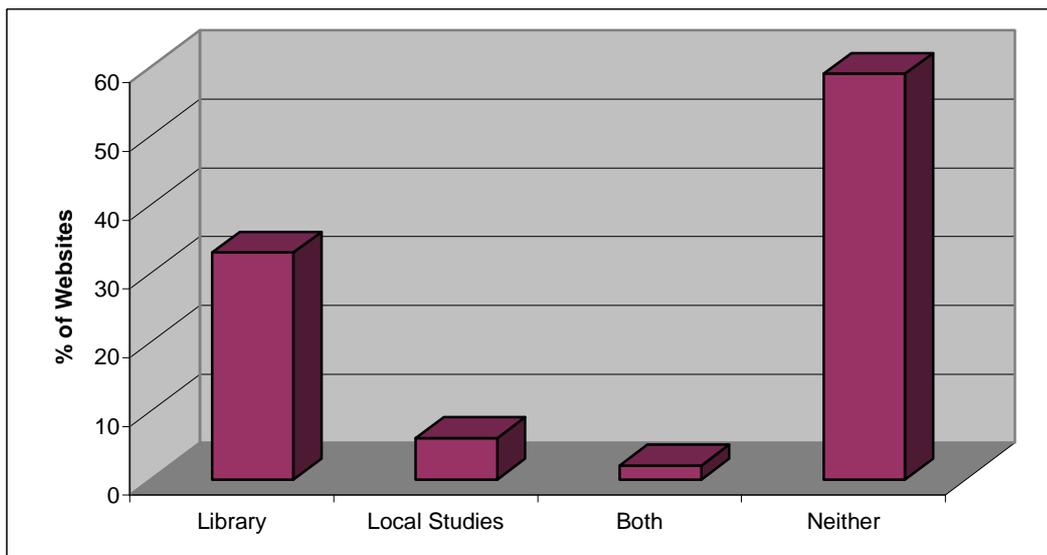
16. Remote Access

This section recorded the provision of services, such as access to catalogues, databases, and digital collections through the local studies website.

- Library Catalogues

33% (16) provided a direct link to the library catalogue from the local studies website, 6% (3) provided a link to a specific catalogue of local studies material, 2% (1) provided a link to both, while 59% (28) did not provide a link to any catalogue.

Figure 17 Access to library catalogues



- Databases

The presence of links to databases, and whether they were available to non-library members was recorded, with the majority not providing access through the local studies pages.

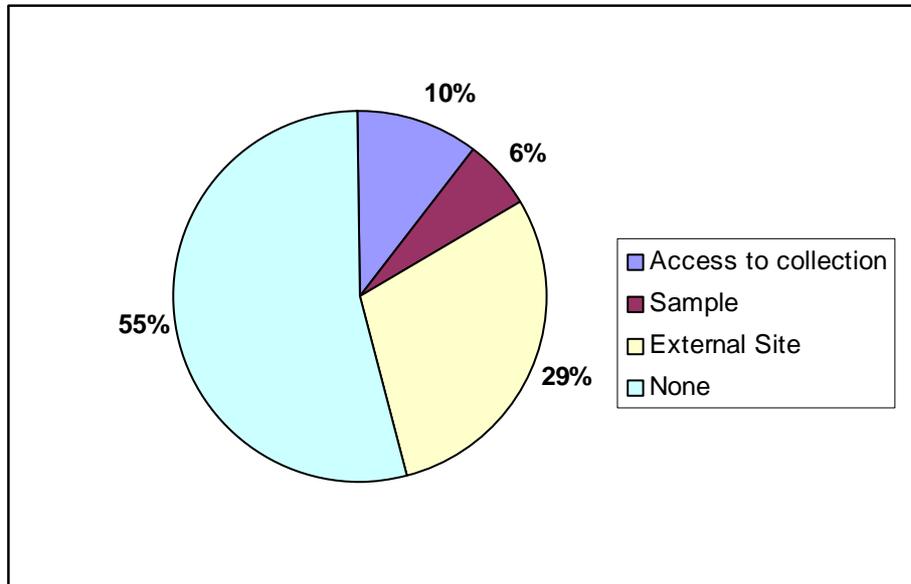
Table 5 Remote access to databases

Access to Databases	
Membership required	22% (10)
Access for all	7% (3)
No link to databases	71% (33)

- Digital Collections

10% (5) provided access to a searchable gallery; 6% (3) provided access to a sample of the collection, 29% (14) provided a link to an external site housing their collection; while 55% (26) did not provide access to digitised material.

Figure 18 Access to digital collections



- Downloadable information

This was used to note whether any information was supplied in a format that required the user to access pdf or Word documents before obtaining it. It was found that over a third of the sample, 38%, provided material in this

format. This strongly disagrees with the recommendations of Nielsen and Loranger (2006) and others (Barber 2002; Nielsen 2003)

Table 6 Information requiring download

Information requiring Download	
Information in pdf/Word only	38% (18)
Information in pdf/Word and web	4% (2)
None	58% (28)

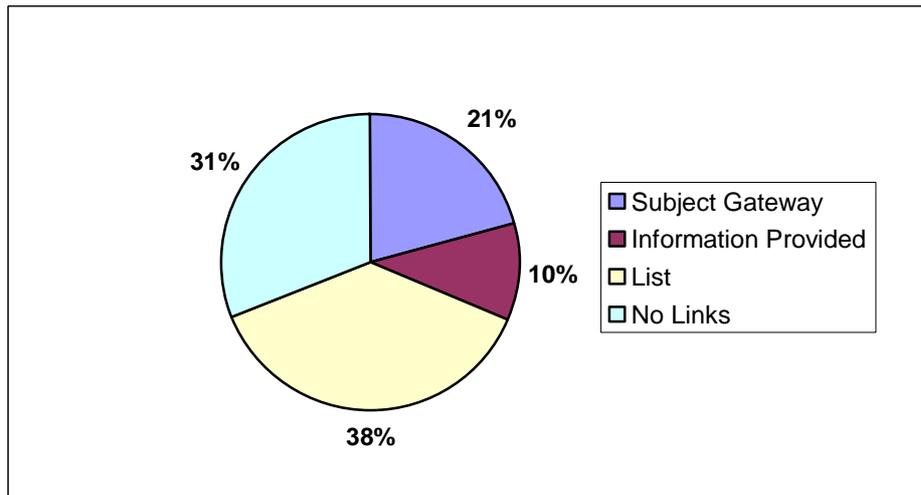
17. External Links

Many library websites provide links to external sites, which supply the user with further information about the topic they are researching. This section was used to note the categories of links provided on local studies websites. The inclusion or absence of a description of the sites linked to was also noted.

- **Provision of External Links**

31% (15) of the 48 local studies library websites did not provide any links to external websites of interest to local studies users. 38% (18) simply listed links without supplying any further details, 10% (5) provided details about sites linked to, while 21% (10) provided dedicated subject gateways for local studies topics, i.e. local studies, local history and/or family history.

Figure 19 Provision of external links



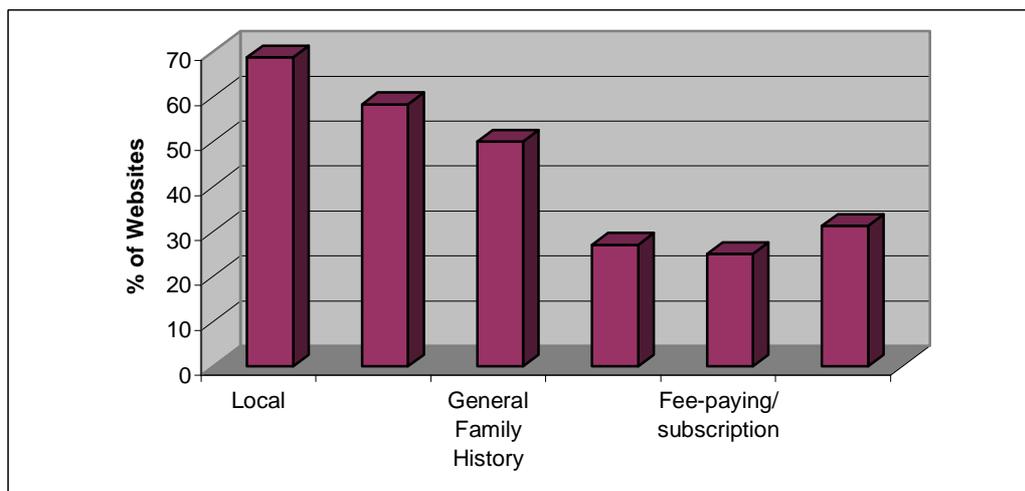
- Categories of external links

Links to websites of specific local interest, i.e. sources of local records, local history/family history societies, or local attractions, were the most popular type of link provided. Links to websites requiring users to subscribe (excluding links to the library edition of Ancestry.com, which is only accessible within library buildings) were the least popular category of sites linked to.

Table 7 Categories of external links

Categories of External links	No. Of Websites
Sites of specific local interest	69% (33)
National/ International records	58% (28)
General Family History	50% (24)
General History	27% (13)
Fee-paying/ subscription websites	25% (12)
No Links	31% (15)

Figure 20 Categories of external links



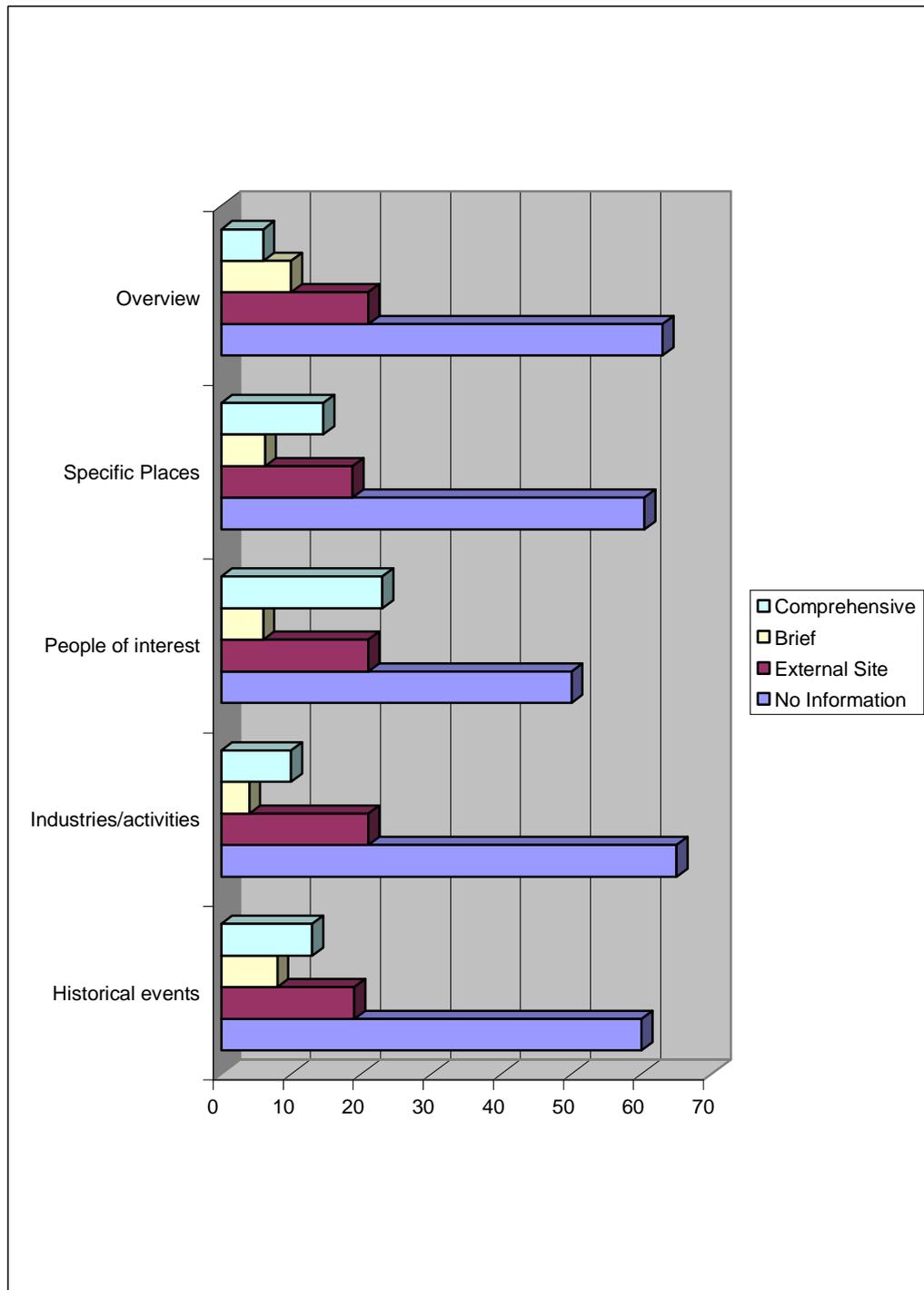
19. Information about the locality

This section was included to establish whether local studies libraries provide any information about the local history of their area on their websites. Local history topics include; an overview or introduction to the region; information about specific places or buildings; information about people of interest to the area; information about the industrial history of the area, or other activities; and information about historical events. It was also noted whether any information provided was; comprehensive, i.e. more than paragraph or information about more than one building, person etc.; brief; or only available on an external site managed by/ in collaboration with the library services.

Table 8 Inclusion of local history information

Local History	Comprehensive	Brief	External Site	None
Overview	6% (3)	10% (5)	21% (10)	63% (30)
Specific Places	16% (7)	6% (3)	18% (9)	60% (29)
People of interest	23% (11)	6% (3)	21% (10)	50% (24)
Industries/activities	10% (5)	4% (2)	21% (10)	65% (31)
Historical events	13% (6)	8% (4)	19% (9)	60% (29)

Figure 21 Local History Information



20. Additional Features

Additional features such as those with interactive content such as games, quizzes, virtual exhibitions etc. are often used by websites to attract and educate users and encourage them to revisit the site. However it was found that very few of the library websites in the sample offered any interactive features, with only two offering virtual tours or exhibitions, with Darlington Borough Council providing a virtual tour of their recently renovated Local Studies Centre and Gateshead Council providing online exhibitions of their photographic collections and a virtual tram ride through 1906 Gateshead. Bedfordshire Libraries have quizzes using their collections, e.g. identify historic buildings from photographs. Additionally Peterborough's City Council's library archives website uses a 'Theme of the Month' feature incorporating photographs from their collection.

Table 9 Additional Features

Additional Features	No. of Library websites	No. of External websites
Virtual tours/ exhibitions	2	5
Interactive tutorial/ quizzes	1	3
Games	0	2
Highlighted content	1	2
What's New	4	2
Newsletter	2	1

More interactive features are available on external websites housing local studies digital collections. However of the 15 external websites associated with the 48 libraries in the current study, only 5 used the material in their

collections for virtual tours or exhibitions, while only two, Oxfordshire's Your House, My House website and the Highland Council's Am Baile website provided interactive games.

Web 2.0/ Library 2.0

Very few of the libraries in the sample incorporated any Web 2.0 features. No use was made of blogs or podcasts, and only two of external websites, the Highland Council's Am Baile, and Leeds City Council's Leodis used RSS feeds to keep their users informed.

One of the internal local studies library websites allowed users to add their own content or comments i.e. the London Borough of Barking and Dagenham allowed users to recommend links to useful websites. The Highland Council's Am Baile website allowed users to submit their own personal stories and recollections and allowed users to form their own scrapbooks of favourite material. Leeds City Council's Leodis website similarly enabled users to create albums. A further three of the externally provided websites encouraged users to help identify photographs.

Only one of the websites in the sample provides the facility for users to communicate with each other and exchange tips on how to improve their research. Salford City Council's Local History Library provides a discussion forum on their website and encourages participation,

"If you want to discuss any aspect of our Heritage Service, find old Salford friends, or want help with Family History, why not visit our discussion forum. Read the current discussions and join in, or start a new one." (Salford City Council 2007).

5.5 Summary

This chapter presented the results collected when the criteria established through the literature review and were applied to a random sample of public library local studies websites.

- Of the fifty library authorities originally chosen for evaluation, two were found not provide any section of their websites for their local studies

services. Therefore, they were excluded from analysis, and all the results presented in this study are calculated from the remaining sample of 48 library authorities.

- The results for Section A, relating to website usability were presented. The majority of library authorities placed a link to their local studies pages on their homepage, although a significant quarter of the sample required users to navigate through several pages before locating the relevant pages. More than half of the sample (56%) consisted of dense blocks of text with little or poor use of graphics. (60%) provide links that do not change colour when accessed, in contrast to the recommendations found in the literature review (Nielsen and Loranger 2006). The majority of the websites were well maintained, although most had no date stamp.
- The results for Section B, relating to the information content of the websites were outlined. The majority displayed basic contact details for the local studies services, or referred the user to other sections of the library website for this information. Almost a third (31%) did not provide any information about library charges or policies. Over half (56%) provided enquiry service through e-mail only. 42% did not provide any form of guidance material. Almost half (46%) provided detailed descriptions of local studies holdings, important information for those planning to visit the library. More than a third (38%) did not provide links to external websites of interest. Very few library authorities embraced the use of Web 2.0 applications

6 Discussion

6.1 Introduction

This chapter discusses the results of the evaluation. The aim of this study was to discover whether public libraries are currently providing websites that meet the needs of those wishing to use their local studies collections. The results will be discussed in reference to the objectives stated in the introduction. The goal was to produce a general picture of the situation and not to rank the individual websites in the sample, however some examples of best and worst practice will be discussed.

6.2 Do public library local studies websites meet usability criteria?

The usability criteria examined included the location of links to the local studies web pages, the aesthetic appeal of the website, its layout, navigation, consistency and its currency and maintenance.

6.2.1 Location

This looked at the placements of links to the local studies page(s). The majority of library authorities did present direct link from the library homepage. These were located either within the body of the page, side menus or tabs. These were clearly labelled using terms such as 'local studies collection', 'local history resources', 'family history services' or combinations of these terms. Two of the libraries in the sample used the term 'community history'. These were clearly labelled and well situated and should not present users with any problems in locating the website. An additional 13% of the sample had links in multiple locations, i.e. the pages could be accessed by following a link from the library homepage or a link from a section of the local authority website, such as a Local History and Heritage page. This increases the chances of the user successfully locating the website, but can be confusing or frustrating when differently labelled links lead to the same page.

A significant quarter of the sample contained 'hidden links' to their local studies pages, i.e. the user was required to navigate through three or

more pages before reaching their destination. For example locating the local studies pages for West Berkshire Council requires users to select *What's in the Library?* followed by *Reference and Information* where users can then choose to move on to *Local History* or *Family History*, thus requiring the user to move through three pages before they find the information they want on the fourth page from the libraries homepage. Users do not like clicking, as it takes a longer time and requires them to think the path used. It also creates problems for those with mobility and/or cognitive problems (Nielsen and Loranger 2006, Mead et al 1999). Users visiting different library authorities may also be confused about which service area local studies might be found in, as they can be found within reference services, special services, research services or within reference libraries or special libraries etc.

Three of the sample only provided access to information about local studies services from outside of the library pages. This was particularly confusing in the case of the Bath and North East Somerset Council website. The *Libraries* homepage clearly displays a '*local studies websites*' link, however this takes the user to an annotated list of useful websites, but does not provide any information or links to information about the local studies collections or services. Similarly a '*local & family history enquiries*' page accessed by following a link on the library's '*Library Services*' page does not provide any information on library holdings and services. In order to access this information the user has to select the '*local history*' option from the side menu of the council's *Local History and Heritage* page and then select *Local Studies Section-Bath Library*, which provides excellent information about resources and facilities available. However, the difficulty in locating this page and the number of 'clicks' required may suggest that some users might not persevere that long.

The fact that almost a third (31%) of the sample presented potential barriers to users in locating their local studies pages suggests that is an important issue for local studies services to address. This is a priority area of concern, because if a user cannot find the site, it doesn't matter whether or not it provides adequate content or usability.

6.2.2 Aesthetic Appeal

This criterion was the most subjective and therefore may be of limited value to the general situation. However an attempt to increase objectivity involved concentrating evaluation on aspects such as the volume of text on screen. More than half of the sample (56%) was considered to present dense blocks of text with little use of images, colour or white space to break it up. An example of this is Leeds City Council's *Local and Family History Services* page

Figure 22 Screen shot of Leeds City Council Local Studies Library homepage



Conversely others presented a more balanced appearance, using images, colour and space and limiting the amount of text on screen. An example of this is Bedfordshire Libraries *Local and Family History* pages

Figure 23 Screen shot of Bedfordshire Libraries Local and Family History homepage



Almost half (44%) of library authorities presented their local studies pages in a balanced nature, suggesting some local studies departments are aware of the problems and are acting accordingly.

6.2.3 Layout

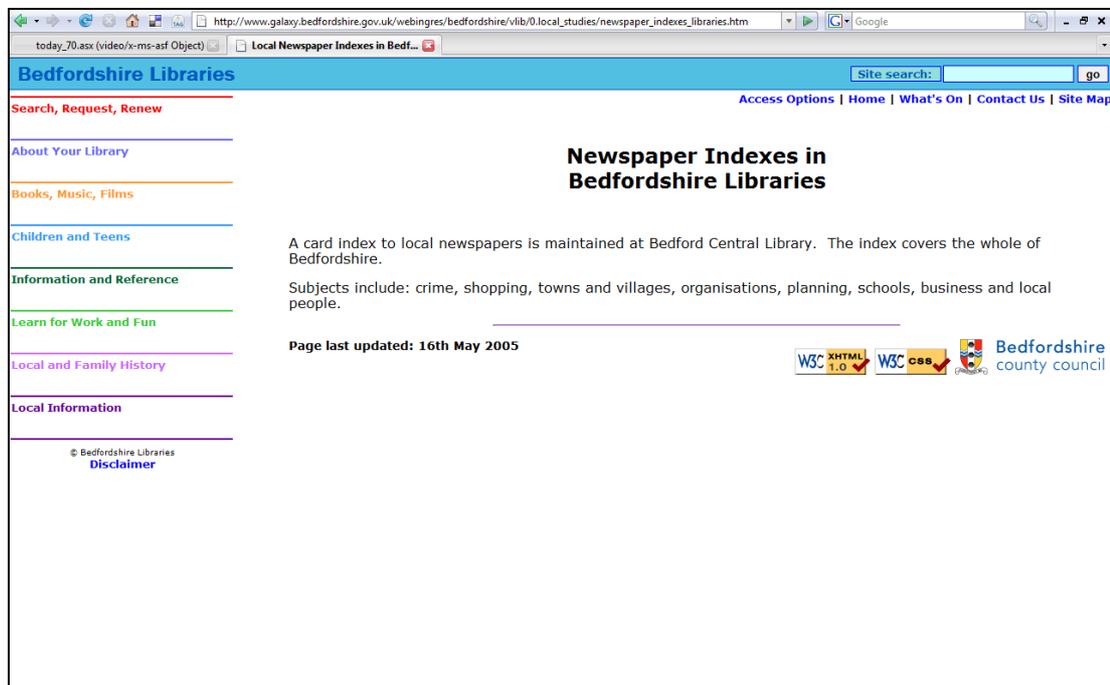
This looked at whether the content of websites in the sample was logically laid out with a clear visual hierarchy as recommended by Krug (2006). The majority of the sample (77%) did not present any problems in this area. Some problems encountered in the other 23% of the sample included the sometimes-confusing placement of hyperlinks to related internal pages, with some appearing on left-hand menus, and others occurring in right-hand menus, with no visible reasons for the disparity.

The need for scrolling to view all material on a page often presents usability problems. However the findings of this study show that this has already been addressed by many local studies websites, as none of the sample required any horizontal scrolling and half of the sample were designed for minimum scrolling. However 50% of the sample did require users to scroll through more than two screens before reaching the bottom of the page. Nielsen and Loranger (2006) classify the need for scrolling as a

medium impact usability problem as people frequently encounter long pages, and will persevere if interested in the content.

An alternative to scrolling is splitting material between several pages, however this can lead to the creation of pages with little content. Links of this nature can raise user expectations, leading them to believe there may be more information available than there actually is, leading to disappointment and frustration (Reid 2003). However this is only a problem in a minority of cases, with only three websites containing more than three pages in this category, e.g. Bedfordshire Libraries *Local and Family History* website contains several pages with only two or three lines of text, e.g. Figure 24. These are particularly frustrating, as users need to move through ‘navigation pages’ i.e. pages that only contain links to other pages to reach them (Nielsen and Loranger 2006). As this is not a feature of the vast majority of the sample it is not considered to be a problem of concern for the general population of local studies websites.

Figure 24 Example of Bedfordshire Nonessential page



Readability

This is also a criterion that involves a level of subjectivity in evaluation but as Williams and Tollettt point out *“if it looks hard to read, it is”* (2000: 221). The majority of sites did not present any significant problems for readability, as text was presented in an accessible format, blocks of text were broken into sections by headings and/or bullet points enabling users to skim through the content quickly and clear and simple language was used. However over a quarter of the sample (29%) exhibited problems that may hinder readability. These problems are closely related to issues also associated with the appearance of the site and its accessibility, e.g. the use of dense blocks of text with poor spacing between the words and other associated media, text that is too small and/or not in a colour contrasting with the background. A common problem encountered on sites with poor readability was small text squashed into dense paragraphs occupying only a fraction of the available space on the screen. Poor choice of colour was also encountered, e.g. grey text on white backgrounds. These are significant problems for many users. Nielsen and Loranger’s (2006) study found that poor readability ranked third in a misery scale of website problems encountered by users. They rank the presence of dense unscannable text as a high-impact usability problem. Therefore the fact that a relatively large portion of the sample displays poor readability is considered to be a priority issue for local studies websites to address as, like the ability to locate the site, unless users can read the content it doesn’t matter what is actually said.

Navigation

Navigation did not present any major problems for the websites in the sample. The majority (62%) provided more than three different navigation aids to help users to move around the site, the most common of which were navigation bars and sitemaps. Breadcrumbs, a set of links across the top of the page showing the pathway from the homepage was the most frequent method included to help the user identify their location. Sites containing less than two navigation tools all contained prominent navigation bars, but some users may experience problems relating to discovering where they have already been within the site, leading to back-tracking. Navigation was

generally consistent with common Web conventions. However, one problem frequently encountered was the failure of links to change colour when accessed. This will be discussed in more detail in the discussion of website accessibility.

6.2.4 Searching

All but one of the sites provided a search facility. The majority of these were simple search boxes located at the top of the page, while some contained a link to a separate search page. The majority (83%) of these did not allow users to restrict their search to either the local studies or library pages and instead searched the whole local authority website. This is in keeping with the recommendations of Nielsen (2000) who advises against scoped searching. On the other hand, if users do not choose their search terms carefully they may have to sift through many irrelevant results.

6.2.5 Consistency

Consistency of design elements such as the location of navigation tools is important for good navigation and for the general usability of the website. This saves the time of the user, as they then don't have to learn how to use a new interface with every new page. The sample performed well in this area, with 75% displaying no inconsistencies, and 21% only containing minor inconsistencies. This suggests that it is not an area of concern for those responsible for local studies library websites.

6.2.6 Currency and maintenance

Surprisingly the majority of websites in the sample (69%) did not provide any information on when content was generated or modified. This is surprising because librarians themselves use this information when assessing the quality of electronic resources and encourage their users to do the same (Hallam 2003; Cooke 2001). Less than a third of the sample (29%) supplied the date of last update, without any additional details. Only one website in the sample, Sheffield City Council, supplied comprehensive information i.e. the date the page was generated, the date the content was modified and the name of the author with a link to contact them. This

information is supplied for every page on the council website and is not restricted to library services.

Due to the lack of provision of a date stamp, it was difficult to assess whether information was current. Instead only obviously out of date content, e.g. information about upcoming events that have since passed, was designated as outdated content and together with the presence of broken links was recorded as an indicator of poor maintenance. Poor maintenance can lead users to distrust the quality of the website and the validity of its content (Cooke 2001). However, the sample performed well in this area with the majority of websites (71%) well maintained with no broken links, and the remainder of the sample contained five or less broken links. Maintenance is therefore not a pressing concern for local studies websites. Nonetheless the inclusion of contact information for those responsible for maintenance should be considered. This can act as an indicator of the library authority's concern for quality service provision (Cooke 2001). This was provided by over half (54%) of the sample.

While these elements do not affect the functionality or usability of the website they can help users to build trust in the website, its content and the local studies services and are therefore useful inclusions to consider.

6.2.7 General Usability

In general, therefore, public library local studies websites do meet most usability criteria. However, there is still room for improvement. Priority issues for those responsible for local studies to consider include the placement of links to their local studies web pages, and their predilection for dense blocks of text which create problems for the readability and general appearance of the web pages. Of lesser priority are the issues of page length requiring scrolling and the inclusion of date stamps.

6.3 Do public library local studies websites meet accessibility criteria?

The conditions that can lead to accessibility problems include visual impairment, auditory disabilities, motor disabilities and cognitive disabilities. These are all features associated with the aging process (Middleton 2001). Local studies websites therefore need to be especially aware of these issues because, as established during the literature review, a large portion of their usership is over the age of fifty

The evaluation looked at the accessibility of text, images, and hyperlinks and whether the website could be adjusted to the requirements of the user. The majority of the websites presented text in an accessible format, however 21% presented difficulties by using a font size of under 12, and/or used poor colour contrast. Improving these aspects would also help to ease the more general readability problems discussed earlier.

The W3C Web Content Accessibility Guidelines state that all websites need to *“Provide a text equivalent for every non-text element”* (W3C 1999). This study found that only 50% of the sample met this requirement for all images and graphics. 40% of the sample included some ‘non-text elements’ without alternatives, or with inadequate alternatives, e.g. during the evaluation process the researcher encountered a number of instances of ALT tags simply labelled ‘image’. Two of the 48 websites evaluated didn’t provide any alternatives for images. This suggests that this is an area requiring greater attention.

Hyperlinks are an essential element to the Web and therefore need to be fully accessible to all, i.e. clearly labelled and identifiable, and of an adequate size and location to ensure they are ‘clickable’ for those with mobility difficulties. Ensuring that links change colour once accessed is an important navigational aid to those with memory problems (Middleton 2001; Nielsen and Loranger 2006). However this study found that just over a third (36%) ensured that links were fully accessible in this manner, while an alarming 60% of the sample did not provide links that change colour when accessed. Nielsen and Loranger (2006) rank this as a high impact usability

problem. This indicates that it should be a high priority for local studies libraries to address this situation.

Just 25% of the sample provided users with an on-screen option for adjusting the appearance of the web page, e.g. a button to resize font etc. This is not essential as this can be achieved by adjusting browser settings. However studies have shown that this can be problematic for some, especially the elderly (Ellis and Kurniawan 2000; Nielsen 2002). Therefore it may be beneficial to offer these options on local studies websites, where older adults account for a large portion of the usership.

6.4 Do public library local studies websites provide appropriate information for those wishing to visit the library?

Information required by users planning a visit includes finding out where to go, when they can go, and what they can expect when they get there. These information requirements can be met by providing adequate information about; the location of collections and their opening hours and facilities, charges and use policies, and details about library holdings.

Library information

The majority of the sample satisfied the first requirement, i.e. they provided information on the location of collections. Just over a quarter provided detailed information on the local studies pages, e.g. Derby Local Studies Library provides detailed directions and a map of how to find the library, and explains the need to book disabled parking in advance. A further 35% refer the user to other library pages containing this information. Conversely 36% provide only very basic information such as the address. As local studies collections contain unique material and attract many users from outside the locality, providing as much comprehensive information on the local studies pages as possible is preferable, although providing clear links to other sources of this information is adequate.

Charges and policies

The level of information about library charges and policies also varies between different library authorities, with 23% providing detailed information organised on specific pages or available as pdf documents, and 29% not providing any information at all. The remainder provided brief scattered references. A more systematic approach may help users form clearer expectations, and plan their visit accordingly.

Events

Many libraries run events such as workshops, lectures etc. associated with local studies topics to encourage people to come to the library and explore the available resources. Yet only a quarter of the sample provided any details about events. However, it is uncertain whether this is poor use of the medium to advertise such events, or whether it reflects service provision in this area.

Library holdings and resources

Reid (2003) states that it is essential for local studies websites to provide thorough, detailed information about library resources. Just over half (52%) of the websites in the sample met this requirement, providing detailed descriptions, titles and locations of resources. For example the Oxfordshire website provides the following information about their newspaper holdings;

“You can see over 100 local newspaper titles ranging from 1643 to the present day at Oxfordshire Studies. They include Mercurius Aulicus (Jan 1643 - Sep 1645), a Royalist propaganda newssheet published in Oxford during the Civil War, Deddington's only newspaper, the North Oxfordshire Monthly Times (1849-1854) and three issues of the Witney and District Advertiser, a short-lived freesheet from 1985. With few exceptions, these titles are only available on microfilm ... You can see ALL these newspapers on microfilm at Oxfordshire Studies; SOME titles are also held by Oxfordshire branch libraries at Abingdon, Banbury, Didcot, Henley, Wantage and Witney” (Oxfordshire County Council 2007).

This is accompanied by a detailed list of each title and the issues held, its availability by library branch, and information about the availability of

microfilm readers. Alternatively 22% provided brief descriptions and lists of the types of holdings and resources available. For example The Brighton and Hove City Library Services local studies pages provide the following information about their newspaper holdings

“Brighton History Centre holds a range of weekly and daily newspapers for Brighton and the former county of Sussex, from 1749 to the present. Our collection of newspaper cuttings features articles on many popular topics, including biographies of well-known personalities”. (Brighton and Hove City Library Services 2007).

However no further details are supplied. 11% provided a simple list of materials available without supplying further details, e.g. Bath and North East Somerset Council’s local studies section provide a list of the type of resources available

- *Books, on people, places and general topics of local interest. Many of these can be borrowed*
- *Photographs, prints, portraits, glass slides and negatives*
- *Maps, both old and new, in a variety of scales*
- *Pamphlets*
- *Cuttings from newspapers on topics of local interest ...[etc]”* (Bath and North East Somerset Council 2007)

13% of the websites provided further details of library holdings on downloadable pdf or Microsoft Word documents. One, Hartlepool Borough Council, did not provide any information about local studies holdings or resources. Its local studies page consisting of the following;

“There are a number of local and family history resources held by Hartlepool Library service and the Reference library.

Please visit Central library for further information”. (Hartlepool Borough Council 2007)

Therefore, although provision of information on these topics is clearly not consistent across the sample, the majority do provide at least a basic

level of library information to allow users to plan a visit. More comprehensive coverage however would assist visitors further and encourage more users to visit by allowing them to fully appreciate the services on offer.

6.5 Do public library local studies websites provide access to material for remote users?

Users who may choose to access local studies collections remotely include existing members of the library, members of the community not familiar with the library, and potentially anyone in the world with an interest in the area. These users do not have the benefit of being able to browse shelves for material, or being able to ask library staff for assistance or suggestions. However, some of these services can be delivered online via the local studies web pages.

Enquiry services

Enquiry and reference services are available on the majority of the 48 websites assessed for this study. None of the websites sampled provided the facility for real-time contact with local studies staff, about a third (32%) enabled users to submit an enquiry to either local studies staff or general references services via an online form. These can be used as an online form of a reference interview, encouraging users to structure their query, and enabling librarians to more clearly establish their particular information needs (Reid 2003). The majority of the websites (however simply provided e-mail addresses for the local studies services, or for individual members of staff and encouraged users to use this method to contact them. Surprisingly six of the local studies web pages did not provide any method of contacting staff via the Internet, instead only supplying telephone numbers. This is particularly unsatisfactory for users calling long distance.

Guidance Material

Another method of helping users to locate and use material and reduce the need to contact staff, which some users can find intimidating, is by providing guidance material. This enables them to help themselves.

Guidance material can include comprehensive subject guides; guidelines on how to use the collection, brief 'how to' tips, interactive tutorials, or even blogs used to discuss these issues etc. (Smith 2002; Reid 2003). Almost a third (31%) did provide some comprehensive detailed guidelines on topics such family or house history, how to use resources etc. An additional 19% displayed 'helpful hints' or other form of brief tips to help users to get started with their research. Four of the sample provided help in the form of a Frequently Asked Questions page. However despite these various options a significant 42% of the sample did not provide any guidance on how to use resources, or specific topics. This suggests that the provision of guidance materials is an issue that should concern more local studies libraries, as guidelines provide

“an excellent way of sharing knowledge on how to find materials in the collection ... and show users the benefit of combining [different] types of sources for study ... without doing several catalog searches” (Watts 2006: 19-20).

However, some of this material is presented only in pdf or Word format, as many library authorities simply make existing library literature and leaflets available online for users to download. Over a third of the sample (38%) was guilty of this. This practice is frowned upon by many e.g. Barber 2002; Hildebrand 2003 as this material is not well suited to the medium of the Web, users may require additional software to access it, and it creates usability problems, especially those with accessibility issues (Nielsen 2003).

Direct access to library resources such as the library catalogue and library subscribed databases can also help users to locate and access material without visiting the library. Only 41% of the sample contained a links to library catalogues from the local studies pages. The inclusion of this link would be beneficial as it would inform users about the potential of the catalogue for identifying and locating resources that may be pertinent to their needs. It also reduces the need for users to navigate away from the local studies pages, reducing unpopular clicking. Similarly many public libraries subscribe to databases that may benefit local studies users, but only 29% of the sample

supply links to this service. In the absence of this, many users could remain oblivious to the existence of these resources.

Digital collections

Access to digitised material is an important factor for users when choosing websites to visit during the course of their research (Bayliss 2004; Richards 2006). It also provides the local studies department with unique material to attract users enrich their experience and encourage them to return to the website. It can be used to tease the users and pique their curiosity about what else may be available (Falk 1999; Watts 2006). Over half of the websites in the sample did not provide access to digital material, while 16% contained at least a sample of material on the local studies library web pages. An additional 29% enabled access to material hosted by an external site managed by the library authority or in collaboration with other bodies. Digital images accounted for the majority of digitised material available, although Oxfordshire County Council's Oxfordshire Studies hosted an mp3 collection of personnel recollections and Leeds City Council's Leodis website houses a collection of playbills. There may be many reasons for the low availability of access to digital material; there may be funding problems preventing or limiting digitisation, there may be copyright issues with making items available, or there may be no suitable items in the collection to digitise etc. (Hume and Lock 2002; Reid 2003).

Local history information

Similarly the majority of the websites in the sample did not provide any narrative information about their locality. This form of dissemination of information places the collection into historical context for the user and can act as an introduction to their research. Pictures and images from the collection can be used to encourage users to explore the collections further (Fischer 2002). Topics covered in this way included general information about the history of the region, information about specific places, locations or buildings, biographical information about people of interest to the locality, information about the regions industrial history, and information about events in the region's history. The topic that received the most attention on websites

in the study was people of interest; this was followed by historical events and information about specific places. The local history of industrial activity or other activities such as sports received the least attention. Ten of the fifteen external websites associated with the local studies libraries in the current sample were used to deliver information in this format. More local studies services should consider including this service on their website as it can be used by many different users, e.g. family historians looking to place their ancestors into a larger social context, or trying to estimate death dates (Bever 2003). This feature could also be used by school children doing projects, tourists looking for information about the area etc. It can also encourage people to revisit to the website.

External links

Reid states that

“Links should be made to sites that will appeal to and assist both the local and the remote user” (2003: 106).

The majority of the sample supplied links to external websites providing their users with additional sources of information relevant to the topic. More than a third (38%) simply listed links without providing any additional information about their value or content. 10% went a step further and accompanied the links with brief annotations. A fifth of the sample (21%) provided dedicated subject gateways, for local studies, family history, and/or local history. Cooke explains that these

“provide access to the descriptions of only high quality resources. They are developed and maintained by information professionals and subject experts, and you can access these services assured in the knowledge that an individual working in the field has already identified and evaluated high-quality resources” (2001: 40).

However almost a third (31%) of the websites sampled did not provide any links to external websites. This is a disadvantage as local studies users consider the provision of links to be helpful, e.g. 70% of the Derbyshire local studies users interviewed by Bayliss (2004) rank the provision of a subject gateway as very important, with one participant commenting that

Helps your learning curve as you discover new resources, for me it would open another world, I need help as I get lost in it all" (quoted by Bayliss 2004: 44).

Those that did supply links covered many categories, with, unsurprisingly, links to websites providing local information and records as the most popular category. Links to national or international sources of records were the next most frequently linked to, followed by general family history websites.

6.5.1 General accessibility

In general, therefore, while public library local studies websites do provide access to services and materials for remote users, this could be improved by; placing a link to library catalogues and databases on the local studies pages, providing guidance material in an accessible format, and where possible providing access to digital collections. Links to useful external websites should be included as this is a feature appreciated by users that may encourage them to re-visit.

6.6 Do public library local studies websites provide any additional features to attract visitors?

Reid recommends the inclusion of interactive features to exploit the potential of the collection and "*provide the story of the area in words and pictures and much else besides*" (2003: 83). However these features are expensive and technically difficult to create, therefore it is not surprising that very few websites in the sample provided any of these features. However not all additional features require extra resources to produce e.g. Peterborough City Council's library *Archives* pages include a 'Theme of the Month' feature which uses material from their collections to draw attention to various topics. As these are changed regularly, users are encouraged to return to see new content. The inclusion of a 'What's New' section or a newsletter informing users about new additions to the collections, upcoming events or courses, etc. are equally 'low tech' methods of encouraging users to return. However they do require continuous maintenance.

More interactive features are supplied on the external websites produced in association with the local studies collections. These sites are managed outside of the local authority's website and are therefore free from the design constraints of being part of a parent website. They are generally managed by consortia or collaborations between different bodies, e.g. the *Picture the Past* website is managed by Derby City council, Derbyshire County Council, Nottingham City Council and Nottinghamshire County Council. This enables access to more funding, expertise and material. These projects receive funding from bodies such as the Heritage Lottery Fund (Dewe 2002). There were 15 such websites associated with the 48 websites assessed for this study. These are included in Appendix C. Examples include the Highland Council's Am Baile page which can be accessed in English or Gaelic and Knowsley Library Service's award-winning *Knowsley Local History* website. However, only five of these used their material for interactive features such as virtual tours or exhibitions, e.g. the *Imagine York* website contains a feature where users can tour through the lives of different people from different time periods. Only two provided interactive games. Wolverhampton City Council's *Wolverhampton Archives* features an interactive family history tutorial.

6.6.1 Library 2.0

The majority of public library local studies websites have yet to embrace the use of Web 2.0 applications such as blogs, podcasts and incorporating user-generated content. Only Salford City Council provided a facility for users to interact with each other and exchange tips and research strategies. However the adoption and use these features should be considered as they have many advantages, for example Reid (2003) suggests that a blog could be used to discuss enquiries received about specific places, events etc. Of the websites in this sample four contain 'What's New' pages, and two provide newsletters. These could be adapted into blogs, allowing users to comment on developments. They could also be made available to users as RSS feeds.

6.7 Summary

This chapter presented a discussion of the results of the evaluation

- Most usability criteria were met, but problems relating to the use of dense blocks were encountered
- Most websites were found to be presented in an accessible format, but problems relating to links not changing colour are discussed
- Most websites provide at least a basic level of library information to enable users to plan a visit but would benefit from more comprehensive coverage
- Remote access to services and materials could be improved by; placing a link to library catalogues and databases on the local studies pages, providing guidance material in an accessible format, and by making more digital collections available. Links to useful external websites should be included

7 Conclusions and Recommendations

7.1 Introduction

This study aimed to assess the usability and content of current public library local studies web pages in order to discover how well libraries are meeting the requirements of their local studies users. This chapter will outline the findings of the study and present recommendations.

7.2 Local Studies Library Users

Local studies libraries have a diverse usership, however those interested in family history and genealogy account for the largest category of users. Those over 50 make up the largest age group of users. Many users are concerned with accessing accurate records and material and are willing to travel if necessary to access resources not available electronically. Therefore local studies library websites need to provide information and services for those who visit the library in person and for remote users, both from within the locality and from wider afield.

7.3 Website Usability

Current expert opinion on website design and usability was consulted during the literature review. The appearance, layout, readability, and navigation are all important aspects for consideration when evaluating usability and accessibility. All users should be able to scan the content and locate the information they need with minimum effort. The use of dense blocks of text, long pages and poor navigation inhibit this.

7.4 Findings and Recommendations

- Public library local studies websites do meet most usability criteria. However, priority issues to consider include the placement of links to

the local studies web pages and the use of dense blocks of text as these create problems for the readability and general appearance of web pages. Of lesser priority are the issues of page length requiring scrolling and the inclusion of date stamps.

- Local studies websites meet most accessibility criteria, but need to address the issue of links that don't change colour when accessed. Additionally designers could consider including buttons on the page to enable users to adjust features such as text size.
- The majority of local studies websites do provide at least a basic level of library information to allow users to plan a visit. More comprehensive coverage however would assist visitors further and encourage more users to visit by allowing them to fully appreciate the services on offer.
- Access to services and materials for remote users could be improved by; placing a link to library catalogues and databases on the local studies pages, providing guidance material in an accessible format, and by making more digital collections available. Links to useful external websites should be included as this is a feature appreciated by users that may encourage them to re-visit.
- The majority of local studies websites do not provide interactive content or additional features, and have not embraced the potential of Web 2.0, but could adopt features such as blogs, RSS feeds and discussion boards to forge closer links with and between users.

7.5 Limitations of the study

- This study was conducted by a single researcher, adapting the techniques of content analysis to establish the usability and content of a sample of websites. Current opinion recommends user testing, involving the observation of a number of users interacting with the interface, as the best method of assessing usability. Similarly content analysis should ideally involve more than one coder. Unfortunately

due to time constraints and other practicality issues these were not possible.

- Some of the criteria assessed were unavoidably subjective in nature, however the same conditions were consistently applied across the sample.

7.6 *Suggestions for further research*

- The current study involved a quantitative assessment of the general state of public library local studies websites, a more qualitative approach focusing on the opinions and experiences of users, may highlight different issues and priorities.
- The current study did not consider resource and other issues that may affect how the website is presented and what elements are included or excluded. Future research could involve consulting with local studies librarians and those responsible for the websites to examine their priorities and the limitations they face in achieving these.

Word Count: 19, 980

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Appendix A: Evaluation Framework

Website:

Url:

Date:

Section A: Usability	
1. Location of Local Studies Link	
2. Aesthetic appeal	
3. Layout: General	
Scrolling	
Superfluous Pages	
4. Readability	
5. Navigation: Navigation Aids	
Searchable	
6. Accessibility: Text	
Images/Media	
Links	
Adjustability	
7. Consistency	
8. Currency	
9. Maintenance: Content	
Person/s responsible	

Section B: Content	
10. Contact Information	
11. Information on library policies, Procedures, charges	
12. Information on upcoming events	
13. Enquiry/reference services	
14. Guidance Material	
15. Library Resources	
16. Remote Access	
Catalogue	
Databases	
Image/Map Collections	
Downloadable Material	
Other	
17. External links	
Subject Gateway	
Type of links provided	
Local	
National/international	
General Historical	
General Family	

Subscription/Fee-paying	
Information about links	
18. Local history Information	
Overview	
Specific Places	
People of interest	
Industries/activities	
Historical Events	
19. Additional features	
Virtual tours/exhibitions	
Quizzes	
Games	
Highlighted content	
Other	
20. Web 2.0/Library 2.0	
Blogs/newsletters	
Add content	
Discussion forum/chat	
RSS	
Other	

Notes:

Appendix B Evaluation Codes

Section A: Usability		
1. Location:	A	A clearly labelled link from the library homepage, from the main body of page, or menu
	B	A clearly labelled link from the council/authority page
	C	Links provided from multiple locations, e.g. library home page plus other areas such heritage, history etc.
	D	Links hidden and requiring more than three 'clicks' to locate
2. Aesthetics	A	Pages are uncluttered and use a combination of text, graphics and colour
	B	Pages consist of dense blocks of text, with poor use of images or colour
	C.	Pages uses several colours, extraneous graphics and distracting media
3. Layout	A	All pages follow a clear logical hierarchy, with more important information at the top of the page
	B	Some pages are not logically laid out

3.2. Scrolling	A	Minimum (less than two screens) or no scrolling required
	B	A lot of vertical scrolling required
	C	Horizontal Scrolling required
	D	Both horizontal and vertical scrolling required
3.3 Nonessential Pages	A	Several pages with minimum content
	B	Few (less than 5) pages with minimum content
	C	No nonessential pages
4. Readability	A	Text is written in simple, clear language, with adequate space between words and graphics and is scannable through use of headings, bullet points etc.
	B	Text is cluttered and difficult to read. Images interfere with text.
5. Navigation	A	Good navigation through provision of three or more different navigation aids
	B	Navigation difficult, three or less navigation aids provided
5.2 Search Facility	A	Search facility provided for library/local studies section
	B	Search facility only provided for parent authority site
	C	No Search facility provided

6. Accessibility		
6.1 Text	A	Text is in accessible format of san serif size 12-14, using contrasting colours.
	B	Text is not presented in accessible form
6.2 Images/media	A	All images/media are accompanied by text alternative
	B	Some images/media are accompanied by text
	C	No images/media are accompanied by text
6.3 Links	A	Links are clearly labelled, identifiable, and change colour when accessed
	B	Links are clearly labelled, identifiable, but don't colour when accessed
	C	Links are difficult to differentiate from other text
5.4 Adjustable	A	Each page displays ability to adjust page to need of user e.g. text size, text-only
	B	Instructions on how to adjust page available on accessibility page
	C	Adjustable through browser only
7. Consistency	A	Design features, style, layout, navigation etc. are consistent across all pages and are in keeping with library/ local authority parent site
	B	Some pages are inconsistent
	C	Several inconsistencies

8. Currency	A	Pages show date of last update
	B	Pages show date when content written
	C	Pages do not show date stamp
9 Maintenance		
9.1 Content	A	All links are working and no out of date information is presented
	B	A few broken links are present, but majority of information up to date
	C	Many broken links, and obviously out-dated content
9.2 Responsibility	A	Person/s responsible for website upkeep named and contactable
	B	Not named, but facility to report errors
	C	No method of contact supplied

Section B Content:		
10. Library Information	A	Comprehensive information about location of collections, contact details, opening hours and facilities available
	B	Contact information and opening hours only
	C	Referred to main library/ authority site for details
	D	No information provided
11. Information on upcoming events	A	Details about events/courses of interest to local studies in library and in community
	B	Library events only
	C	Local/community events only
	D	No information about events
12. Information on library policies/ procedures/ charges	A	Detailed information provided
	B	Brief mention, but no detailed information
	C	No information provided
13. Enquiry Services	A	E-mail an enquiry
	B	Synchronous help, e.g. IRC
	C	General enquiry form
	D	Local Studies Enquiry form

14. Guidance Material	A	Comprehensive hints/tips on family and local history issues
	B	Brief tips
	C	Local Studies FAQ
	D	Online tutorial/ interactive help
	E	No help provided
15 Library Resources	A	Detailed description of available resources, providing details of their location, value, limitations etc.
	B.	Brief description of resources available
	C	Simple list of resources
	D	No information on resources
16. Remote Access:		
16.1 Catalogue	A	Link to library catalogues
	B	Link to specific local studies catalogue
	C	Link to both
	D	No link provided
16.2 Databases	A	Access to databases for all
	B	Membership required to access databases
	C	No remote Access

16.3 Digital Collections	A	Searchable gallery of comprehensive collection
	B	Sample of collection available online
	C	Link to external site hosting local collection
	D	No access to digital material provided
16.4 Downloadable material	A	Information provided in pdf/Word format only
	B	Information provided in pdf/Word format and on screen
	C	No material requiring download
17. External links		
17.1 Subject gateway	A	Subject gateway(s), containing several relevant links, accompanied by descriptions
	B	Brief description provided for relevant links
	C	Links listed, with no accompanying details
	D	No external links provided
17.2 Types of links provided		Links of local interest, to sources of local archives/records, local societies, local attractions
		Links to national/international sources of archives/records
		Links to general family history sites

		Links to general history sites
		Links to commercial/fee-paying sites
		No Links
18. Local History Information		
15.1 Overview:	A	Comprehensive introduction to local region,
	B	Brief introduction to local region
	C	No introduction
	D	Available on external library/collaborative site
18.2 Information on specific locations/buildings	A	Comprehensive information about locations/buildings/sites within region
	B	Brief information about locations within region
	C	No information provided
	D	Available on external library/collaborative site
18.3 Information on People of interest	A	Comprehensive
	B	Brief
	C	None
	D	Available on external library/collaborative site

18.4 Information on Industries/activities	A	Comprehensive
	B	Brief
	C	None
	D	Available on external library/collaborative site
18.5 Information on Historical events	A	Comprehensive
	B	Brief
	C	None
	D	Available on external library/collaborative site
19. Interactive Features	A	Interactive features such as virtual exploration/tour, online exhibitions, Interactive tutorials/quizzes offered
	B	Interactive features only through external site
	C	No interactive features provided
20. Web 2.0/Library 2.0		
Blogs/Newsletters	A	Available on local studies library site
	B	Only through external site
	C	No features offered
Add content	A	Available on local studies library site
	B	Only through external site
	C	No features offered

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Discussion forum/chat	A	Available on local studies library site
	B	Only through external site
	C	No features offered
RSS	A	Available on local studies library site
	B	Only through external site
	C	No features offered
Other	A	Available on local studies library site
	B	Only through external site
	C	No features offered

Appendix C: Public Library Local Studies Websites

Argyl and Bute Council

<http://www.argyll-bute.gov.uk/content/leisure/libraries/localstudies/?s=2165022&a=0>

The London Borough of Barking & Dagenham

<http://www.barking-dagenham.gov.uk/4-heritage/local-history/local-study-centre.html>

Bath & North East Somerset Council

<http://www.bathnes.gov.uk/BathNES/leisureandculture/localhistoryheritage/localhistory/localandfamilyhistory.htm>

Bath in Time:

<http://www.bathintime.co.uk/>

Bedfordshire Libraries

http://www.galaxy.bedfordshire.gov.uk/webingres/bedfordshire/vlib/0.menu/local_studies.htm

Belfast Education and Library Board

<http://www.ni-libraries.net/libraries/belb/belfast-central-library-ulster-and-irish-studies/>

Blackburn with Darwen Borough Council

<http://www.blackburn.gov.uk/server.php?show=nav.257>

Cotton Town: Your Town, Your History

<http://www.calderdale.gov.uk/wtw/>

Bridgend County Borough Council

<http://www.bridgend.gov.uk/Web1/groups/public/documents/services/001884.hcsp>

Brighton and Hove City Libraries

<http://www.citylibraries.info/localhistory/default.asp>

Bury Metropolitan Borough Council

<http://www.bury.gov.uk/LeisureAndCulture/LocalAndHistoricalHeritage/HistoricalRecords/default.htm>

Calderdale Council

<http://www.calderdale.gov.uk/leisure/libraries/localhistory/index.html>

From Weaver to the Web

<http://www.calderdale.gov.uk/wtw/>

Camden Council

<http://www.camden.gov.uk/ccm/content/contacts/council-contacts/libraries/contact-the-camden-local-studies-%26-archives-centre.en>

Ceredigion County Council

<http://www.ceredigion.gov.uk/index.cfm?articleid=3610>

Clackmannanshire Council

<http://www.clacksweb.org.uk/culture/archives/>

Coventry City Council

<http://www.coventry.gov.uk/ccm/content/education-%26-libraries-directorate/services-for-communities/libraries-and-information-service/local-studies-library.en>

Picture of Coventry

<http://www.picturesofcoventry.co.uk/>

Darlington Borough Council

<http://www.darlington.gov.uk/Education/Library/Centre+for+Local+Studies/Centre%20for%20Local%20Studies.htm>

Derby City Council

<http://www.derby.gov.uk/LeisureCulture/Libraries/LocalStudiesLibrary/?qsNavSetting=max>

Picture the Past

www.picturethepast.org.uk

Douglas Borough Council
No Local Studies website

<http://www.douglas.gov.im/councilinformation.asp?ID=1025>

East Lothian Council

<http://www.eastlothian.gov.uk/content/0,1094,307,00.html>

East Renfrewshire Council

<http://www.eastrenfrewshire.gov.uk/heritage.htm>

Fife Council

No Local Studies website

<http://www.fife.gov.uk/topics/index.cfm?fuseaction=subject.display&subjectid=F6E580D1-E419-48D7-BCF2BB754F5E949F>

Flintshire County Council

http://www.flintshire.gov.uk/webcont/libs.nsf/vwa_ServiceListEnglish/3E77FD44F94E8F7F80256D71003053E9?openDocument

Gateshead Council

<http://www.asalive.com/Local/Home.cfm?Login=Done>

Hartlepool Borough Council

http://www.hartlepool.gov.uk/site/scripts/documents_info.php?documentID=629&pageNumber=4

The Highland Council

<http://www.highland.gov.uk/leisure/libraries/ambaile/>

Am Baile: Highlands Local History and Culture

<http://www.ambaile.org/en/index.jsp>

Hillingdon, London Borough of

<http://www.hillingdon.gov.uk/libraries/heritage/index.php>

Isle of White Council

<http://www.iwight.com/living%5Fhere/libraries/Local%5FStudy/default.asp>

Islington Council

<http://www.islington.gov.uk/Education/Libraries/Local/LocalHistoryCentre.asp>

Knowsley Council

<http://www.knowsley.gov.uk/leisure/libraries/archives.html>

Knowsley Local History

<http://history.knowsley.gov.uk/>

Leeds City Council

<http://www.leeds.gov.uk/page.aspx?egmsIdentifier=6D44C20FE6A1A57E80256E1D0040569A>

Discover Leeds:

<http://www.leodis.net>

Monmouthshire Libraries and Information Services

<http://libraries.monmouthshire.gov.uk/index.php?lang=EN&navId=47>

Northumberland County Council

http://pscm.northumberland.gov.uk/portal/page?_pageid=107,54495&_dad=portal92&_schema=PORTAL92&pid=90012

Nottinghamshire County Council

<http://www.nottinghamshire.gov.uk/home/leisure/libraries/familyhistory.htm>

Oldham Council

http://www.oldham.gov.uk/community/local_studies.htm

Oxfordshire County Council

http://www.oxfordshire.gov.uk/wps/portal/publicsite/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzKL94039HcCSZnFO8WHOepHogtZloR8PfJzU_WDgFKR5kAhY3Nf_aic1PTE5Er9YH1v_QD9gtzQiHJvR0cAojBqlw!!/delta/base64xml/L0lJSk03dWIDU1lBIS9JTGpBQU15QUJFUkVSRUIrLzRGR2dkWW5LSjBGUm9YZnJDRUEhLzdfTV8zN00vMzY!?WCM_PORTLET=PC_7_M_37M_WCM&WCM_GLOBAL_CONTEXT=http://apps.oxfordshire.gov.uk/wps/wcm/connect/Internet/Council+services/Leisure+and+culture/Libraries/Library+services/LC+-+Libraries+-+local+studies

Your House, My House: <http://www.yourhouse-myhouse.org/index.htm>

Peterborough City Council

<http://www.peterborough.gov.uk/page-5682>

Powys County Council

<http://www.powys.gov.uk/index.php?id=645&L=0>

Powys Digital History Project:

<http://history.powys.org.uk/history/intro/menu3.html>

Reading Borough Libraries

<http://www.readinglibraries.org.uk/services/local.htm>

Rotherham Metropolitan Borough Council

http://www.rotherham.gov.uk/graphics/Learning/Archives/_+ArchivesService.htm

Rutland County Council

<http://www.rutland.gov.uk/pp/gold/viewGold.asp?IDType=Page&ID=9479>

Salford City Council

<http://www.salford.gov.uk/leisure/museums/lhlibrary.htm>

Sefton Council

<http://www.sefton.gov.uk/default.aspx?page=6384>

Sheffield City Council

<http://www.sheffield.gov.uk/in-your-area/libraries/find/all-libraries/local-studies-library>

Picture Sheffield:

<http://www.picturesheffield.co.uk/>

South Tyneside Council

<http://www.southtyneside.info/learningandleisure/libraries/cultureHeritage/default.asp>

Tomorrow's History:

<http://www.tomorrows-history.com/about.htm>

Suffolk County Council

<http://www.suffolk.gov.uk/LeisureAndCulture/Libraries/LibraryServices/SpecialCollections/LocalStudies/>

Telford and Wrekin Council

<http://www.telford.gov.uk/Leisure+culture+and+tourism/Libraries/Community+history/>

Vale of Glamorgan Council

http://www.valeofglamorgan.gov.uk/working/libraries/family_and_local_history.aspx

Wakefield Metropolitan District Council

<http://www.wakefield.gov.uk/CultureAndLeisure/Libraries/LibraryServices/LocalStudies/default.htm>

Twixt Aire and Calder:

<http://www.twixtaireandcalder.org.uk/>

West Berkshire Council

<http://www.westberks.gov.uk/index.aspx?articleid=4472>

Westminster City Council

<http://www.westminster.gov.uk/libraries/archives/>

Wolverhampton City Council

http://www.wolverhampton.gov.uk/leisure_culture/libraries/archives/

Wolverhampton archives and Local studies:

<http://www.wolverhamptonarchives.dial.pipex.com/homepage.shtml>

Wolverhampton History:

<http://www.wolverhamptonhistory.org.uk/>

York City Council

http://www.york.gov.uk/leisure/Libraries/Research/local_and_family_history/

Imagine York:

<http://www.imagineyork.co.uk/>

All sites were accessed between 15th July and August 5th 2007