## The Inclusive Library: An investigation into provision for students with dyslexia within a sample group of academic libraries in England and Wales

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#### **Abstract**

The aim of this research was to investigate how the term inclusion can be applied to the support of dyslexic students within higher education in England and Wales. It explored the additional support services offered to dyslexic students by academic libraries and whether they are moving towards a more 'dyslexic friendly' environment. The research investigated the following issues:

- 1. Whether the additional support services provided by academic libraries meet the needs of dyslexic students
- 2. How inclusive is dyslexia provision within academic libraries?

The methodological approach was primarily qualitative with some quantitative elements - a questionnaire and face-to-face interviews.

The findings demonstrated that the provision for dyslexic students varied across the sample group. The development of more inclusive practices within the physical and virtual library was uncovered but there is still a need for additional support for students with dyslexia. A series of recommendations is derived from the conclusions.

## 1 Introduction

This research explored the term inclusion and how it can be applied to the support of dyslexic students within higher education in England and Wales. The sample group consisted of libraries belonging to the CLAUD (Creating Libraries Accessible to Users with Disabilities), ALIS Wales (Accessible Libraries and

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Information Services) and Open Rose (Opening up access for disabled users of academic libraries in Yorkshire) networks, alongside a random selection of other academic libraries. It considered the needs of all dyslexic undergraduates and postgraduates as well as mature students and distance learners.

The British Dyslexia Association (2010) defines dyslexia as:

A specific learning difficulty which mainly affects the development of literacy and language related skills. It is likely to be present at birth and to be life-long in its effects.

(British Dyslexia Association, 2010)

Singleton (1999) suggests:

Medical terms such as 'diagnosis' and 'symptom' are regarded by many as inappropriate to discuss the specific ways in which dyslexia affects people. Although it is a disability, dyslexia is not a disease nor can it be treated or cured.

(Singleton, 1999, 26)

Although classified as disabled under the terms of the Special Educational Needs and Disability Act 2001 (SENDA), many dyslexic students do not see themselves as disabled and are reluctant to approach disability services for help (Jamieson and Morgan, 2008; Mortimore and Crozier, 2007). However, libraries can present considerable barriers to these students due to complicated layouts and classification systems (Coxon, 2003).

The essence of the issue is the importance of achieving effective inclusion for students with dyslexia and not just integration. Whereas "integration" means making specific adjustments for individual students based on the needs they have declared, the concept of "inclusion" is more about provision of services which anticipate and accommodate a range of possible needs. The move from integration to inclusion involves a radical change in perspective; requiring institutions to focus on adapting to a diversity of needs rather than focussing on the disability (Open University, 2012; Swain et al, 2004). Guidelines for best practice have been provided by the Society of College, National and University Libraries (SCONUL) (2007), International Federation of Library Associations and Institutions (IFLA) (Nielsen and Irvall, 2001) and through United Kingdom government legislation on Special Educational Needs (Disability Discrimination Act, 2005).

The warrant for this research rests in the continuing debate on how education can be made fully inclusive in relation to students with dyslexia. The literature review uncovered a gap in research into how academic libraries are supporting dyslexic students since the studies by Jones (2002), Wilson (2004), Prior (2003) and Harrison (2004). At the same time, participation in higher education by dyslexic students, who make up the biggest group of disabled entrants, has increased (Higher Education Statistics Agency (HESA), 2010) as demonstrated in Figure 1.

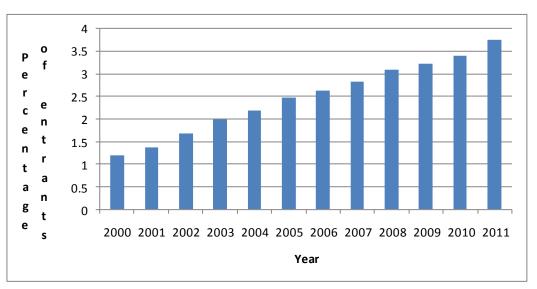


Figure 1: Percentage of new higher education entrants in England and Wales with dyslexia. (HESA, 2012).

It is important to consider how university libraries are adapting to offer a fully inclusive environment for all students. Pumfrey (2008) demonstrates that the percentage of dyslexic students obtaining first-class honours rose by 3.3% from 1998-2005 in comparison to a rise of 3% in non disabled students reaching the same level, emphasising the gap is narrowing and inclusion policies are slowly working. Academic libraries have a responsibility to support dyslexic students through their studies despite increasing numbers and limited resources. This research uncovered practices and facilities that have been introduced with dyslexic students in mind but are beneficial to all students. The SCONUL Access steering group (2007) identified a number of barriers to dyslexic library users including:

- Difficulty interpreting and understanding information given.
- Remembering instructions.
- Sequencing and interpreting shelf marks.
- Communicating needs to library staff.
- Assimilating information making library orientation difficult.
- Poor attention span e.g. during induction sessions.
- Poor organisational skills making obtaining the required resources within a timeframe difficult.

#### 2 Literature review

## 2.1 What is dyslexia?

Developmental dyslexia causes reading and spelling difficulties, despite adequate intelligence and educational opportunity (Fisher et al, 1999). It can also impair short term memory and organisational skills. Dyslexia is extremely complex and can result in cognitive weaknesses, such as memory and information processing (Grant, 2005; Snowling, 2000). This means the brain struggles to break down a series of sounds into small sections when listening to someone talk; making it

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difficult for dyslexic people to follow a conversation, particularly in a noisy environment when distracted by background chatter. Reading is also affected by the inability to remember verbal information for a short period of time, known as working memory, and is often greatly reduced in those suffering from dyslexia (Grant, 2005). These factors make learning and library usage extremely problematic. Dyslexic students must therefore be treated as individuals and it is not appropriate to have a stringent policy when supporting students as their needs will vary considerably (Grant, 2005).

## 2.2 Dyslexia and inclusion

Recognising strengths as well as weaknesses is an important factor in the concept of inclusion. The Salamanca Statement (UNESCO, 1994 in Deppeler et al, 2005) declared that the provision of education for all within the mainstream system was the most cost effective and efficient way of building an inclusive society.

Macdonald (2009) views discrimination as a social barrier, redefining dyslexia as a social rather than an individual problem and thereby highlighting the distinction between inclusion and integration. His solution is to break down the social barriers that prevent those with dyslexia from reaching their full potential rather than making special arrangements on an individual basis. The education system, with its reliance on examinations and written assignments as a measure of intellect, becomes an "institutional barrier that masks discriminations for people with dyslexia" (Macdonald, 2009, 353).

## 2.3 Dyslexia and Higher Education

With the emphasis placed on Widening Participation by New Labour, more and more 'non traditional' students have been entering higher education since the mid 1990s (Jamieson and Morgan, 2007, 18). These include students with disabilities as well as an increasing number of mature students who may have undiagnosed dyslexia due to limited testing when they were at school (Jamieson and Morgan, 2007).

When students enter higher education, they are going through an important transition. As Campbell (2011) states, many students manage to cope until the demands of their course become too much. Dyslexia should be viewed as contextual in the fact that the problems individuals face can vary in severity depending on the environment they are in. For example, examinations may be more stressful than presentations (Kirk, McLoughlin and Reid, 2001). Time management can also be a problem. Dyslexics may leave tasks too late and then panic when deadlines are looming (Campbell, 2011). Researching for essays can be the biggest challenge and this is an area where the support of library staff is crucial.

Many dyslexic students do not consider themselves to have a disability; making them reluctant to approach disability services. This appears to be a particular problem for male students who are reported to be reluctant to seek academic or pastoral support (Equality Challenge Unit, 2012). It is therefore essential for institutions to change their perspective; making strategic changes to create a more 'dyslexic friendly' environment, which reduces the need for students continually

to disclose their dyslexia as well as marketing support services as appropriate for their needs (Prior, 2003). One solution is a separate dyslexia support unit (Jamieson and Morgan, 2007).

## 2.4 Library support

"Libraries can be complicated places. Most people, dyslexic or not, have to ask for help at some time" (Goodwin and Thompson, 2004, no page number).

Library staff have to appreciate, due to poor organisational skills, students with dyslexia find it difficult to follow procedures and may need repeated explanations of how to access resources and manage their library accounts (Jamieson and Morgan, 2007). As Nielsen (2006) asserts, libraries have a responsibility to ensure dyslexic students access information on an equal basis to their peers. Harrison (2004) identifies the library as a component part of the higher education experience; therefore playing an important part in supporting disabled students. Prior (2003) emphasises the importance of clear and effective advertising of additional support services as people with dyslexia often have low self esteem and can easily be made to feel stupid (Nielsen, 2006). Guidelines produced by IFLA in 2001 echo these recommendations and advocate the importance of publicising library services to dyslexic users as well as investing in assistive technology (Nielsen and Irvall, 2001).

With libraries undergoing a shift towards self service and reduced front line service (Jones, 2004), it is important to consider how this affects students with dyslexia, and whether there is now a real need to provide a more 'dyslexia friendly environment' that serves both those with and without dyslexia in a more equitable manner. Dyslexic students may have difficulty navigating large libraries and remembering classification codes (James and Litterick, 2010; McAulay, 2005). McNaught (2011) argues current models of dyslexia support do not serve dyslexic learners properly and fail to take advantage of more inclusive technologies that serve all users such as e-books. The current models of support focus on disclosure and "fixing individuals" (McNaught, 2011, 4). Singleton (1999) raised the issue that many students with dyslexia find using libraries difficult and stressful and therefore may be tempted to avoid using the facilities, to the detriment of their studies. The report recommended that libraries should make their facilities easier for students to access. The introduction of a privilege card to access enhanced support and offering extended loans for library items and reduced photocopying costs was recommended (Singleton, 1999). McAulay's (2005) interviews provide a useful insight into the views of disabled students. Creating an inclusive environment was more important to them than having individual support, although it must be recognised that any future work environment may not be so inclusive. Prior (2003) and Heaven (2004) emphasise the need for dyslexic students to have access to a quiet room or area to study in. They may also need more room to spread out their work (Callen, 2011).

The lack of a dedicated member of staff within libraries to support disabled students was raised as an area of concern by Harrison (2004) as was the inconsistency in identifying students with dyslexia for support. The issue of data protection is one potential barrier to adding information regarding access

requirements to the library management system (Harrison, 2004). Harrison (2004) identified the problem that many libraries tended to provide services for disabled users as a homogenous group rather than as individuals. Holloway (2001) identifies the problem of having to renegotiate support with the library service after declaring at university level. Reid (2009) advocates the scanning of all key texts for dyslexic students to allow them to access material on an equitable basis to their peers. Recent changes in the copyright licence have opened up the option of scanning texts into an alternative format for dyslexic as well as visually impaired students, providing the library holds a print copy, but this is still a considerable task for libraries with limited staffing budgets (Copyright Licensing Agency, 2010). The purchasing of e-books is a more accessible option for many and benefits all students (Garrod, 2003; McNaught, 2011).

New technologies have also been identified as ways of making a library more dyslexic friendly. The use of Google style library catalogues, which are more tolerant of spelling mistakes, single sign on to reduce the need to remember numerous passwords as well as the ability to set up roaming profiles to customise the visual appearance of screens can be invaluable for dyslexic students as well as appreciated by all library users (McAulay, 2005; Callen, 2011). The dissemination of information in a variety of accessible formats such as MP3 downloads and podcasts helps target those who find print materials difficult to read (Juggins, 2009). For inductions and information literacy sessions, a variety of methods need to be considered to enable students to retain the information given including more interactive forms of instruction such as the Cephalonian method (Morgan and Davies, 2004). Instruction should be available to download as podcasts or online quizzes so that those with short term memory problems can revisit the information provided and learn at their own pace (Charles, 2004). Smart phones and tablet computers can be invaluable to students with their functionality to set reminders and access the library's online resources on the move.

Accessibility audits and on-going departmental feedback targeted at users with disabilities are also advocated to ensure continual development. Improved communication with central disability services is essential to ensure library services are made aware of those declaring a disability and what support is required (Heaven, 2004).

## 3 Research design

## 3.1 Research rationale

As outlined above, the literature suggests that a more inclusive environment needs to be provided in order to support dyslexic students effectively and offering extra support is not enough to ensure full inclusion. The research attempted to follow up on recommendations made by Harrison (2004) and Prior (2003) by identifying what improvements have been made and if changes in library services have made the academic library more dyslexic friendly and thus created a more inclusive environment for all students. This was considered in the light of the introduction of self service, social learning zones and a reduction in individual study space (Latimer, 2011; Bryant, Matthews and Walton, 2009). The need for additional support was also researched as well as the desire for a more inclusive service that

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does not require continuous disclosure to library staff including the use of new technologies such as integrated specialist software, e-books and automated renewals.

In order to find out what libraries are doing to support dyslexic students and to uncover the inclusive measures being used to support all students, but which are of particular benefit to those with dyslexia, two main areas were investigated:

- Whether the additional support services provided by academic libraries meet the needs of dyslexic students
- How inclusive is dyslexia provision within academic libraries?

Two research methods were used to collect predominately qualitative data, supported with some quantitative analysis. A survey was circulated to a selection of university libraries, followed up by interviews with a smaller group of library disability support representatives. The research was undertaken during the winter of 2011/12. The questionnaires were sent out first, with a deadline of 10 November 2011. This deadline was subsequently extended to 20 January 2012. In the questionnaire was a request for the respondents to state whether they were prepared to take part in a follow-up interview. These interviews took place in late February and early March 2012.

## 3.2 Questionnaire

The questionnaire (see Supplementary File) was circulated by email to CLAUD members by the organisation's chair. The same questionnaire was emailed to the members of the Open Rose and ALIS Wales groups and a random selection of other university libraries. These were selected by location to improve the geographic mix of the sample group. The aim was to gain a representative view from different groups of universities: University Alliance, Russell, 1994 and Million+ groups. Disability contacts were found by checking the library services websites for details. In total, 33 questionnaires were circulated to 31 different universities. Two universities were sent 2 questionnaires as their disability support services were divided due to being multi campus institutions. Table 1 demonstrates the breakdown of membership of the universities selected although it should be noted that some universities selected were unaligned.

CLAUD	OPEN ROSE	ALIS WALES	Russell Group	Million +	University Alliance	1994 Group
19	9	2	11	2	10	3

Table 1: Demographic of surveys distributed

From the 33 questionnaires distributed, 21 were returned. Three respondents declined to take part due to staffing difficulties, student profile or restructuring of the service, one institution did not provide additional library support for dyslexic

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students and eight failed to reply. This gave a response rate of 63.6%. From the returned questionnaires, 14 respondents volunteered to be interviewed.

A coding frame (Moore, 2000) was used to allocate numerical codes to each possible answer in the questionnaire and the responses were entered into a Microsoft Excel spreadsheet in preparation for analysis. The data obtained from the open questions and 'other' categories was checked for recurring themes and recorded using the coding process and as free text (Denscombe, 2007). This also gave an opportunity to highlight areas for further investigation at the interview stage (Bell, 1999). Table 2 illustrates the demographic of the survey respondents and interviewees.

Institution survey code	Interview code	Library disability support network	University consortia membership groups
C01	N/A	CLAUD	Russell Group
C02	F	CLAUD	Russell Group
C03	E	CLAUD	Russell Group
C04	N/A	CLAUD	None found
C05	D	CLAUD	University Alliance
C06	N/A	CLAUD	Russell group
C07	N/A	CLAUD	1994 Group
C08	N/A	CLAUD	University Alliance
C09	G	Open Rose	University Alliance
C10	N/A	CLAUD	Million +
C11	N/A	CLAUD	University Alliance

C12	A	CLAUD	University Alliance
CI3	С	CLAUD	University Alliance
C14	N/A	None declared	Russell Group
C15	N/A	None declared	Russell Group
C16	В	ALIS Wales	Russell Group
C17	N/A	Open Rose	Russell Group
C18	N/A	CLAUD	1994 Group
C19	N/A	CLAUD	None found
C20	N/A	None declared	1994 Group
C21	Н	Open Rose	Russell Group

Table 2: Demographic of survey respondents and interviewees.

#### 3.3 Interviews

Face-to-face interviews were used to provide an opportunity to visit the interviewees in their work environment and see what measures had been introduced. In order to allow the respondent to "tell the story" of their experiences rather than just answer a series of questions a set of interview topics was circulated before the meetings (see Supplementary File). Purposive sampling was used to select the interviewees from the participants in the questionnaire survey who volunteered to take part.

The selection criteria for interview were based on:

- Those who had volunteered for interview.
- Those who had completed the questionnaires most fully.
- Institutions with a variety of inclusive practices in place in order to match the research question of whether libraries are becoming more 'dyslexic friendly'.
- To give a balance of respondents belonging to three different consortia and a mixture of research- and teaching-led institutions.

The responses collected from the eight interviews were organised into nine themes to ensure that the data could be ordered and analysed effectively (Powell and Connaway, 2004). This qualitative data was then compared and recurring themes identified by entering the results in an analysis grid (Gillham, 2005).

#### 3.4 Limitations of the research

This research was limited by the relatively small initial sample size. Although the response rate was 63.6%, only 21 replies were received making any generalisations beyond the field of study difficult. It may therefore have been advisable to increase the number of institutions contacted and thus improve the sample size for more accurate results. Also, only seven of the 21 universities were able to provide information on the number of students admitted in autumn 2010 and figures on those declaring dyslexia and other learning difficulties on entry. Only three provided the breakdown by gender and only six respondents had information on the numbers that had registered for extra library support. Due to the poor responses to these questions it was difficult to make any specific analysis to compare to the figures obtained by HESA outlined in the introduction (HESA, 2012). This problem of availability of reliable statistics was echoed by all the interviewees who identified record keeping as an area for improvement.

The information obtained by interview was found to be much more detailed than that obtained by questionnaire. It would therefore be beneficial to repeat the study using more interview candidates.

The questionnaire concentrated on policy changes and electronic resources but amendments to the physical layout and design of libraries in relation to study space was identified as an important factor which was then followed up at interview stage. More information could therefore have been obtained on this if it had been included at questionnaire stage. More direct questions on inclusive provision would also have helped identify new policies and facilities at an earlier stage in the research.

## 4 Findings

## 4.1 Introduction

From the findings of the literature review, the resources available to dyslexic students within academic libraries can be divided into two separate categories:

- Additional support for disabled and dyslexic students which is dependent on disclosure by the student and referral by disability services.
- **Inclusive practices** and facilities within the library introduced for all students but which are of particular benefit to those with dyslexia.

The interviews followed on the findings of the questionnaires and also included discussion on study space which was raised as an issue by several respondents in their additional comments. Therefore the findings from both the questionnaires and the interviews have been amalgamated to avoid duplication of information. Full coding information can be found in Table 2 (section 3.2).

# 4.2 Do additional support services provided by academic libraries meet the needs of students with dyslexia?

From the information provided in the questionnaire, and the follow-up discussion at interview, it became clear that any attempt to provide individual support for students with dyslexia was dependent on disclosure and referral from the central disability support service at each institution. Only seven of the 21 universities were able to provide information on the number of students admitted in autumn 2010 and figures on those declaring dyslexia on entry. Three provided the breakdown by gender and six respondents had information on numbers registered for extra library support. For the seven universities providing details on numbers of students declaring dyslexia the percentages ranged from 2% (two libraries) to 11% (one library).

This gives a mean value of 5.4% which is slightly higher than the average figure of 3.76% provided by HESA for the 2010/11 academic year. However, if the highest figure of 11% is removed, which indicates that the institution has an above average entry of students with dyslexia, the mean reduces to 3.6% which is comparable to the national average. This institution (C11) offers a wide range of vocational courses and foundation degrees, which are popular with students with dyslexia. It was reported that 60% of students declare a disability on their UCAS forms with 40% going onto seek support from disability services. Their additional library support is arranged centrally with direct referral from their disability advisor to subject librarian thus avoiding the need for repeated disclosure. Unfortunately there was insufficient reliable data to make any comparisons on registration for additional library support.

## 4.2.1 Communication

Communication was identified as key to being able to support students satisfactorily; communication with disability services to obtain learning support information; communication with students to get them to come in to discuss their requirements.

## 4.2.1.1 Communication with disability services

The referral process with disability services is reliant on complying with student wishes and having good lines of communication between the two departments to reduce the need for continual disclosure. Two of the eight interviewees reported there was no referral process in place as all provision was organised by disability services. Interviewee G explained levels of support were organised by disability advisors and communication had improved since disability services and library services had become part of the same division. Interviewee A remarked that the service could operate more smoothly if communication with disability services was improved and if there was a more integrated approach to support, "students often have to declare twice or more to get various types of support". In contrast Interviewees B and H reported that good communication with disability services had strengthened the referral process and improved uptake of services.

#### 4.2.1.2 Communication with students

Only two institutions out of the 21 questionnaire responses received indicated that they carried out student surveys amongst their registered dyslexic users. It was found services were promoted to students in a variety of forms, as shown in Table 3, with referral from university disability services being the most significant.

Types of communication / promotion	Number of Libraries (%)
Referral from university disability services	19 (95%)
A general library induction	13 (65%)
In undergraduate welcome pack	6 (30%)
Website	8 (40%)
Other	11 (55%)

Table 3: Library disability service promotion methods.

One of the 'Other' significant forms of promoting the service was via a welcome email sent by the library support coordinator to all new students registered with disability support. Information in these emails included links to the website for more information as well as an offer of an appointment to discuss individual needs and application for extended loans; making websites an important route for establishing contact.

## 4.2.2 Structure of library disability support service

Once a student has disclosed to disability services and agreed for their details to be passed to the library disability representative, their library support plan must be agreed. In some cases this is automatic and arranged by the disability advisor. Others are advised to contact the library disability team for help. Interviewee F reported that only a small percentage of those declaring dyslexia actually go on to seek extra support from the library disability support team. However, the take up appears to have improved since welcome emails have been sent out on receipt of students' learning support plans, a comment repeated by interviewees B, C and H. Unfortunately no figures were available to support these opinions.

## 4.2.3 Photocopying / scanning services

Mediated photocopying was offered by 85% of responding institutions but Interviewee B said most students preferred to photocopy independently and then claim it back from their disability support allowance. Interviewees C, E, F and G offered support with this process by providing a print out of transactions and Interviewee D reported that all students with dyslexia received a free photocopying card to get them started. Scanning of core texts into alternative

formats was offered by 75% of institutions surveyed. However, questionnaire respondent CO6 reported that students were encouraged to do their own scanning on open access scanners. Interviewee G explained that they offered training to allow students to scan their own documents and the acquisitions team were notified by disability services if a student required a text in an alternative format so that publishers could be approached. Subject librarians were notified to ensure any resources to be added to the virtual learning environment could be uploaded in an alternative format if required. The demand for alternative formats appeared to vary considerably across the interview sample group. Two institutions reported they were rarely approached to source an electronic copy of a core reading whilst four others were struggling to keep up with demand. The institutions experiencing a high demand for an alternative format service had procedures in place for requesting items and this was widely advertised. Interviewee G promoted this service on their leaflets and direct requests were made by the disability advisors to the acquisitions teams. Interviewees A and C had dedicated alternative format services which were again accessed direct from disability services.

## 4.2.4 Extended loans and self-issue

Interviewee A was concerned the introduction of self-issue had led to decreased staff contact with students.

Although none of the interviewees reported problems with the self issue interfaces for dyslexic students, Interviewee F commented that the need for a PIN to access the system can cause difficulties for students with memory problems. All interviewees felt pictorial guides on self-issue seemed to appeal to all students including those with dyslexia.

Table 4 highlights that only two libraries receive an automatic update from the student database. This indicates that, in most cases, some form of manual intervention is required which is dependent on communication from disability services and / or additional disclosure by the student.

Automatic update	Number of libraries (%)
Yes, automatic upload from student database	2 (10%)
Yes, dedicated user type on LMS	5 (24%)
Manually added	12(57%)
Colour coded card given to disabled users	1 (5%)
Other*	3 (14%)
*Other reasons given were: Max 5 renewals for all students; not normal policy to give extended loans.	

Table 4: Does the library have an automatic update to library management system (LMS) used to allow extended loans?

Interviewees A and C explained that problems with self-issue and extended loans had been resolved since the introduction of a separate user category. Interviewee F

remarked that not having a separate user profile does put dyslexic students at a disadvantage during unstaffed hours as books will not be issued for the full extended period on self issue or when renewing online. The process of actually obtaining extended loans also appears to be inconsistent across the sample interviewed. Three out of the 8 people interviewed added extended loans entitlement to a user's account on receipt of notification from disability services. One institution had entitlement added by disability services and one did not offer extended loans. The other three emailed students to ask them whether they would like extended loans. "Sometimes I feel we asking students to jump through too many hoops to get what they need", commented Interviewee F.

## 4.2.5 Software provision

The range of assistive software available is compared in Table 5. Scanning software, Inspiration mind mapping tools and Read and Write talk back service were the most commonly provided.

Software available	Number of libraries (%)
<b>Scanning Software</b>	18 (86%)
Inspiration	13 (62%)
Texthelp Read and	18(86%)
Write	
Other	13 (62%)
Kurzweil 3000	3 (14%)
Dragon	4 (19%)
Supernova	4 (19%)
JAWS	5 (24%)

Table 5: What software is offered?

Access to assistive technology by students with dyslexia was compared. The findings demonstrate that while 62% of the libraries completing the questionnaire have a dedicated Assistive Technology room for use by dyslexic students, a greater proportion (76%) have installed assistive technology onto the networked computers thus increasing access to all students. 29% of institutions surveyed offered uploads of software onto students' own laptops.

#### 4.2.6 Equipment loan services

The availability of equipment loans was explored as there can often be a considerable delay between students applying for funding and the receipt of their disability support allowance. Four institutions did not offer an equipment loan service.

Table 6 identifies the loan of laptops, digital recorders and core texts as being the most common provision made by institutions surveyed.

Items loaned to dyslexic students	Number of libraries (%)
Voice recorders	12 (57%)
Laptops	10 (48%)
e-book readers	2 (10%)
Core texts	11 (52%)
No loan service offered	4 (19%)
Other*	6 (29%)
*Other includes: Loans discussed with	
disability support unit; cerium overlays;	
laptops and voice recorders loaned to ALL	
students for use in the library.	

Table 6: Comparison of loans service across libraries surveyed.

## 4.2.7 Study space

The availability of this resource was not specifically asked about in the questionnaire but was followed up in interviews as it was highlighted as an additional service in one of the questionnaire responses. Interviewee F explained that single study rooms for disabled students needing a quiet place to study had been introduced to reduce pressure on the assistive technology room. Dyslexic students particularly appreciated this service as the software they required is loaded on their laptops; they were only using the assistive technology room because it was a quiet place to work. None of the other participants offered this facility although interviewees D and G had bookable individual study rooms for all students.

## 4.3 How inclusive is dyslexia provision within academic libraries?

## Interviewee G commented:

In 2010, over 1400 dyslexic students registered with disability services [...] we have to mainstream provision and make it fully inclusive [...] we cannot possibly provide a service just for them.

Interviewee G stated that support for disabled users had been reviewed as a response to concerns that library staff were "seeing the disability instead of the student." As a result of a review of provision, and greater cooperation between the different departments of library, computer and disability services, there had been a move to a more inclusive service reducing the need for students to disclose. The ultimate aim was to "put inclusive services at the heart of strategic planning" and create facilities that are accessible to all but this required the "buy in" of the library management team. A range of changes to the physical and electronic facilities in the libraries surveyed were identified. These included roaming profiles for computer usage and single and group study rooms bookable through the University's virtual learning environment.

#### 4.3.1 Renewals and reminders

A limitless renewal is one facility that is relatively easy to implement but helps students manage their accounts and avoid unnecessary charges. Interviewees F and H both reported this had recently been introduced in their institutions and was proving popular with all students. Reminders could now be set up on phones by students to renew on a weekly or even daily basis. No institution responding to the questionnaire had a facility for automatic renewals but 90% sent email reminders and one library sent text reminders. When followed up at interview, several different practices were identified. These included teaching students to set up alerts on their mobile phones to check their library accounts on a regular basis (Interviewees B and F). Interviewee B explained they did not send reminders to any students as they felt it was better to educate them how to manage their own accounts thus preparing them for life after university. Four out of the eight participants interviewed reported that loan periods had been reviewed to reduce the number available and make it easier for students to understand. Two had removed all other loan status apart from standard and short loans to make their loan policies more transparent and responsive to demand.

## 4.3.2 Assistive technology

Over three quarters of respondents to the questionnaire reported assistive technology software was available on all networked computers in the library. All those interviewed explained that mind mapping and "Read and Write" software was networked making it available to all students if required. Interviewee G commented that all assistive technology was now open access although certain PCs were reserved for registered students only. Scanning facilities were also identified as an important resource for all students. Interviewee B explained their open access scanners were provided by disability services but were available for anyone else to use. Six out of the eight participants interviewed had facilities for open access scanning.

#### 4.3.3 Expansion of technology

The need for better more user friendly search facilities, tolerant to spelling mistakes, is seen as beneficial to all students and especially dyslexic students. All interviewees mentioned the benefit of having a single sign on facility for all databases reducing the number of passwords a student needs to remember. Interviewee B explained the library will soon be receiving an update to their library management system allowing highlighting of search terms and autocorrecting spelling mistakes. Interviewee G has introduced roaming profiles for their students which can either be set up at registration by the disability support team or is available to all students at the library help desk. This allows students to save their preferences for screen layout thus giving them an individualised profile. Interviewee F commented on the benefit of the recent introduction of smart cards which allows personalised access to buildings, computer rooms and photocopiers without having to remember PIN numbers or passwords.

#### 4.3.4 E-books and electronic resources

Figure 2 shows that 4% of respondents to the questionnaire reported that all departments had core readings available on their virtual learning environment, although 57% reported that some departments used this facility. However, 17 out of 21 respondents had links from their library catalogues to e-books to improve access.

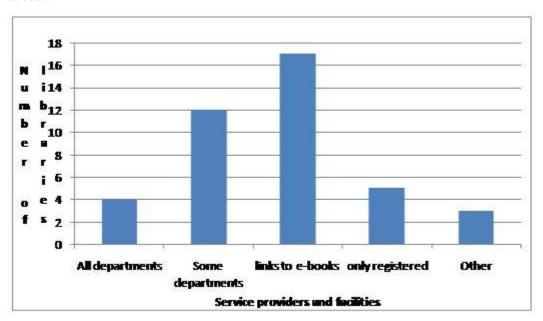


Figure 2: Digitization service across libraries surveyed.

## 4.3.5 Library inductions

Individual library inductions were identified as an important role of the library disability support teams surveyed with 95% respondents offering this service. However, in the interviews it was not reported to be a facility that dyslexic students asked for on a frequent basis (although none could provide usage statistics). All those interviewed identified the provision of good customer service and follow up advice at help desks for all students as essential. Most requests received were for individual database training which was referred onto subject specialists. Two out of eight respondents interviewed offered a mediated service to arrange this.

From the data provided by questionnaire respondents, Figure 3 demonstrates that 76% of library inductions are carried out as walking tours. This may be a problem for students with dyslexia who may be distracted by a big group or struggle to remember all the information provided due to short term memory and information processing difficulties. 80% reported some inductions were offered as talks with handouts which would allow students to review the information, subsequently. The use of slides, podcasts and videos was reported by a significant minority of respondents. All interviewees reported information provided at induction was also available on the library websites.

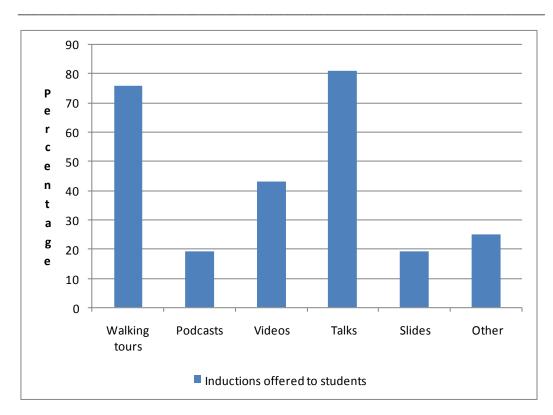


Figure 3: Types of library inductions offered across libraries surveyed.

## 4.3.6 Information literacy and catalogue training

Interviewee B explained information literacy is embedded in most of the schools' curricula, including compulsory units. Interviewee C explained additional training is offered to all students on a one to one basis and is particularly popular at assignment deadline time with dyslexic students. Interviewee G commented that all students are referred to the relevant information specialist for information literacy training. Information literacy tutorials were available on all of their library websites to give back up information including podcasts and quizzes on referencing thereby reinforcing knowledge gained from the face to face training.

## 4.3.7 Equipment loans for all students

Two interviewees mentioned that some equipment was available to borrow by all students. Interviewee H explained digital recorders and laptops were available to borrow in their central library. Interviewee F reported some branches within the service offered laptop loans on a bookable basis for all students.

## 4.3.8 Physical space

The physical layout of a library was not specifically covered in the questionnaire, which focussed on customer service and electronic forms of support. However, this was raised as a move towards inclusion by all the interviewees. The following improvements were identified:

• Improved, clearer signage and the use of zones to define different types of study space. Interviewee F reported the introduction of pictograms to explain food and drink policy.

• Designated areas for group and quiet study.

- Bookable group study rooms, although only three reported the availability of
  individual study rooms. However the rest reported this would be an extremely
  popular facility if introduced.
- Help desks three out of the eight interviewees had introduced a roving service at peak times to answer enquiries at the point of need.

## 4.3.9 Study skills support

Interviewee D identified the study skills service located in the library, but not run by it, as an important inclusive resource. This service is open to all students by appointment via email and scheduled drop in sessions without the need to disclose.

## 4.3.10 Sharing good practice

All those interviewed reported they belonged to a network and found the sharing of information essential in developing their service provision. Those belonging to CLAUD or Open Rose found these groups particularly supportive. The benefits of belonging to a network included shared training events, e-mail circulation list, conferences, video conferencing, benchmarking exercises including regular audits of member institutions, Wikis for sharing information, liaison with other networks and with TechDis to provide support on obtaining alternative formats from publishers.

Overall, those interviewed agreed belonging to a network of disability representatives was an advantage, facilitating the sharing of ideas and improving practice. However, membership of university groups, such as the Russell Group, did not seem to make any specific difference.

#### 5 Discussion

The research has uncovered the development of more inclusive practices within the physical and virtual library but identified there is still a need for additional support for students with dyslexia to allow them to compete on an equal basis to their peers. This is reliant on excellent communication between disability services, libraries and students. Another major challenge is record keeping ensuring that service provision is constantly monitored and updated.

Libraries have a duty to support students with dyslexia so they can access resources on an equal basis to their peers (Nielsen, 2006). However, this research has attempted to demonstrate that this can be largely achieved by providing a more 'dyslexic friendly' service to benefit all students. As Charles (2004) proposes, handouts, quizzes, tutorials, etc, should accompany teaching sessions to allow students to revisit the information conveyed in their own time and to reenforce the knowledge gained. As McNaught (2011) has proposed, much of dyslexia support has focussed on 'fixing individuals' since the recommendations of the Singleton report (1999). Policies for additional support appear inconsistent across the sample group as identified by Harrison (2004). However, it is important to consider the views of the dyslexic students are essential in planning a fully inclusive service thus fulfilling the requirements of the Disability Equality Duty.

Unfortunately, this survey failed to reveal any coherent and consistent approach to obtaining student feedback. Only one of the interviewees reported the involvement of a disability representative in service planning and none of the respondents conducted regular surveys of registered disabled users. Feedback was in the main dependent on informal contact and email complaints.

#### 5.1 Communication

The research identified there were still potential barriers to library use by students with dyslexia due to an inconsistent approach to communication. The recognition of needing to share provision in order to maximise access to limited resources, i.e. "do more with less" (Kitchin, 2010, p.55), was a recurrent theme in the interviews. This makes communication even more vital. Communication with disability services was identified as an important factor in all the interviews.

Obtaining feedback from students was identified as a problem by all those interviewed, although Interviewee G reported this had improved since library and disability services had become part of the same division. Interviewee F reported that only a small percentage of those declaring dyslexia actually go on to seek extra support from the library disability support team. However, the take up appears to have improved since welcome emails have been sent out on receipt of students' learning support plans, a comment repeated by Interviewees B, C and H. This emphasis on closer cooperation and sharing of knowledge is replicated in the importance placed on the use of networks by Heaven (2004) and all the interviewees in the sample group.

## 5.2 Use of technology

The need for better more user friendly search facilities which are more tolerant to spelling mistakes has been identified as beneficial to all students (McAuley, 2005) and these are becoming more prevalent. But McNaught (2011) reported current support for dyslexic students fails to take advantage of new more inclusive technologies serving all users such as e-books which can be manipulated into different fonts, colours and layout. However the findings from the survey, and subsequent interviews, derived mixed results. There was a wide disparity in available resources identified. At the most developed extreme, Interviewee G reported the use of roaming profiles to personalise screens and a fully networked system of assistive technology software. Students also had access to all core texts on their virtual learning environment and alternative formats by the smooth referral of needs from disability services to the acquisitions department and subject specialists. However other universities reported less use of these technologies. The purchasing of e-books is a more accessible option for many and benefits all students (Garrod, 2003; McNaught, 2011) although it can present problems with alternative formats. The other option is to provide open access scanners and train students, and their support workers, to use them.

## 5.3 Strategic planning

The importance of consulting with disabled students and disability services at every stage of strategic planning was highlighted. "The buy-in of top level management is essential in order to make a library fully inclusive" (Interviewee

G). This applies to library policy on rules and regulation as well as allocation of the physical space. The availability of equipment loans is important given the delay between students applying for funds and the receipt of their Disability Support Allowance (Reid and Kirk, 2009). With the majority of academic libraries moving to self issue (Jones, 2004) the importance of dedicated user profiles to allow extended loans was also stressed by four of the interviewees. In the survey, only 10% of the respondents had an automatic upload of disability status from the student database but 24% now had a separate user profile for disabled students. This is a significant improvement from Harrison's 2004 report but still most academic libraries surveyed have to change a record manually in order to facilitate extended loans; this process is dependent on disclosure and communication with disability services. The move towards zoned learning spaces was also identified as a potential improvement with clearer signage and the use of pictograms.

#### 5.4 Recommendations

These recommendations are divided into two sections, reflecting the discussion relating to integration and inclusion.

Recommendations designed to help **integrate** students into library services:

- Ensure excellent communication with dyslexic students at all times, including welcome emails on receipt of students' learning support plans.
- Ensure regular two way communication with disability services staff.
- Improve record keeping about specific needs.
- Use dedicated user profiles to allow extended loans.

Recommendations designed to support **inclusion**:

- Consult with disabled students and disability services at every stage of strategic planning.
- Review the way the service is marketed and keep information clear and concise.
- Make available networked assistive software.
- Encourage greater use of e-resources, e.g. by purchasing of e-books.
- Provide open access scanners and train students, and their support workers, to use them.
- Introduce zoned learning spaces.

Engaging in closer cooperation and sharing of knowledge through networking with relevant groups is likely to enhance both aspects of service provision.

#### 6 Conclusion

From the research, it appears the majority of students are accessing library resources independently with minimal support from library disability contacts thus making it difficult to assess whether additional support is meeting the needs of dyslexic students. The process for receiving this support is dependent on disclosure and referral from disability services. There are still examples of

students having to disclose two or more times to obtain the services they require. However, it is recognised that not all dyslexic students disclose and many are still undiagnosed. Others do not consider themselves as disabled; preferring not to declare and to work independently (Kirk, McLoughlin and Reid, 2001; Prior, 2003).

However, the move towards a more inclusive service is essential in these challenging economic times and to meet the needs of a growing number of students with dyslexia. There has also been a rise in the number of mature students entering higher education who may be recently diagnosed with dyslexia or still unaware of what is causing their difficulties with reading and information processing (Singleton, 1999). All these students need to be catered for and the move towards a more accessible environment seems the answer to having to "provide more with less" (Kitchen, 2005, 55).

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