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# Supporting distance learning students with disabilities



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## INTRODUCTION

The Open University (OU) has approximately 250 000 students studying at any one time and every year about 12 000 of these are registered as being disabled. As the Open University is a distance-learning institution, from the library perspective the emphasis has been on providing access to resources in electronic format since the late 1990s. Although online access to journals and books has many benefits for students, including many who have a disability, accessibility problems with some third-party resources mean that some disabled students may need additional services to help them make full use of these resources.

This article will look at the services that have been established over the last ten years and will discuss our current developments and what we are planning for the near future. Throughout the article I refer to module teams and module websites. Module teams are composed of cross-departmental OU staff who work together to create a module (called the production process). The teams are composed of academic, design, technical and library staff involved with writing the material, presenting it using different multimedia, embedding library resources and checking accessibility. All students have a module website, although the methods of making the learning available will vary.

## BACKGROUND

A project called ENABLE<sup>1</sup> was set up in 2001 to plan for our response to the introduction of the Special Educational Needs and Disability Act

(SENDA) in 2001. The project made recommendations on how both the physical and online resources could be made more accessible, and subsequent developments to disability services have built on these findings.

The services to support these students have also developed since 2002, when one member of staff held this responsibility, until a special needs group was formed in 2008. This group comprises five members of staff from Library Services, four from the Learning and Teaching team and one from the Information Literacy Unit. Staff within the Learning and Teaching department support students via the library helpdesk and liaise with academics to embed information literacy and library resources within modules. Having a team leader in the group means that there is someone with strategic knowledge alongside those who have the experience of talking to and supporting disabled students. Staff from other areas of Library Services are invited to the monthly meetings, where appropriate.

We have found that this group works well. One full-time member of staff still takes the main responsibility for writing and implementing processes, training other staff and liaising with the rest of the OU regarding disability services, but the input from all members improves the services provided.

#### **POSTAL LOAN SERVICE TO HOUSEBOUND STUDENTS**

With the admission of OU students to the UK Libraries Plus (now SCOUNL Access) scheme we had to consider how housebound students would have access to physical material. Traditionally, much of what OU students needed for their module was provided for them; however, increasingly they are expected to look beyond this material. Library Services does have access to a wealth of electronic resources but there may be times when access to physical books and journals is required. To ensure equitable access a postal loan service for housebound disabled students was set up, with Library Services paying the outgoing post and the student paying for return postage. This service is much appreciated by this group of students. A photocopying journal article service was also set up about three years ago, but it has only been used a couple of times. This is probably a reflection of the fact that so many journals are now available online.

#### **MEDIATED LITERATURE SEARCHING**

One recommendation from the ENABLE project was to set up a mediated literature searching service, as we found that some databases were so inaccessible that it was inappropriate to expect disabled students to navigate them. Details of the information required to conduct the mediated search are provided on the library website.<sup>2</sup> Whilst the initial call comes to the library helpdesk, the search is undertaken by the appropriate subject librarian.

The service is provided in consultation with the relevant module team to ensure they are happy that the appropriate learning outcomes will still be achieved. Since its introduction, it has been used very little, possibly once a year. With the increasing awareness of providers that their resources need to be accessible and the consequent improvement in accessibility, the need for this service should reduce still further.

#### **DATABASE ACCESSIBILITY**

As OU students are not on campus and therefore cannot be guided by library staff face to face, we thought we should be aware of any accessibility problems with our subscription databases and as far as possible convey this information to students. With access to about 450 different databases, we are not able to check the accessibility to them all, so the decision was taken to concentrate on the most frequently used ones and those providing full text. The main functions of a database, such as the search and browse facilities, are tested to see if they are accessible to students needing to change the colour and text size, to those students who can only use a keyboard and to screen-reader users. Our accessibility comments are fed back to the supplier, sometimes via the national JIBS User Group,<sup>3</sup> which includes bringing '...matters of concern to the attention of the data suppliers and the data service providers'<sup>4</sup> as one of its principal aims.

Trial databases are tested for accessibility, which can inform decisions about their purchase. Although we wouldn't necessarily refuse to buy a database if there are accessibility problems, where there is a choice between suppliers providing much the same information, the accessibility level of the different resources can help to make the final decision.

To alert students to any accessibility problems with databases we decided to use an icon which

links to brief hints and tips. This icon is situated after the information about a database on the 'Databases' page of the library website.<sup>5</sup> If a library user passes their mouse over the icon they can see the wording 'accessibility information' followed by the name of the particular database. This alternative text has been added for screen-reader users and if they activate the link they are taken to the 'Database accessibility issues' page.<sup>6</sup>

#### **AD HOC JOURNAL ARTICLE CONVERSION SERVICE**

Whilst testing the accessibility of full text, we found the levels of accessibility of PDFs varied from being fully accessible to scanned images, which cannot be read by a screen-reader. Therefore in 2008 we introduced an ad hoc journal conversion service, whereby disabled students who found that an article was inaccessible could contact the library helpdesk and request an accessible version.

Once the request has been made the checking and conversion is undertaken by a library assistant in the Special Needs group. First they check whether an accessible version of the article is available from an alternative provider that we subscribe to. For example, if an HTML version is provided this should be regarded as accessible. If there are no accessible copies the article is converted using the Optical Character Recognition (OCR) software behind assistive technology such as Kurzweil, TextHelp and ClaroRead. Once it has been converted to a Word document, it is checked for accuracy and styles and formatting are used to ensure that it is as accessible to screen-reader users as possible.

This service was set up for articles that students come across when doing independent research outside their module material. It has been used by fewer than ten students, but some of them have asked for several articles to be converted.

Our next task was to address the accessibility of library material integrated in module websites provided by Moodle, the OU's VLE.

#### **LIBRARY RESOURCES VIA THE VLE**

Increasingly the OU provides its modules in a blended or sometimes purely online format. This has increased the importance of addressing online accessibility both of library resources and teaching material in general. The OU is addressing this by implementing a series of initiatives to embed accessibility within the university processes and

thereby ensure greater equality of access for disabled students, together with an audit trail of any decisions taken about accessibility. Where there are accessibility problems these need to be communicated to disabled students.

As part of the wider university initiative Library Services has an accessibility implementation plan. Included in this plan is liaising with key named accessibility people in each faculty to ensure they are aware of how the Library Services makes resources accessible and to ensure that we are involved in discussions in the early stages of module production. We are addressing ongoing training needs and have mainstreamed the process of checking the accessibility of articles used within modules.

As many articles are linked to within OU modules, we recognised the need to check the accessibility of and convert articles in an anticipatory way where possible. The OU has not purchased the Copyright Licensing Authority's Trial Scanning Licence, so licences are scrutinised by Library Services Content and Licensing team to make sure that they do not override or take away rights granted under disability legislation. Our Head of Content and Licensing also approached a selection of our major journal suppliers, including aggregators, to clarify the situation and ask for their agreement to our converting individual articles which we found to be inaccessible and providing access to them via the password-protected VLE. At the same time as asking for this permission we gave examples of where the full text they provided was not accessible and also commented on any accessibility issues with their platform. Although this has speeded up the conversion process, we have come across some unforeseen problems, mentioned below.

The article checking and conversion process has been introduced for new modules available to study from May 2011 onwards. If we become aware that a visually impaired student will be studying a module produced before this date, we will retrospectively check library resources. When a module team identifies with their liaison librarian which articles they wish to use, details of these are sent to a group of three library assistants who have been trained to check articles for accessibility. They will identify any accessibility problems and also any accessible alternatives from other providers we subscribe to and send this information to the librarian, who can then liaise with the module team. If it is decided that an article needs to be converted, the library assistants will do this,

record the information and place the article within our password-protected library document management system. Where appropriate the accessible Word document can then be added to the VLE. If finding the article is part of the learning outcome, disabled students will need to contact the library helpdesk to ask for a copy of the converted article.

We convert the text within an article, but not the images, tables or other figures, which are not accessible. If these items are vital to the understanding of the article, the module team is responsible for writing a description. All converted articles carry the appropriate bibliographic and copyright information as demanded by the licence terms.

It is whilst we have been testing and converting articles that we have come across additional problems. For example, some older articles provided by one supplier are protected by digital rights management (DRM) so that if you try to read them using Adobe's Read Out Loud, a warning tells you 'Read Out loud cannot be activated for this document because its permissions do not allow for content copying for accessibility'. We are currently liaising with the publisher to try and resolve this problem by having the DRM removed.

Other articles, especially historical ones, can be difficult to convert, even using the OCR software behind enabling technology such as Kurzweil and ClaroRead. The script can be difficult to decipher and correcting the conversion is time-consuming. Historical newspapers can be especially problematic, as sometimes only a PDF of the full page rather than the individual article is available.

Sometimes module teams point students towards particular journals, but want them to search for relevant articles. This is especially challenging, as the accessibility of a journal can vary according to which year an article was published and the processes used for its conversion to online format. In addition we may have access to a journal from a variety of different suppliers, all with different levels of accessibility. We are considering the best way to make this information available to both the module teams and students.

#### **TRAINING**

Our Learning and Teaching Librarians are responsible for liaising with module teams and making them aware of the accessibility adjustments the library can make. In January this year training was provided to increase their confidence when

liaising with module teams about accessibility issues, although it is only when actually addressing particular issues that we are becoming aware of some of the potential problems and devising ways of dealing with them.

In the autumn we plan to hold another session for Learning and Teaching Librarians where we can discuss some of the problems which have arisen in our liaison with the module teams, how we can overcome them and share examples of good practice.

#### **THE FUTURE**

We are in the process of formulating a policy for dealing with inaccessible e-books, as they are not covered by the publisher agreements obtained for the article conversion process. As the OU's Rights Department already has named people within different publishers whom they contact when clearing copyright material for modules, we will involve them in any process. The Publisher Lookup<sup>7</sup> material provided by TechDis, which assists in sourcing textbooks in electronic format for disabled students, will also be useful when setting up the process, even if different contacts are used.

#### **SOURCES OF SUPPORT**

Whilst looking at accessibility issues, support both from within the OU and from outside has been invaluable. Regional and National groups such as CLAUD and ALIS-Wales provide useful opportunities to discuss issues with colleagues from other institutions and TechDis provides very helpful guidance, in particular, their 'Good practice guidance for library and information professionals: moving towards accessible e-book platforms',<sup>8</sup> which includes information about the OU Library Services' Databases issues page.

Nationally, JISC TechDis works with the Publishers Association to develop understanding about the accessibility needs of students and as a result of a joint project between JISC Collections, JISC TechDis and the Publishers Licensing Society guidance for publishers on providing accessible e-book platforms is provided.<sup>9</sup>

Internationally, the 'Accessible publishing: best practice guidelines for publishers'<sup>10</sup> were published in April 2011 and will be updated as the three-year project 'Enabling technologies framework', jointly involving World Intellectual

Property Organization (WIPO), EDItEUR and the DAISY Consortium progresses.<sup>11</sup>

## CONCLUSION

As you can tell, this is very much a work in progress and by the time you read the article, we may have found some solutions that work for us or come across additional problems. Whilst it is important to have the processes in place to alert students to potential accessibility problems and make material more accessible, ultimately the aim is for publishers to make their resources fully accessible in the first place. That is why we think it is important to feed back to publishers any problems we come across, both as an individual institution and nationally via JIBS.

## NOTES

- 1 K. Baker, ENABLE project: final report (unpublished), Open University Library, 2002
- 2 See <http://www.open.ac.uk/library/mediated-literature-searching/>
- 3 See <http://www.jibs.ac.uk>
- 4 See <http://www.jibs.ac.uk/aboutus/intro.html>
- 5 See <http://www.open.ac.uk/library/databases/>
- 6 <http://www.open.ac.uk/library/databases-accessibility-issues/>
- 7 See <http://www.publisherlookup.org.uk>
- 8 JISC TechDis, JISC Collections and Publishers Licensing Society (web page, 2010), available at [http://www.jisctechdis.ac.uk/assets/Documents/learnersmatter/Good\\_Practice\\_Guidance\\_for\\_Library\\_and\\_Information\\_Professionals.pdf](http://www.jisctechdis.ac.uk/assets/Documents/learnersmatter/Good_Practice_Guidance_for_Library_and_Information_Professionals.pdf) accessed 26 July 2011
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- 10 S. Hilderley, *Accessible publishing: best practice guidelines for publishers* (EDItEUR, World Intellectual Property Organization and DAISY consortium, 2011), available at [http://www.visionip.org/technology/en/doc/accessible\\_best\\_practice\\_guidelines\\_for\\_publishers.docx](http://www.visionip.org/technology/en/doc/accessible_best_practice_guidelines_for_publishers.docx) accessed 26 July 2011
- 11 EDItEUR, *Enabling technologies framework*, <http://www.editeur.org/109/Enabling-Technologies-Framework/> accessed 26 July 2011