



Electronic Doctoral Theses in the UK

A Sector-wide Survey into Policies,
Practice and Barriers to Open Access

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In association with

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Statement of Contributions by the Authors

This report is the product of collaboration between the UK Council for Graduate Education (UKCGE) and UCL (University College London) Library Services, but it is based on work carried out in 2010 by UCL Library Services, commissioned by the Joint Information Systems Committee, JISC. As such, it is appropriate to declare the contributions of the individual authors:

Tina Barnes, UKCGE

Tina Barnes, author of the 2010 UKCGE publication “Confidentiality of PhD Theses in the UK”, discovered the work of UCL Library Services shortly before its completion in October 2010. The importance of the work and its value to the UKCGE membership was immediately evident, but the original report had been written for a specific audience, that of HEI library and information service professionals. Tina Barnes, working closely with Martin Moyle, UCL Library Services, developed the background context and additional content required to make the work accessible to the wider academic community represented by UKCGE, including additional contributions to the analysis.

Martin Moyle, UCL Library Services

Martin Moyle, Acting Group Manager (IT Services) and Digital Curation Manager, UCL Library Services, led the original UCL Library Services commission, liaising with the JISC and the British Library, and directing the work of the project team throughout the process. He had overall editorial responsibility for the first UCL report, to which his original contributions were the Executive Summary and Recommendations. He worked closely with Tina Barnes, mainly in an advisory capacity, in the preparation of this follow-up report for the UKCGE audience.

Josh Brown, JISC (formerly UCL Library Services), and Kathy Sadler, Cranfield University (formerly UCL Library Services)

Josh Brown and Kathy Sadler, then members of UCL Library Services, formed the original project team. Together they designed the survey, sent out invitations and chasers, collated and analysed the responses and conducted follow-up correspondence. They wrote the original report and the associated best practice summaries, which were published on the project website and in the ETHOS Toolkit. Additionally, Josh Brown conducted and compiled the four detailed case studies accompanying the work. Kathy Sadler subsequently presented the findings from the project at the British Library at an event hosted by the Repositories Support Project: *Supporting and influencing the deposit of e-theses in higher education*, London: British Library Conference Centre, 28th March 2011 - <http://www.rsp.ac.uk/events/e-theses-in-higher-education/>

Summary

Sharing knowledge and research outputs is critical to the progress of science and human development, and a central tenet of academia. The Internet itself is a product of the academic community, and opening access to that community's most important body of research, doctoral theses, is both a logical and an inevitable development. Progress toward open access to electronic theses has been slow in the UK. Much has been written on the perceived barriers and practical/infrastructural considerations that might explain this, but a comprehensive picture of that progress, and obstacles to it, was lacking. In 2010, a survey of policy and practice in UK HEIs was conducted by UCL (University College London) Library Services (commissioned by the Joint Information Systems Committee, JISC) to address this very issue. Incorporating inputs from 144 institutions currently awarding doctoral degrees, the work provides the first clear and detailed picture of the status of open access to doctoral research in the UK. The mission of the UK Council for Graduate Education (UKCGE) is to promote and support the interests of graduate education, and this it does through dissemination of best practice and intelligence on emergent trends; helping to shape policy and practice for the benefit of the UK HEI sector. This report contributes to that mission by bringing to the membership's attention the results of this important work by UCL Library Services; a collaboration between UKCGE and the authors of the original work, it sets out the policies and practices that emerged from the survey and also considers what has been learned about the perceived barriers to the implementation of open access to electronic theses.

The 2010 survey has enabled, for the first time, a differentiation to be made between barriers that are "real" and those which are unfounded and/or yet to be properly validated. At the same time, the work highlights the progress made in certain critical areas, as well as those that require our greater attention. A positive picture emerges for the UK on the adoption of the electronic thesis, with the majority of HEIs surveyed expected to be providing open access to their theses in five years' time. A more detailed picture also emerges regarding the primary reasons for requests to restrict access to theses, some of which, notably, apply only to electronic (not print) theses. This has necessarily given rise to new policy developments. There is positive evidence also of collaboration among HEIs to provide an efficient and robust service for accessing electronic theses; pooling their resources and expertise either in the development of their institutional repositories or in operating a joint service. The key driver of open access to electronic theses is the opportunity for UK HEIs to "showcase" their research outputs to the widest possible audience and enhance their impact. There are no reliable means as yet to measure this impact, but there are encouraging early indications that electronic doctoral theses attract significant attention when made openly accessible. Open access to electronic theses may therefore indeed accelerate the sharing of knowledge and the progress of scientific discovery and human development.



1 Introduction

The UK government has, since the beginning of the new millennium recognised the important role of electronic access to information in building a “knowledge economy”. The Blair government sought to encourage adaptation to a new economic reality; that the majority of wealth-creating work would be knowledge-based and not reliant on the physical production of goods. The Internet has given rise to an extraordinary increase in the mobility of information. The exchange of research and ideas that the Internet has made possible has accelerated innovation and the creation of new products (Riley, 2003). But these profound changes have not been confined to the business world. The Internet is a major tool for sharing research in academia and has transformed learning and access to information for students world-wide. Electronic access to journals and the use of online databases to search for, access and download information has meant that the content of the physical university library represents only a small proportion of the information now accessible to students, researchers and scholars.

But one important repository of research has been slow to make the transition to electronic access, and this has become a key focus of the Open Access movement – an ethos of sharing information for the common good which has gained weight with the advent of the Digital Age and the spread of the Internet. The doctoral thesis document is an important source of research findings, new ideas and the development and testing of new theories, and due to the requirements of the examination process, it must be capable of standing alone as a complete exposition of the research undertaken by its author. As such doctoral theses are an important source for other researchers to consult, but access to them has traditionally been limited to the physical copy placed in the library of the awarding institution (itself subject to restrictions on copying). Whilst the technology and the infrastructure for creating and storing electronic theses (e-theses) is not yet fully developed, the barriers to open access to doctoral theses are not merely technical. Whilst there is substantial support for the principle of Open Access in academia, it is widely acknowledged that progress in moving toward freely and publicly available e-theses has been hampered by concerns and challenges that have arisen precisely because of the significant change in access that this represents. There are important implications to providing widespread and essentially uncontrolled access to this most substantial and detailed embodiment of academic research, not least with respect to making public information that might be of a highly sensitive nature.

This report investigates these challenges and concerns in the context of a comprehensive study of the progress of open access to e-theses in the UK, and in so doing provides a clearer view of the significance of these perceived barriers and how they might be (or are beginning to be) overcome. The work on which this report is based was initially carried out by UCL (University College London) Library Services as part of a study commissioned by the Joint Information Systems Committee (JISC) in 2010. The survey formed part of a wider project aimed at encouraging the development of policies and practice among HEIs for the creation of e-theses, which would be made available on an open access basis via institutional repositories (IRs). The original work, including the report made to JISC and a suite of advocacy materials, are available at the UCL Library Services project website¹. The comprehensive nature of the study makes an important contribution to the on-going debate regarding e-theses in that it provides a detailed picture across the UK HE sector, and highlights key areas where a more concerted, combined effort within the academic community would reap significant results and accelerate progress within the UK along a more efficient and sustainable path.

In introducing this report, it is important first to define what constitutes an electronic thesis or dissertation. A number of different forms exist. Where access is required to an old thesis, an electronic copy may be produced by scanning the print form and converting it to a suitable digital format such as PDF. In the case of more recent works, the thesis may have been produced and submitted as a Word or PDF document. Furthermore, the production (and increasingly submission) of theses in electronic form has enabled “born digital” theses to incorporate audio and visual material, using them in creative and interactive ways which would not be possible in the traditional print form (ETHOS Toolkit, 2007).

Whilst this report will primarily focus on the issues raised by academia concerning electronic theses and the new, Open Access inspired institutional policies that support them, it is recognised that there are equally pressing concerns regarding the digitisation of old, print theses, and the technical issues with respect to the storage (in a suitable standardised format) and preservation of the more sophisticated “born digital” theses incorporating multi-media features. Whilst many of the issues arising from both extremes of this continuum lie essentially outside of the scope of this report, particularly the detailed technical and legalistic obstacles, where possible the authors have attempted to acknowledge these concerns, provide indicators of the extent and validity of them, and where possible to disseminate relevant developments that may address them.

1. UCL Library Services project website at: <http://www.ucl.ac.uk/lis/etheses>

2 Background Context

2.1 The Rise of Open Access to E-theses

The digitisation of theses and dissertations and the move toward increasing accessibility to this considerable body of research output is widely acknowledged to have begun at Virginia Tech in the USA, leading to the formation of the Networked Digital Library of Theses and Dissertations (NDLTD) in 1997, which now has a world-wide membership (Vijayakumar and Vijayakumar, 2007; MacColl, 2002). Such initiatives are now widespread among the developed nations, most notably in the USA, Germany, Canada, Australia and the UK, but developing countries have also embraced the benefits of Open Access, including China, Brazil, India and African countries, through the Association of African Universities (Ghosh, 2008; Vijayakumar and Vijayakumar, 2007; Kiondo, 2004).

As might be expected, the motivations for such developments differ. The ethos of open access is largely predicated on the argument that it will foster further improvements in academic standards and will maximise the impacts of scientific discoveries. In the UK however, another prominent driver is that in the challenging and competitive environment in which universities now operate, increased visibility of research publications and outputs could provide a critical advantage in winning research funding and attracting high calibre postgraduate students, both domestic and international (JISC, 2008).

Among the emerging economies however, e-depositories for theses are being regarded as an important means of overcoming the financial barriers that often prevent researchers from accessing the research information that they need (Ghosh, 2008). Among the African universities for example, it is recognised that African researchers have great difficulty accessing each other's work, and the development of repositories spanning the African nations may enable research to collectively achieve critical mass and thus enhance the visibility of African scholars at the international level (Kiondo, 2004); a vision not unlike that being promoted in Europe.

2.2 The Open Access Movement in the UK

It is widely acknowledged that the UK has been slow to respond to the trend toward electronic submission of theses and the Open Access movement (Grieg, 2005; MacColl, 2002). There are a number of theories as to why this is the case. MacColl (2002) indicated that the centralised nature of the processing, management and storage of theses in alternative media is an important contributor. Prior to the move toward digitisation many print theses were reproduced and stored on microfilm by the British Library, providing a centralised service that institutions had come to rely on. With the move to digitisation therefore, a significant concern was with the costly and time-consuming nature of making the transition for such a large body of existing theses. In contrast, Grieg (2005) suggests that university libraries were enthusiastic about the move to electronic theses; it was in fact the supervisors, and in some cases university administrators who needed to be persuaded. Electronic submission of theses requires a change to university regulations in most cases, an often lengthy procedure that adds to the delay (Grieg, 2005), though this is most likely not a problem that is confined to the UK.

The UK's response to the Open Access movement is embodied in projects such as Daedalus, *Theses Alive!* and EThOS (Electronic Theses Online Service). The JISC-funded Daedalus project at the University of Glasgow (2002-2005) is a good, early example of the adoption of Open Access, though it was not specific to doctoral theses (the repository also included published papers and pre-prints and an Open Access e-journal was developed). The *Theses Alive!* project concluded in 2004 and was also funded by JISC to develop a system for the management of electronic theses, incorporating the means to submit theses into an online, full-text repository. The intention of the *Theses Alive!* project was to encourage UK institutions to develop (with the project team's support) their own e-repository systems (MacColl, 2002), and this may indeed have provided the basis for many of today's institutional repositories. However, the most significant development to build on *Theses Alive!* was the EThOS project initiated in 2005. EThOS essentially continued the British Library tradition of providing a centralised service to institutions, whereby the e-theses produced by those UK institutions subscribing to it, are digitised and archived for the public to access. The original EThOS project was a collaboration between the Joint Information Systems Committee (JISC), the Consortium of Research Libraries in the British Isles (CURL, now Research Libraries UK), the British Library and participating institutional partners, but since its completion, the on-going management of the EThOS service to emerge from it has been managed by the British Library (JISC, 2009).

The political, practical and technical issues surrounding Open Access and the provision and management of systems to support access to electronic theses is largely beyond the scope of this report, which instead seeks to address the issues raised by Open Access that are concerning academics, university administrators and students. However, where such issues inform discussion around the concerns of academia regarding Open Access, a brief summary of the pertinent points and developments will be incorporated into this report for the benefit of the reader.



2.3 The Benefits, Challenges and Concerns of Open Access to E-theses

2.3.1 Benefits

Traditionally the PhD thesis needed only to be placed in the University library to be regarded as a “public document”, made available for the benefit of future scholars. In practice however, this offers only limited accessibility, with restrictions on physical access to the document and on its duplication. One of the perceived benefits of making doctoral theses more widely accessible is that they are more readily available as a primary source for scholars to consult for their own research. Brown (2010) has noted that access by students to complete theses and a generally wider research literature is perceived as an important benefit by students and their supervisors in institutions both in the UK and overseas. The importance of theses in this context does however vary between disciplines; theses are known to be widely used in humanities and social sciences, for example (Brace, 2002; MacColl, 2002). More often in other disciplines, theses are not widely consulted since it is assumed that “good” research will be published in a book or scaled-down for dissemination in peer-reviewed journal articles. Nevertheless, it does not necessarily follow that all doctoral research that has not been published elsewhere is irrelevant and unimportant, and since many doctoral theses have never been published in any other form, there is potentially a substantial amount of “good” research that has traditionally remained effectively hidden (Brace, 2002; MacColl, 2002).

It should be noted that theses have been moving online anyway. There is nothing to prevent students from publishing their theses on a personal or departmental website, and while the instances have tended to be small, this practice has been acknowledged (Grieg, 2005; MacColl, 2002). There are also national and international subject-specific repositories that academics may request that students submit their theses to. For example, *ArXiv*, described as being “one of the most extensive repositories in the world in the fields of physics, mathematics, astronomy, computer sciences and quantitative biology” (JISC, 2008), or the UK national Archaeological Data Service (Grieg, 2005). However, such movements are uncontrolled and patchy; a more systematic, nation-wide effort would benefit all concerned and allow for efficiencies to develop that will limit costs and provide a more robust process, and the formulation of a more coherent and considered strategy to meet present and future challenges.

Other benefits perceived within academia include the improved visibility and accessibility that Open Access gives to an institution’s research outputs and the rapid dissemination of that research (Brown, 2010). Universities are increasingly concerned with “show-casing” their research in a bid to attract further research funding as well as the highest calibre research staff and students (JISC, 2008). Such widespread dissemination should also reduce the duplication of research effort that inevitably results when research is not visible and easily accessible (Evans, 2006; Vijayakumar, Murthy and Khan, 2007). Furthermore, some studies have shown students to be largely in favour of publishing their work online, seeing it as a means of disseminating their research more widely (Berendt, 2002) and obtaining a greater level of feedback from their peers in the field (Pickton and McKnight, 2006).

Whilst Open Access, as a movement, has a number of perceived benefits, the creation and storage of theses in a digital format encouraged by Open Access has its own implications. The most significant benefit is in the greater flexibility and degree of sophistication that digital theses allow in terms of the formats available. “Born digital” theses will have the capability to contain improved graphics and multimedia and even interactive features not possible with a print thesis. But there are other, more practical reasons for the trend toward the digitisation of theses. For example, the benefits of storing digital copies as a “back-up” against fire, theft and decay (Maclean, 2004). Electronic deposit could also help to alleviate the current problem of storing print theses which number in the thousands for many institutions (Grieg, 2005; Maclean, 2004).

2.3.2 Challenges and Concerns

While there has been much focus on the benefits of Open Access to e-theses, there have also been reports of concerns raised about its implications, particularly from students and supervisors. Among the most commonly cited are concerns regarding the intention to publish the thesis contents in a book or as a series of journal articles, or to make patent applications (Grieg, 2005). A key stipulation for obtaining a patent is that the discovery in question must not have been disclosed to others; patents in many countries are only granted on the basis of “complete newness”, i.e., that the invention has not been made publicly known anywhere else in the world (Crespo and Dridi, 2007). Grieg (2005) has stated that “the majority of publishers do not consider making a thesis available online as prior publication”, thus suggesting that such concerns are unfounded, but does not validate this statement with supporting evidence to that effect.

One serious issue raised by Open Access is that of copyright. Unlike print theses where there was little risk to the commercial interests or the misuse of the copyright owner’s works, the submission of an e-thesis to a national or institutional repository potentially makes that work available to a substantially wider audience. This carries a risk of misuse, not just for the author of the thesis, but also the rights holders for any third-party material included in its content. Therefore, whilst the inclusion of third party material in a print thesis (produced

primarily for the purpose of examination) was exempt from copyright law on the basis that it presented little risk to the third party rights owners' commercial interests, the wider dissemination implied by open access means that it is essential that permission be sought from the owners of any third party content in a thesis before it can be deposited in an e-repository and made accessible to all. Furthermore, copyright law offers only limited protection for some creative works, most notably dramatic or musical works where compilations such as choreography or film scripts are particularly vulnerable (JISC Legal, 2007).

Another common concern is that of plagiarism. Contrary to the perceived benefit of publicising new ideas and research findings more widely, the concern of academics and some students, is that their ideas might be misappropriated (Grieg, 2005). Certainly the ability to plagiarise a thesis was made more difficult by the limited accessibility of print theses, but equally it could be argued that making a thesis available online would potentially provide evidence of "prior art", in the same way that journal articles currently make this possible. Related to this is the concern that research outcomes of potential commercial value, or research based on commercially sensitive work or data, should be protected so that it can only be exploited by the parties involved, i.e., the researcher, the institution and commercial sponsors. The most common remedy for this currently is to either submit a modified version of the thesis for deposit (with the sensitive content removed) or embargo the whole thesis to allow for exploitation (Barnes, 2010).

A concern that is particularly pertinent to the social sciences, humanities and medicine is the risk associated with personal information or politically sensitive data that may be contained within the thesis. Again, the risks have traditionally been small with print theses subject to copying restrictions; this would not be the case with open access. As with commercially sensitive data therefore, instances in which sensitive content is removed from the e-thesis or the thesis as a whole is subject to an embargo could increase. Such action is generally justified on two main grounds – the author needed protection against possible reprisals because of the nature of the work, or the inclusion of personal data about participants in the research and the risk that individuals may be recognisable from the research and may suffer as a consequence, e.g., through loss of privacy.

A serious practical problem raised by the digitisation of both old theses and the storage of "born digital" theses is that of long-term preservation. One of the noted benefits of digitisation is the ability to store electronic copies of this important repository of knowledge and creative works, both as a "back-up" to the original print version and as a means of saving space in the future. However, the technology involved in storing e-content will be subject to continual change, leading to the potential degradation of content with each transition and the potential loss of some works because technology changes render them unreadable or the transition requires adaptations to be made to the content which may not be permissible under copyright law. A notable quote by the UK-based Digital Preservation Coalition cited by Li and Banach (2011) illustrates the extent of the problem:

"The rate of change in computing technologies is such that information can be rendered inaccessible within a decade"

The advent of institutional repositories has been acknowledged by the research library community as a positive development with respect to digital preservation, but there is some ambiguity and debate over the actual purpose of them. Li and Banach (2011) for example (commenting on the situation in the USA) indicate that HEIs often focus primarily on making their research outputs more openly and immediately accessible, and do not consider the stewardship (and long term preservation) of their digital assets to be a key function of their institutional repository. They also note a distinct gap between the stewardship aspirations for institutional repositories and their current actual ability to preserve digital assets; digital preservation is said to be still in its infancy with no clear consensus on an appropriate operational model yet in evidence. Of perhaps greater concern however is their statement that many HEIs have yet to develop a policy for digital preservation. This apparent lack of a far-reaching strategic vision is, ironically, countering the very benefits of the e-thesis. The need to make provisions for long term digital preservation often results in IRs placing restrictions on the file formats that are acceptable for submission (PDF being particularly prevalent). In doing so, students are being denied the opportunity (made possible by electronic submission) to include interactive, dynamic media and audio-visual components, or else requiring such files to be treated as supplementary to the thesis rather than an integral part of it (Lippincott and Lynch, 2010; Caplan and Thomas, 2006).

3 The Purpose and Scope of this Report

It is evident from previous studies related to Open Access that, with regard to e-theses, there are at least as many concerns about the movement among stakeholders as there are perceived benefits. But much of this previous work is highly specific, pertaining to a particular nation, a specific institution or reporting the results of a specific project. Other works are set at the level of policy makers or address particular issues, usually of a highly technical or legal nature. As the brief overview presented above shows, where the concerns raised



by academia are addressed, it is often unclear how widespread the concerns are and whether those concerns actually have any foundation. It is also unclear how this environment is affecting the transition to Open Access in the UK. Whilst it could be argued that the transition is inevitable (the ability to self-publish will ensure that the movement proceeds with or without any attempts to manage or control it), it is unclear at the national level how quickly Open Access is being embraced by UK institutions, and what policies and practices are emerging to manage the transition and provide a firm and sustainable platform for the future.

The work reported here, initially carried out by UCL Library Services as part of a project funded by JISC, sought to focus on the progress of Open Access in the UK, the perceived benefits of the movement and the barriers to its further progress, both those arising from concerns raised by the academic community and the practical barriers (real and perceived) identified by key stakeholders in the movement; the librarians and repository managers and administrators whose role it is to institute and manage the process within the UK institutions. The UCL project was one of a pair of concurrent and complementary e-theses initiatives, the other strand being the British Library's project entitled "Gathering Evidence of the Benefits of Increased Visibility and Impact of Open Access Theses", concerning the impact of the EThOS service. Commissioned by JISC in 2010, the UCL project is based on a landscape survey of thesis deposit. The survey formed part of the "Influencing the Deposit of Electronic Theses in UK HE" project, whose aim was to encourage HEIs to prioritise changes to their policies and practices that result in electronic versions of their new PhD theses being made available on an open access basis from their institutional repositories. The survey work was summarised in a report of the same name and was accompanied by four case studies that explore in detail the specific issue of mandating e-theses. The cases discuss the experiences of one of the earliest adopters of e-theses in the UK, the practicalities of introducing an e-thesis mandate and the role of consultation in encouraging acceptance of e-theses across an institution. All the materials from the 2010 UCL project are available from the project website². Details from these case studies have also been used to further inform the survey results reported in Section 6.1.

The contribution that the JISC-commissioned UCL project makes therefore, as disseminated in this report, is in providing a comprehensive study of the progress of open access to e-theses across UK institutions and the extent and significance of the challenges versus the benefits. Furthermore, additional work undertaken in preparing this work for the UKCGE membership has helped to further illuminate the basis of some of the perceived barriers, in order to better inform the readership regarding those which are truly significant and those which are ultimately surmountable. The report also seeks to highlight areas in which a more concerted, combined effort within the academic community would have a significant impact on progress within the UK, potentially also leading to a more strategic and managed approach that will prove more efficient and sustainable in the longer term.

4 Methodology

The data on which this report is based was collected through an online survey designed by UCL Library Services using SurveyMonkey. The survey took place from 27 May to 22 June 2010 and was organised into the following sections:

1. Policies
2. Practices
3. Barriers to e-thesis deposit

The survey contained 65 questions overall, but employed a logic system that presented respondents with targeted questions, based on their answers to a preliminary set of questions. For example, respondents indicating that their institution accepted theses on a "print only" basis would be presented with slightly different questions from those that accept some form of electronic thesis deposit. This also enabled the institutions accepting e-theses to be targeted for further questioning concerning their specific practices and policies for e-theses (and particular issues pertaining to them).

4.1 Survey Population

The target group of respondents comprised all UK HEIs who offer postgraduate research degrees. A total of 169 HEIs in the UK were invited to participate. In order to achieve a high response rate, invitations were sent to one named individual at each institution. Due to the highly specific nature of the survey, requiring a detailed knowledge of current policies and practices regarding e-thesis deposit, the named individual was, wherever possible, a repository manager/officer/contact. Where such a role could not be identified, the nearest

2. UCL Library Services project website at: <http://www.ucl.ac.uk/ls/etheses>

equivalent was approached instead, for example, a Librarian/Library Manager or the SCONUL (Society of College, National and University Libraries) representative at that institution. Of the 169 target population:

- 14 institutions were identified as not offering doctorates
- 105 institutions were found to have a repository manager/officer/contact
- 50 institutions were approached through their SCONUL representative

The 14 institutions not offering doctorates at the time of the survey were excluded, giving a total sample of 155 HEIs.

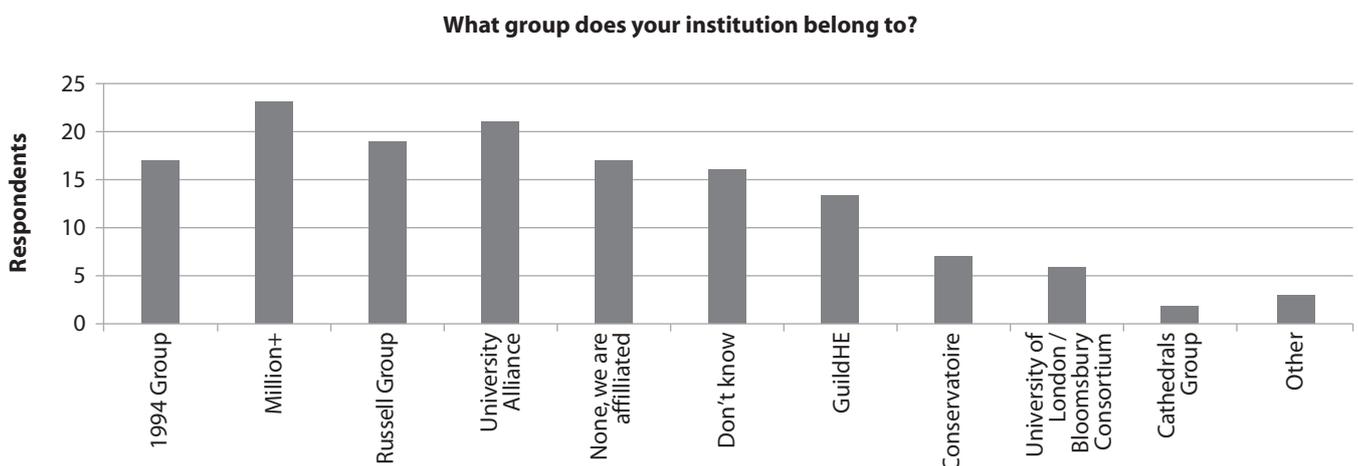
Two project staff members were responsible for encouraging institutions to participate, in order to maximise responses. The response to the survey was high - 144 responses were received from the population of 155, giving a 93% response rate. 86% of respondents completed the entire survey. Of the responding institutions, 112 are members of the UK Council for Graduate Education (UKCGE), representing 92% of the membership. A list of the institutions that participated (and revealed their names for the survey) is included in Appendix A.

This report presents an analysis of the main outcomes of the survey. For access to the complete database of responses, readers are referred to the project website³. The results, both in this report and on the project website, have been anonymised such that respondents are identifiable only by their university group. The primary focus of the survey was to investigate electronic theses; findings concerning print theses are reported here only for the purposes of comparison.

4.2 Respondents by Group

Respondents were asked if their institution is affiliated to a university grouping. The main university groups were all well represented with 19 Russell Group respondents, 17 from the 1994 Group, 23 Million+ members and 21 from the University Alliance, Figure 1.

Figure 1 Respondents by University Grouping



4.3 Respondents by Number of Doctorate Students

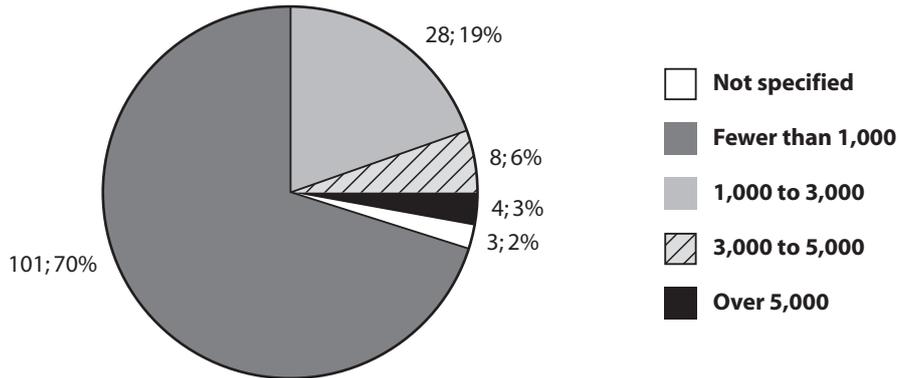
Respondents were asked to identify the number of postgraduate research students in their institution. 70% have fewer than 1000, Figure 2.

3. UCL Library Services project website at: <http://www.ucl.ac.uk/lsetheses>



Figure 2 Respondents by Number of Doctoral Students

Roughly how many postgraduate research students do you have in your institution?



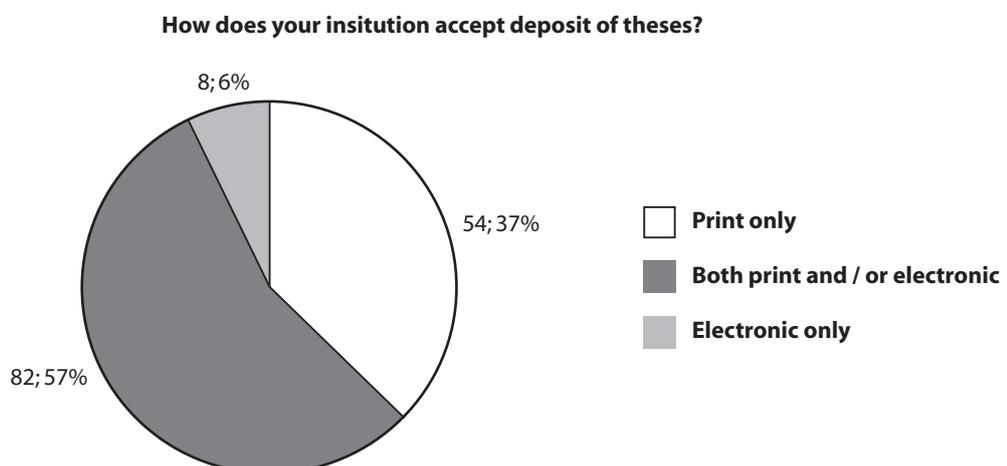
5 Acquisition of e-theses

Respondents were asked to provide information about policy and practice relating to the forms of deposit for doctoral theses accepted by their institutions. This data established the current status of electronic versus print deposit in the UK. Where institutions accepted theses in print format only, the respondents were asked a follow-on question regarding digitisation.

5.1 Deposit

The survey revealed that 63% of the 144 responding HEIs already accept some form of electronic deposit. Of these, eight HEIs (6%) require electronic deposit only and do not accept print copies, with the remainder (57%) accepting both (Figure 3).

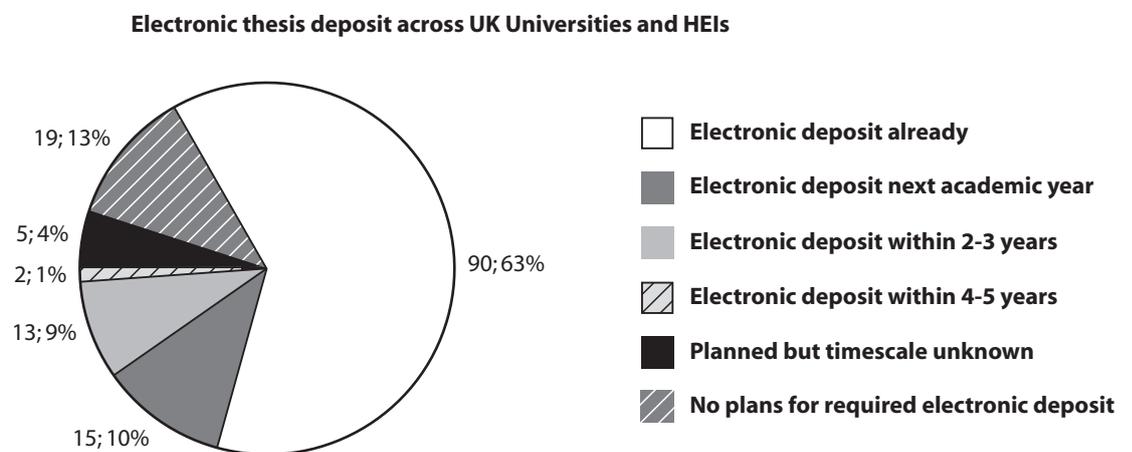
Figure 3 Form of Thesis Deposit in 2010



Of the 90 HEIs accepting electronic deposit, 70 (representing 49% of the total responding HEIs) stated that they do so via a formal policy (mandate). The remaining HEIs have an informal or voluntary arrangement. Among the HEIs with a formal policy of electronic deposit, 65 applied the mandate across the whole institution.

Respondents not already accepting electronic deposit were asked about their future plans. 35 of them stated that they plan to implement electronic deposit within a five-year timeframe (Figure 4). Adding together the number of HEIs currently accepting e-theses deposit and those intending to do so, the survey revealed that approximately 87% of responding HEIs, are likely to be accepting the deposit of e-theses within five years (i.e. before 2016).

Figure 4 Electronic Thesis Deposit across UK HEIs, 2010 and Future Plans



Nineteen respondents have print-only deposit policies and no plans to adopt e-theses. Those who gave permission were contacted for further information about their reasons for continuing to receive theses in print format only. A typical response was:

"I doubt we have more than 10 new doctoral theses a year, which... probably explains why there isn't any great urgency to move to mandated electronic submission - the volumes are a bit low."

The highest number of PhD theses annually awarded by any respondent from this group was 10. HESA statistics for the academic year 2009-10 record the award of 16,610 doctorates. This suggests that if those 35 HEIs that are planning to begin accepting theses in electronic form do in fact do so within the next five years, then no more than 1.1% of theses submitted across the UK will be stored solely in print format by 2016.⁴

5.2 Digitisation

Respondents with print-only deposit were asked whether they digitise theses on demand. This follow-on question yielded 14 "yes" responses, 34 replied "no", and six left the question unanswered. Of those 14 HEIs that do digitise theses on demand, only two digitise them in-house with the remainder using the British Library ETHOS service.

4. HESA at: http://www.hesa.ac.uk/index.php?option=com_datatables&Itemid=121&task=show_category&catdex=3#quals



6 Access to Theses

Reports on Open Access frequently draw attention to the concerns raised by the advent of electronic theses as much as the benefits. But until now, there has not been a comprehensive survey of HEIs to determine the current status of access to theses in the UK. The UCL survey has addressed this gap in order to establish what progress has been made in embracing electronic theses in the UK HE sector - the policies put in place to encourage e-thesis submission, the approaches taken by HEIs to storing e-theses, the extent to which e-theses are openly accessible, and the circumstances under which restrictions may be imposed on access. This chapter reports on the survey findings on these issues.

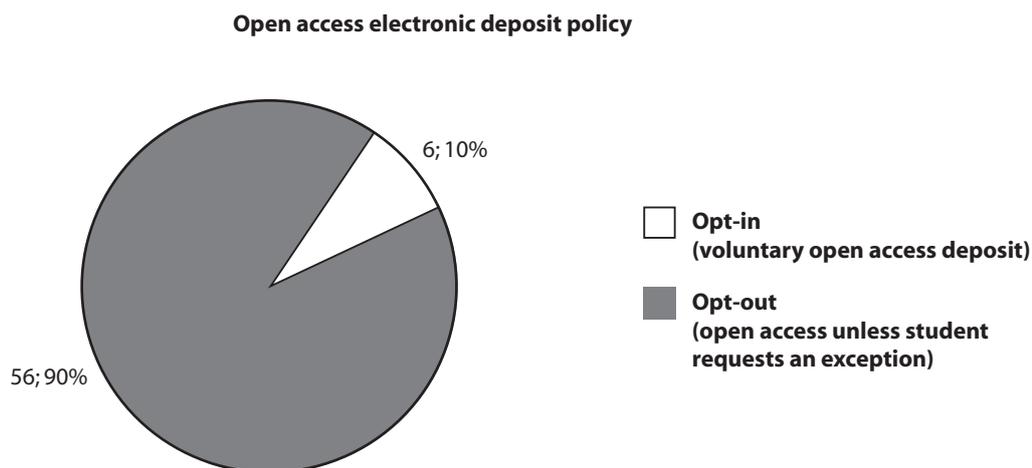
6.1 Formal Policies on Access to Theses

There are broadly two deposit policies that institutions consider in setting up their electronic submission procedures – “opt-in” and “opt-out”. The *opt-in* policy is voluntary and relies on the students themselves making the decision to submit their theses electronically, making them accessible online via the institutional repository or by whatever means has been sanctioned by the institution. In some cases, it may also be necessary for the supervisor to approve deposit; concerns have been raised about whether students are sufficiently informed of the issues to make such decisions, particularly with regard to sensitive and controversial research areas such as animal testing and GM foods (Grieg, 2004).

The *opt-out* policy implies mandatory electronic submission (except where there are good reasons not to make the thesis public) and has been adopted by the majority of institutions. Of necessity, the *opt-out* policy is accompanied by the option to embargo a thesis for a period varying between institutions, on presentation of a strong case for the thesis to remain confidential (Barnes, 2010).

Of the 70 survey respondents that have formal policies for electronic deposit in place, 62 provided details of that policy. 56 of the 62 HEIs that responded (90%) stated that they currently operate an *opt-out* policy on electronic deposit, i.e. theses are made openly accessible by default unless an exception is granted by the awarding institution, Figure 5.

Figure 5 Open Access Policy



The six remaining universities had adopted *opt-in* policies. There were no discernible similarities between these HEIs; they ranged from small institutions with no affiliation to a particular HEI group to the larger, Russell Group universities.

Case studies conducted by the UCL project team alongside this survey revealed some insights into why *opt-out* has proven more popular than *opt-in*⁵. An important factor that emerges in this decision is the desire by institutions to maximise the visibility of their theses.

5. UCL Library Services project website at: <http://www.ucl.ac.uk/lis/etheses>

For one of the case study institutions, adopting an *opt-out* policy was seen as the best way to maximise the impact of the move to electronic theses, whilst another changed its policy from *opt-in* to *opt-out* when it was recognised that some disciplines were depositing at lower rates than others, leading to uneven coverage across the institution. For this particular institution, concerns raised by certain disciplines (most notably the creative arts) had provided the impetus for the *opt-in* policy that had been in place previously. By consulting closely with staff and students, dispelling unfounded concerns and addressing valid ones through robust processes and procedures, this institution found that *opt-out* was ultimately the best way to maximise the benefits of Open Access.

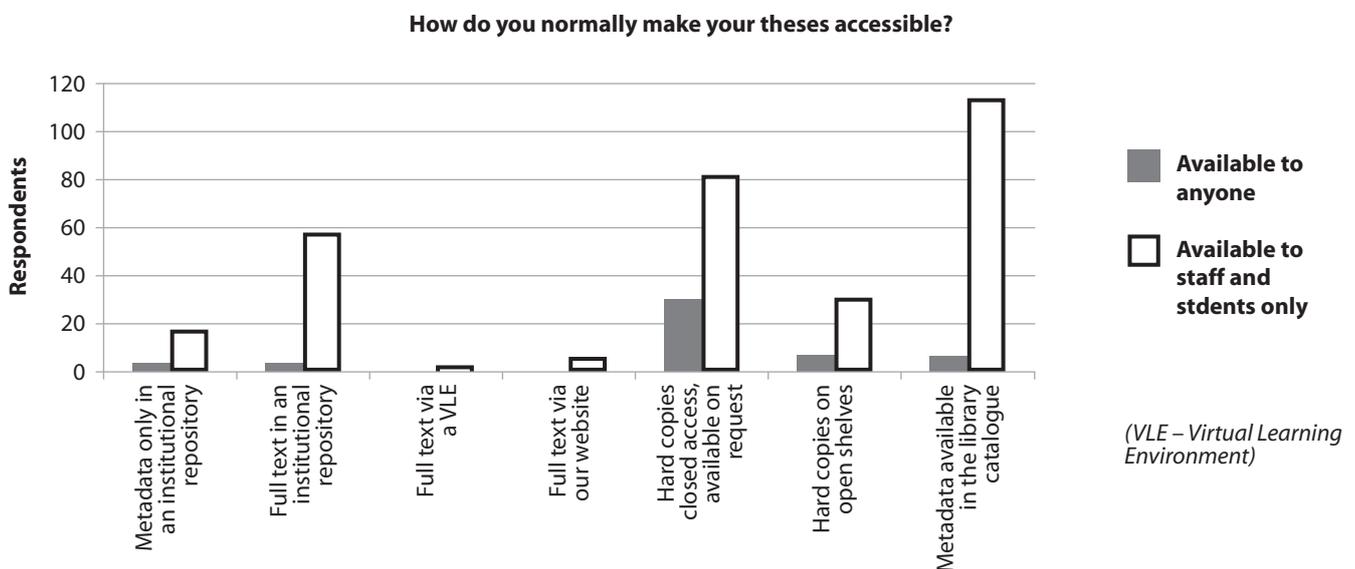
Another explanation for the popularity of the *opt-out* policy is that whilst staff and students generally welcome the electronic deposit of theses and open access to them, academics concerned about the implications can often be reassured by the explicit option of an embargo. Given that an embargo is, by definition, not required if deposit is voluntary, academics can actually be less comfortable with an *opt-in* policy than *opt-out* (Grieg, 2005).

6.2 Making Theses Available

In order to determine the extent to which Open Access is being applied to doctoral research in the UK, survey respondents were asked in what form their theses are made available and the extent to which they are available, i.e., open to all, or restricted to staff and students in their own institution. 93% of the 144 participating HEIs answered this question, and respondents were asked to select all options that apply, Figure 6.

As would be expected, a high proportion of HEIs indicated that hard copy is one means by which theses are made available, either on open shelves or on request. The results show that a high proportion of the HEIs in the survey make the thesis metadata⁶ available through the library catalogue.

Figure 6 Accessibility of Theses



With respect to theses made available in electronic form, 59 institutions deposit full-text theses in an institutional repository, with a further six utilising a website - a total of 65 institutions. Of these, 62 make theses available on an Open Access basis (available to all). This suggests a high level of accessibility where full-text deposits are being made.

6. Metadata, in this context, is the information provided in library catalogues and institutional repositories about a thesis, e.g., the author's name, the thesis title, date of the award and may include the abstract.



It should be noted that of the 134 respondents who answered this question, 33 offered alternative answers to the fixed options shown in Figure 6. Among the comments, it was evident that some have only recently introduced mandatory electronic submission, and therefore had few or no deposits as yet. Others were in the process of setting up an institutional repository. Such comments suggest that further increases in electronic deposit and Open Access are likely. It should also be noted that the survey does not make any distinction between theses being submitted in electronic form under new institutional policies requiring electronic submission, and the digitisation of older theses submitted prior to such changes. However, comments made by respondents suggest that whilst metadata is available in some cases for older theses, full-text thesis deposits are, for the moment, primarily the result of new policies encouraging or mandating electronic submission of new theses.

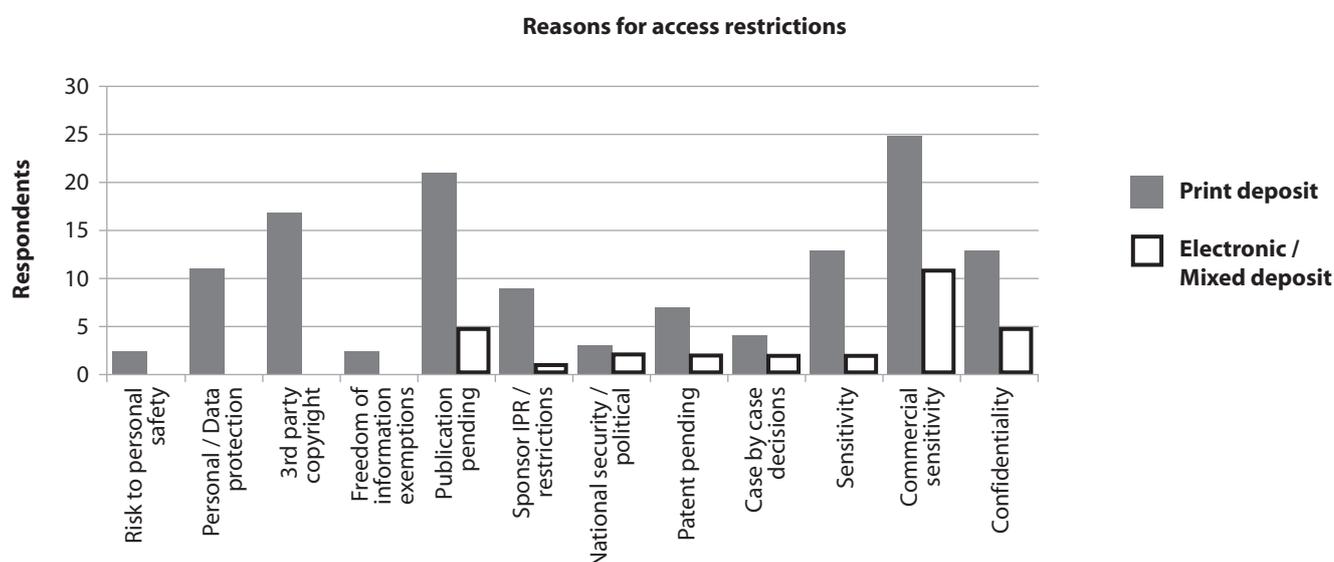
Respondents were also asked how their institutions store electronic theses. In this case, the survey took account of not only those HEIs with electronic submission in place, but also those HEIs that accept print only submissions, and digitise them on request. Of the 81 respondents to answer this question, 72 (88%) already have an institutional repository. Among the HEIs accepting print theses only, 10 stated that they use an external digitisation service (typically EThOS) for digitisation and storage, with just three digitising in-house. However, of the respondents without repositories, only two indicated that they do not intend to introduce one in the future. A further three stated that an institutional repository was being considered, and the remainder stated that one was being planned.

6.3 Restricting Access to Theses

As has already been outlined in Section 2.3.2, open access to electronic theses causes concern for some staff and students in the academic community. The most common approach taken by HEIs when authors wish to restrict access to their theses is to place an embargo on the work for a period of up to five years (Barnes, 2010). The UCL survey was therefore used to verify some of the concerns raised in previous reports, and to identify the most frequently occurring reasons given by UK authors for requesting that access to their theses be restricted. It should be noted that the copyright arrangements concerning theses varies from institution to institution – in some HEIs the author retains copyright ownership of the thesis, whilst in others the author is required to transfer rights to the awarding institution. The nature of the arrangement between author and institution may affect the degree of control that a HEI has over whether or not access to a thesis is restricted.

Of the 144 respondents to the survey, 101 (70%) HEIs reported that their authors have the right to impose restrictions on access to their theses, 28 stated that restrictions to access were not permitted, and 15 skipped the question. When taken separately, 82% of HEIs accepting some form of electronic submission allow access restrictions to be imposed, compared to 50% for HEIs accepting print theses only. This suggests a greater tendency to allow restrictions on e-theses compared to print copies.

Figure 7 Access Restrictions to Theses



The reasons identified by respondents for restricting access to theses (Figure 7) corresponded well with those of previous reports (Section 2.3.2), with the notable exception of plagiarism, which has received some attention elsewhere but was not indicated at all in response to this question. However, when asked directly about plagiarism (Section 8.3), many respondents were aware of this being an issue in their HEIs. Its absence as a reason for restricting access may therefore indicate that this is not the primary basis for requesting an embargo, or that concerns about plagiarism have not, as yet, been substantiated.

It is noted that there is some potential overlap in the responses given by respondents. In some cases, the responses given were not precise enough to categorise them accurately, for example, some respondents stated only that restrictions were imposed on the basis of “confidentiality”, without specifying whether this was in relation to third party commercial material or the personal data of individuals. Similarly, the response “commercial sensitivity” could relate to third party commercial material (provided by a sponsor) or to primary data generated by the author of the thesis that sponsors wish to embargo in order to allow for commercial exploitation. Some respondents simply stated that requests were dealt with on a “case-by-case” basis, without identifying specific reasons. In addition, exemptions from the Freedom of Information Act⁷ would include data that, if made public, could endanger individuals or constitute a risk to national security, and as such, this reason too overlaps with other categories.

Another important finding was that restrictions on the grounds of third party copyright, data protection or potential risks to personal safety were reported only with respect to e-theses and not for hard copy deposits. This is indicative of the higher perceived risks inherent in the Open Access approach. The survey also confirmed that an embargo on the whole thesis is the most common approach taken to restrict access; another option being to redact the electronic copy of the thesis (Section 7.1).

The manner in which an embargo is imposed varies greatly between institutions, ranging from an automatic embargo applied to all theses for a fixed period of time, or the imposition of a short but repeatable embargo imposed on request, to embargo periods being approved up to a specified maximum duration (which varies from two to 10 years, but with one HEI stating that up to 20 years can be requested). Embargo periods greater than three years however seem only to be permitted in the most exceptional circumstances. Default periods for an embargo vary between 1, 2 or 3 years, with the possibility for extensions at the request of student or supervisor. Some respondents also made clear that an embargo is only approved where a strong case can be made. A more detailed examination of embargo best practice is available on the UCL Library Services project website⁸.

7 Policies and Practices

The advent of the e-thesis and Open Access has had a number of implications for policy and practice at UK HEIs. New policies have had to be developed to address the additional risks inherent in making theses more widely and openly accessible, and workflow processes for the deposit of theses have had to be adapted. Furthermore, since one of the major benefits to HEIs of Open Access is the visibility of their research outputs, it is logical for HEIs to introduce metrics designed to monitor the impact of this significant change to practice within HEIs. This section of the report considers the findings of the UCL survey on these issues.

7.1 Formal policies

The most prominent new policy to be introduced in UK HEIs as a result of e-thesis deposit and Open Access, relates to the issue of third party copyright. Third party copyright refers to the inclusion of material in a thesis that is owned by a third party. Traditionally in the UK the inclusion of such material in theses has been ignored with respect to copyright since the print thesis stored in the library of the awarding institution is not considered a published document. The whole purpose of copyright is to protect the commercial interests of the owners, and the risk of violation of copyright has been deemed highly unlikely where the material has been used solely for research and presented in a thesis for the purpose of examination. This however changes considerably when the thesis becomes available via the internet and thus open to all (EThOS Toolkit, 2009).

Therefore, with the introduction of e-thesis deposit, HEIs have been obliged to formulate a policy on third party copyright which mandates that permission must be obtained from the copyright owners of any third party material before a thesis can be deposited in the institutional repository on an open access basis. The survey data reflects this change, revealing that those institutions currently accepting

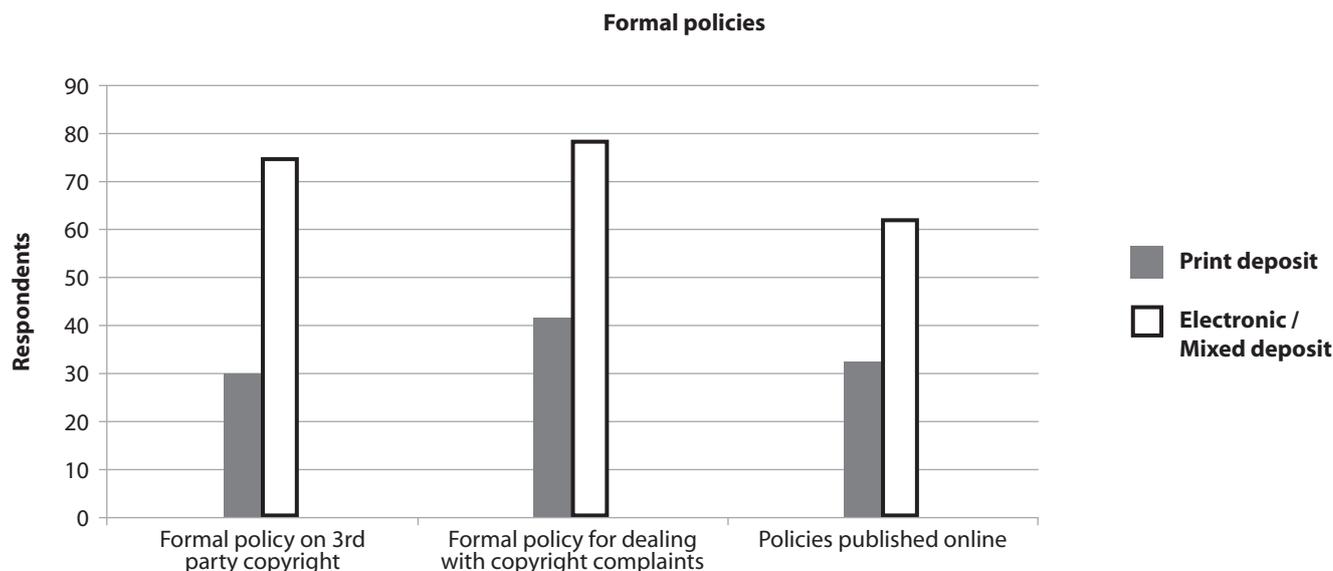
7. Freedom of Information (Scotland) Act 2002 at: <http://theses.gla.ac.uk/gettingstarted/restrict.html>

8. Project website <http://www.ucl.ac.uk/ls/etheses>



electronic theses (or both electronic and print) are twice as likely to have a formal policy on third party copyright, and are twice as likely to have made their policies publicly available online, Figure 8.

Figure 8 Policies Related to Theses



Institutional policies vary but the main options for students would seem to be: a) obtain permission to include all third party material from the copyright owners prior to submission, b) submit an abridged version of the thesis for open access purposes from which the third party material has been removed, c) submit the whole thesis to the institutional repository, but with an embargo in place to prevent open access to it. Notably, the most common element of policy seemed to be to place responsibility for ensuring that all permissions have been obtained with the student. Section 8.2 reports on the practical implementation of HEI policy on third party copyright.

It is regarded as good practice for HEIs to have a formal “takedown” policy in place in the event that a complaint is received, notifying the institutional repository of a potential breach of copyright or that a publisher’s rules have been violated (with reference to a book publication, for example) (EThOS Toolkit, 2009a). The survey data again reflects this in showing that those institutions currently accepting electronic theses (or both electronic and print) are twice as likely to have a formal policy for addressing complaints, usually a “takedown” policy, Figure 8. Good practice in such circumstances would be for the document involved to be removed from the repository pending further investigation. If the complaint is upheld then the withdrawal would become permanent.

7.2 Workflow analysis

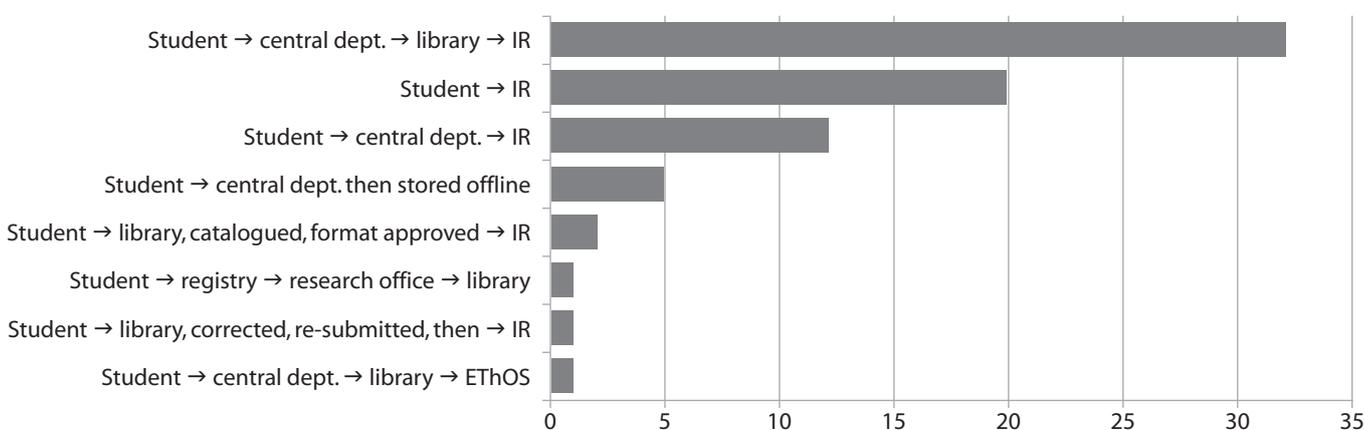
Respondents were asked to describe their thesis processing workflow, in order to establish the impact that e-thesis submission has had on HEI procedures. Procedures for print submission, as described by the respondents, were fairly homogeneous. A clear majority followed a version of this procedure:

- 1) Two print copies handed in to a central administrative office
- 2) One hard copy sent to the academic department
- 3) One hard copy sent to the library for cataloguing and storage

Electronic theses workflows, in contrast, varied across institutions with no clear consensus, possibly due to the complexity of requirements for publication permissions and managing storage and embargos. For example, e-theses may be uploaded to the repository by library staff, faculty administrators, Graduate Office staff or by the authors themselves. There does not appear to be any particular pattern of workflow associated with the type of HEI (e.g. Russell Group members, post-1992 or specialised research institution) but it is worth noting that 67% of the institutions examined here either accept e-theses as part of the normal submission process and then send them to the library for upload to the institutional repository (hereafter referred to as “IR”), or require students to upload directly to the IR as a part of the submission process.

Figure 9 below, shows the departments which are involved in e-theses workflows at the respondent HEIs. Although departments at each university may have similar names but different functions, or different names but similar functions, it is possible to cluster patterns of workflow according to the nature of the department using generic classifications such as “central department” (which may be the Registry, Graduate School, Research Office, Student Progression Office or another designation), or “library” (which may be termed the Learning Resource Centre, the Information Service, Book Library, Main Library or similar).

Figure 9 Identified Workflows by Number of HEIs



At 32 HEIs, students deposit their theses at a central department. This department then passes the thesis to the library, which archives the thesis in an institutional repository. The second most frequent pattern (20 institutions) is one in which the student deposits their thesis directly to the institutional repository. 12 HEIs receive e-theses at a central department which then uploads them directly to the IR. This representation of the workflow is of necessity simplified. There are tasks that are not included, such as approving the award of the doctorate, checking copyright compliance, creating metadata records, embargo procedures and the management of hard copies. A more detailed analysis of e-theses workflow reveals more diversity in the ways that HEIs manage these tasks across the departments – this information is available on the project website⁹.

The survey data reveals that the electronic deposit model has considerable flexibility, but this poses problems for institutions wishing to streamline or standardise workflows and procedures.

7.3 Collaborative Initiatives on E-Thesis Access and Repository Development

The move to e-thesis submission and Open Access is a significant undertaking for any HEI, and has prompted the formation of a number of collaborative initiatives as HEIs and organisations such as the British Library and JISC have sought to find collective solutions to the issues this raises, and to ease the path to Open Access for those involved.

In order to establish a clearer picture of how such initiatives are contributing to the progress of e-thesis deposit and Open Access, respondents were asked to identify any current involvement in co-operative activities or plans to do so in the future. The consortia and collaborative initiatives identified by the survey are described below.

A high level of collaborative activity was indicated by the 122 responses to this question:

- 99 respondents (81%) noted membership of the British Library’s electronic thesis service, ETHOS. Of these, three also mentioned their own repository’s theses being harvested into ETHOS
- 10 respondents indicated current or planned involvement with DART-Europe
- 8 respondents are involved with the Welsh Repository Network and its collaboration for harvesting e-theses into the National Library of Wales
- Other local consortia identified are SHERPA-LEAP (University of London) and White Rose (the Universities of Leeds, Sheffield and York)

9. UCL Library Services project website at: <http://www.ucl.ac.uk/ls/etheses>



It should be noted that the Welsh Repository Network and SHERPA-LEAP are wider collaborations, extending beyond providing open access to theses. As indicated above, the most prominent collaborative initiative in the UK is EThOS (Section 2.2). EThOS was set-up to provide a centralised service to subscribing HEIs, digitising print theses, acting as a repository for HEIs that do not yet have one, and by also harvesting e-theses from participating HEIs, provides public access to the research outputs of UK HEIs¹⁰. At the time of writing, EThOS is being re-modelled to better meet the needs of its members, but its primary function will remain that of making the research outputs of UK HEIs visible and accessible.

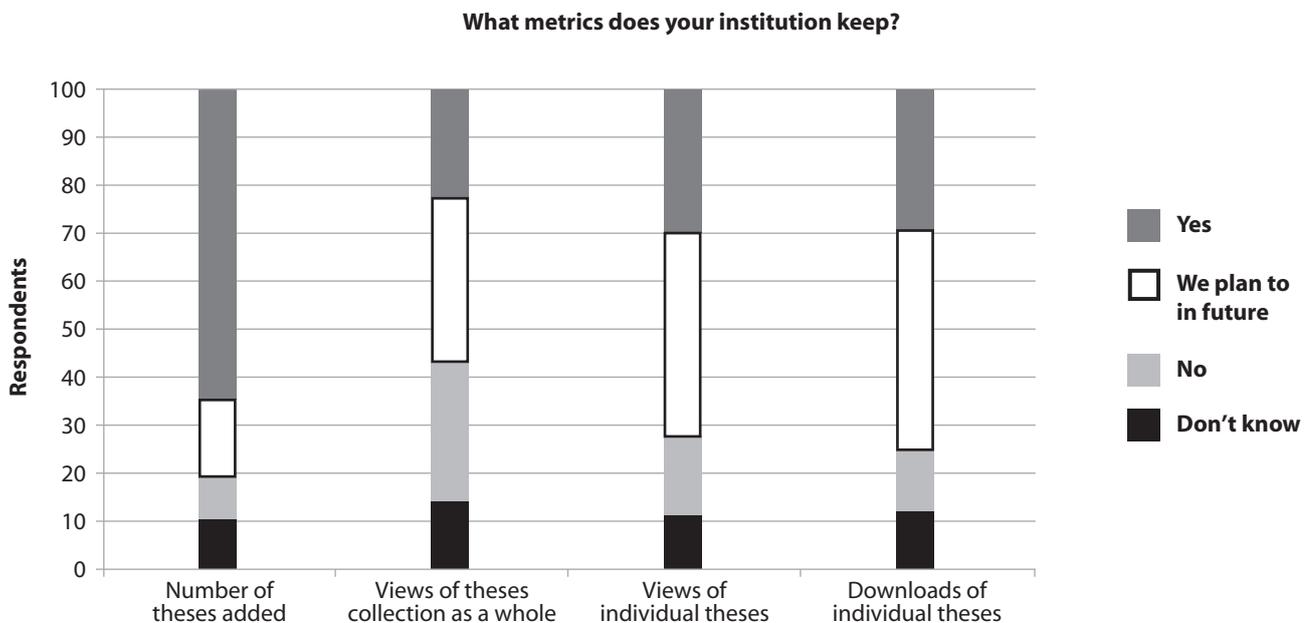
Though far less prominent in the survey results, DART-Europe may gain importance in the future, given its reach into Europe. DART-Europe is a partnership between research libraries and library consortia from universities across Europe. DART-Europe aims to provide visibility and access to European research theses through a single European portal, and to progress developments in e-thesis access¹¹. EThOS is the UK's partner in DART-Europe.

As the survey results show, there are also collaborations between HEIs on a smaller scale. The White Rose Research Online service¹² is a shared repository created to serve the Universities of Leeds, Sheffield and York. Another approach is that of SHERPA-LEAP¹³, a partnership between the University of London institutions, in which the partners combine their resources and skills in developing their institutional repositories. A similar initiative, the Welsh Repositories Network¹⁴ has generated a network of 12 repositories across Wales. More recently, an investigation is underway to develop a collaborative, centrally-managed model. Such initiatives provide the potential to pool expertise and gain efficiencies in the development and operation of e-repositories.

7.4 Metrics

Given that a key benefit of e-theses and Open Access is the visibility and accessibility of HEIs' research outputs, it was anticipated that HEIs would employ metrics to assess performance in practice. Respondents were therefore asked which of a number of simple metrics they employ for this purpose in their institutions. The metrics included the *number of theses added*, the *number viewing the theses collection as a whole*, the *number viewing individual theses* and the *number of downloads of individual theses*.

Figure 10 Metrics Compiled by UK HEIs



10. <http://www.ethos.ac.uk/>

11. <http://www.dart-europe.eu>

12. <http://eprints.whiterose.ac.uk/>

13. <http://www.sherpa-leap.ac.uk>

14. <http://whelf.ac.uk/wrn/index.shtml>

As shown in Figure 10, 64% of respondents count the *number of theses added*; a predictably high figure since the metric is equally applicable to print and electronic theses. Figure 10 also reveals that a significant number of the respondents intend to introduce these metrics at some time in the future.

Respondents who answered “Yes” to all of the metrics, and who gave permission, were approached for further information and actual statistics. The following response, from a Russell Group university, makes clear the high performance of e-theses in terms of access compared with print theses:

- Approximately 200 e-theses added per year
- Approximately 200 downloads per year for an “average” thesis
- Comparison with print theses: the respondent estimated that the most popular print theses were requested up to 10 times per year

The download rates for the most popular theses from this institution ranged from 1,494 to 644 for the five months from January to May 2010. The top three theses were each downloaded more than 1,000 times, Table 1.

Table 1 Illustrative Comparison of e-Theses with Other Material in the Repository of a Russell Group Institution (Jan-May 2010)

Item type	No.	Downloads	Downloads / item
Working Paper	78	10,313	132
Preprint	136	17,944	131
PhD Thesis	1196	121,754	101
Book Chapter	90	9,168	101
Report	46	4,274	92
Journal Article	714	57,901	81
Technical Report	60	3,192	53
Conference Paper	385	17,918	46
Other	91	3,495	38

Another university, unaffiliated to any group, which adds an average 120 doctoral theses per year, reported that only 20% of access to e-theses was from users within their institution, whilst 80% of access originates from elsewhere in the UK and overseas. This HEI also noted that the “average” thesis has been downloaded 1790 times since February 2008, but cautioned that web spiders and crawlers¹⁵ may well account for 90% of the traffic.

The metrics identified above are clearly quite simplistic, and whilst they may be indicative of the visibility and accessibility of the theses, they do not indicate whether the research itself is having an impact in the research community. More meaningful metrics might include, for instance, how many theses are cited in other publications (other theses, books and journal articles), but the means to do this reliably do not yet exist. The tools needed will no doubt develop with time, but an important consideration that will arise is how consistency and standardisation might be achieved, allowing direct comparisons to be made between HEIs.

15. Web crawlers and spiders are computer programmes often used by search engines to methodically browse the World Wide Web as a means of obtaining up to date information.



8 Barriers to E-Deposit

As indicated in the introduction to this report, the primary concerns regarding electronic, open access to theses are:

- Impact on future publication
- Copyright
- Plagiarism
- Sensitive content
- Practical Barriers

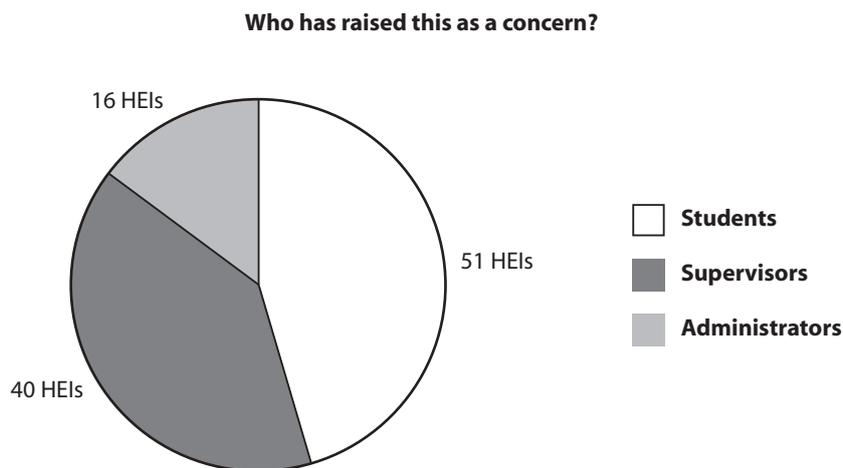
The survey was therefore used to obtain further evidence regarding these issues; to verify the extent and origin of the concerns. Where appropriate, these issues are considered in light of other evidence in order to present a clearer picture regarding the validity of such concerns. For each item, respondents were asked to specify whether concerns were raised by the students, supervisors or administrators. Respondents were also asked to describe any actions taken to mitigate each concern. In order to ensure a representative picture of the kinds of mitigating actions taken across the sector, answers here were collected as free text and then classified to identify areas of consensus. Findings are summarised here; a more detailed examination of the responses to each concern is available on the project website¹⁶.

8.1 Impact on Future Publication

Respondents were questioned about the perceived concern that making a thesis available online may have an impact on students' opportunities to publish their work. Of 130 HEIs answering the question, 72 (55%) are aware of this being a concern in their institution.

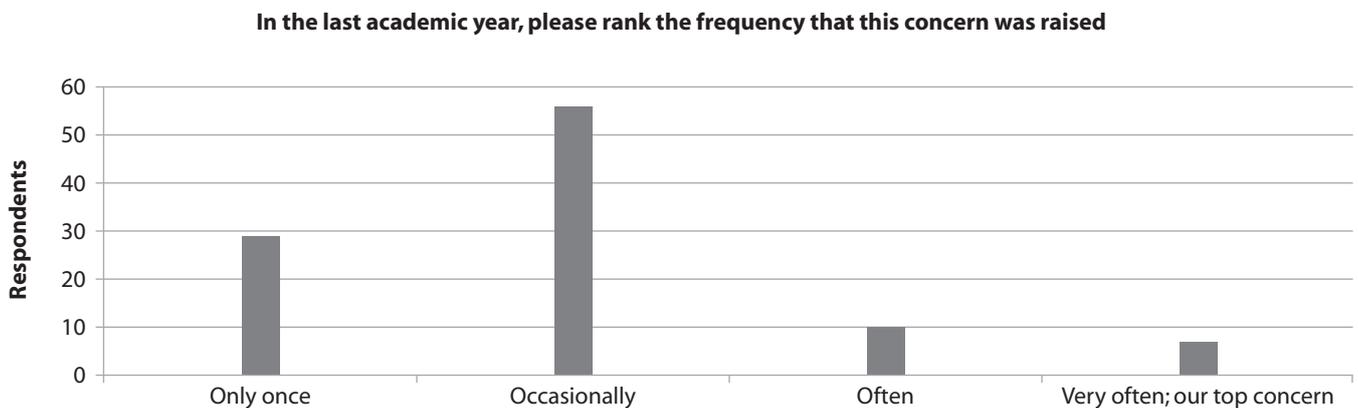
The survey found that students are the most likely to express concerns about publication, Figure 11. Where particular reference was made in the responses to specific disciplines, it was noted that the arts and humanities seemed to be most likely to express concern.

Figure 11 Impact on Future Publication: Number of HEIs where Concern Raised



16. UCL Library Services project website at: <http://www.ucl.ac.uk/lis/etheses>

Figure 12 Impact on Future Publication: Frequency of Concern

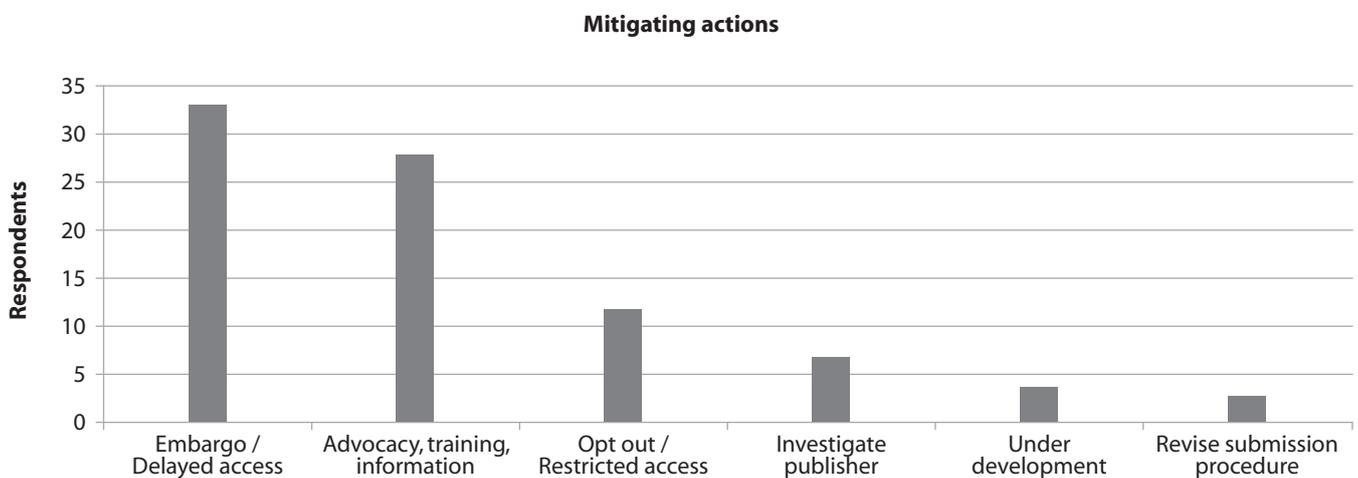


The survey responses indicated a mix of issues regarding future publications based on doctoral theses made available electronically:

- One actual instance of a publisher stating that they would not publish work made available on an institutional repository – the respondent states that “The publisher on request made it clear that deposit in the IR was not acceptable according to their publishing agreement”
- Publishers, students or supervisors expressing concern in a hypothetical context
- Instances of students or supervisors requesting that a thesis be withheld from the institutional repository because of concerns that publishers may no longer regard the work as publishable. One respondent remarked that in some cases the request was made on the basis of “what they [the student/supervisor] had heard” from others about publishers’ policies

The survey indicates that this is an important issue, though only 10 HEIs (7% of respondents) reported that this is a frequent or top concern (Figure 12). But it is evident that views on this are based largely on hearsay and uncertainty about publishers’ policies. Nevertheless, such concerns are having an impact on access to theses, with some 33 responding HEIs indicating that an embargo is the most popular mitigating action, and a further 12 respondents indicating other forms of access restriction may be applied, such as invoking a takedown policy, allowing ‘opt-out’ from open access, or publishing metadata and abstract only, Figure 13.

Figure 13 Impact on Future Publication: Mitigating Actions





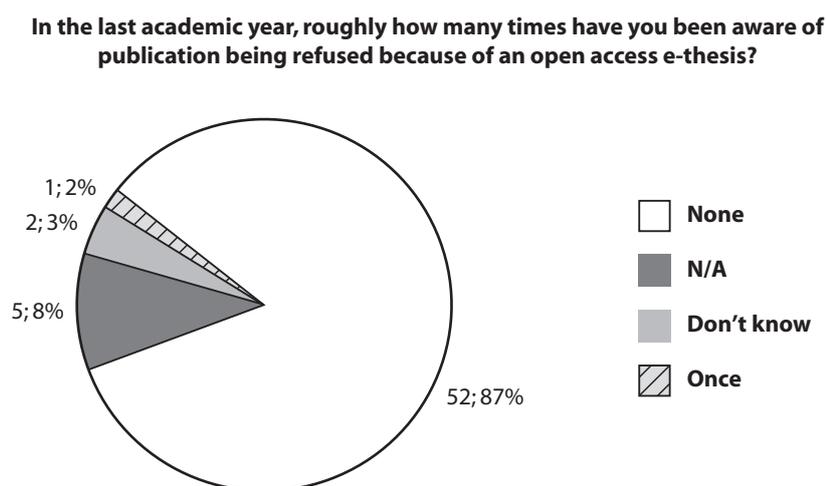
The survey showed that some HEIs are attempting to overcome what might be regarded in some cases as undue concern about the impact of open access on publishing through advocacy and providing guidance through websites and other information sources. Other universities recommend that students check with their publisher or use OA-friendly publishers. Interestingly, some respondents indicate that there is also evidence of a positive reaction by publishers, as noted below:

“We spelt out the positive benefits of making the theses available and in fact some research suggests that publishers are more likely to publish theses if they are being well accessed online”

“We also have students who published theses and were given permission by their publishers to deposit e-theses”

Indeed, when asked to quantify instances of publication refusal, only one was recorded, Figure 14. However, some respondents noted that their open access policies had only recently been put in place, or that few theses had as yet been submitted under the new regulations, and some expressed doubt as to whether they would be made aware of any such occurrences.

Figure 14 Impact on Future Publication: Actual Occurrences



Since this is an issue that causes concern based on an apparently as yet unsubstantiated problem, the authors attempted to obtain additional information on the views of a number of academic publishers and publishing associations on this issue, through direct correspondence and through an unpublished survey conducted by the University of Warwick. It should be noted that many publishers when approached about this issue were unwilling to give a definitive response and did not wish their views to be directly attributed. As such, the information obtained can only be described in general terms and should be regarded as indicative only. It was also evident in the views obtained that the area of concern was primarily with the publications of books based on a doctoral thesis rather than journal publications; journal articles are still likely to prove attractive as succinct versions of the thesis, even if the thesis is itself made publicly available.

The views obtained from individual publishing houses presented a mixed picture with regard to policy on theses made publicly available through an institutional repository. Almost equal numbers of publishers (who were willing to express a view) indicated that either, a) a thesis could remain publicly available without detrimental effect to publication since a book published with them would usually require extensive re-working, b) a thesis can have been deposited in an institutional repository but on acceptance of a book for publication with them based on the work, the thesis would have to be subject to an immediate and permanent takedown, or c) a thesis must not have been deposited in an institutional repository in order for a book based on it to be published with them. However, even where option “c” was stated, some publishers qualified this by stating that exceptions could sometimes be made.

It was noted in direct correspondence with the Association of Learned and Professional Society Publishers (ALPSP) that it is becoming more difficult to recover the costs of publishing scholarly monographs (often critical to the career advancement of junior academics in

the arts, humanities and social science disciplines) and this might explain the more conservative views of some publishers. An editor for a notable University Press however indicated that even in these disciplines, open access to the original thesis is unlikely to be detrimental to publications based upon it if it can be shown that the book is a radically revised or expanded version.

In conclusion, it is evident that there are as yet no definitive policies or views emerging from publishers regarding publications based on a thesis made openly available through institutional repositories. It would however appear that authors should consult potential publishers, if at all possible, prior to submitting their theses in order that a decision on deposit of the e-thesis can be made on the basis of facts rather than on concerns that may prove unfounded.

8.2 Third Party Copyright

It was noted in the introduction to this report that third party copyright presents problems with regard to the submission of an e-thesis that have not previously had to be considered for print theses. At the heart of the issue is the availability of the thesis (through an institutional repository) to a far wider audience than had ever been the case with print-only theses, substantially increasing the risk of misuse of a copyright owner's works or any commercial interests associated with the work.

89 survey respondents (62%) indicated that they are aware of concerns within their institution surrounding IPR and third party copyright in theses. The issues cross academic disciplines; the majority of concerns are raised in arts subjects with, for example, the use of images, photographs and musical compositions, but in the sciences equivalent issues occur with diagrams, plans and maps. The survey showed that adherence to copyright is primarily a concern for the library staff and administrators responsible for depositing e-theses in the institutional repository, and those with responsibility for ensuring that their institution upholds its legal obligations. Students and supervisors by contrast are less likely to raise concerns regarding copyright, Figure 15. A number of respondents noted that one of the reasons for this is a lack of awareness of the issue beyond library and repository staff.

Figure 15 Third Party Copyright: Number of HEIs where Concern Raised

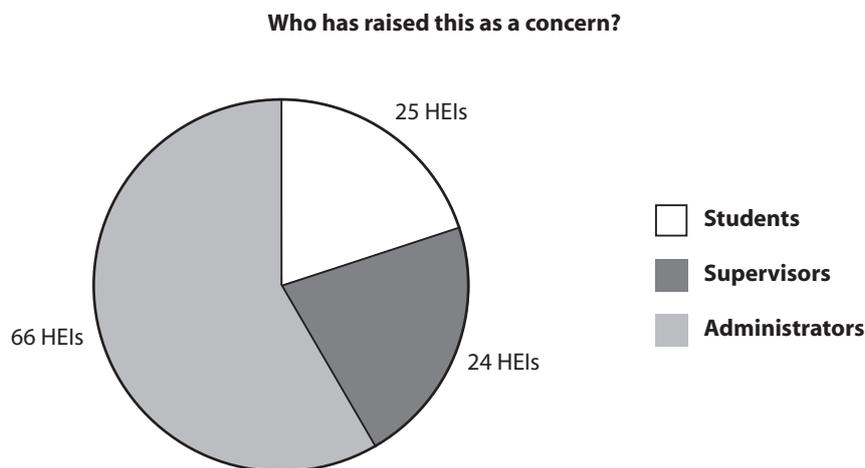
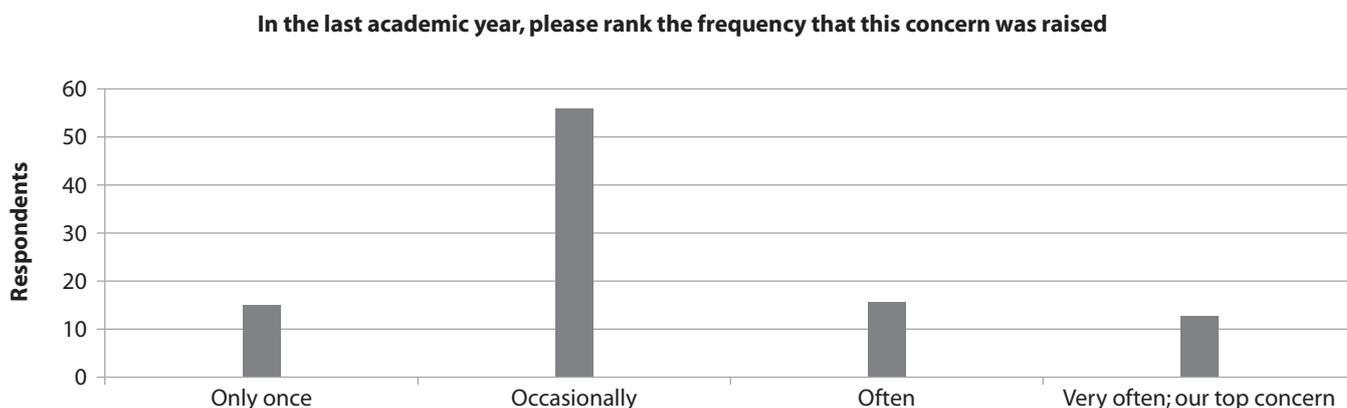




Figure 16 Third Party Copyright: Frequency of Concern

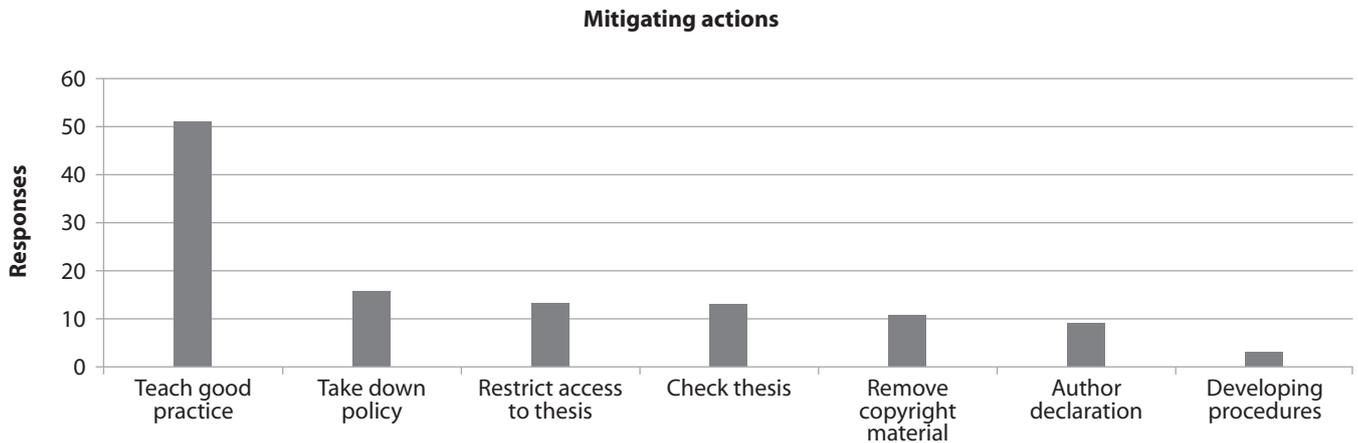


Despite the legal implications of third party copyright, few respondents (22 of those surveyed; 15%) indicated that it was a frequent or top concern within their institutions, Figure 16. Some respondents offered details regarding the nature of enquiries received/concerns raised regarding copyright, which included:

- Discussions among administrators/librarians/repository staff regarding copyright
- Queries raised during training events designed to raise awareness
- Students asking for clarification immediately prior to submission
- “What if” enquiries rather than specific problems and actual cases
- Librarians raising concerns when an EThOS request is received for a thesis, particularly an older thesis for which the author may no longer be traceable

Among the mitigating actions highlighted by respondents, 70% involved raising awareness among staff and students through education, training and the provision of guidance, Figure 17. Some institutions require the author of the thesis to sign a declaration form stating that permissions have been obtained for all third party material, and some provide templates for requesting permission. Respondents for 16 institutions operate a rapid takedown policy so that theses can be removed quickly if a complaint is made by copyright owners. 13 HEIs restrict access to theses containing third party material that has not been cleared, through either a temporary or permanent embargo on submission to the repository. In addition, 12 HEIs stated that theses are subject to checks by repository staff, subject librarians or the Rights department. However, some commented that carrying out such checks adds to the already onerous workload of the staff, and one institution stated that they were unable to inspect every thesis received. The number of such comments was very small but nonetheless highlight the importance of raising awareness of the issue among students and encouraging them to take responsibility for compliance. Only 11 HEIs advocate creation of a separate digital edition with copyright material removed. In contrast, one respondent stated that their current policy did *not* allow the thesis to be edited to take out third party material.

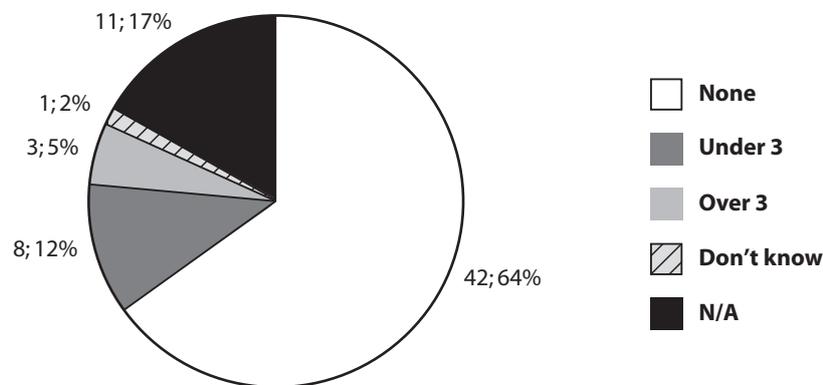
Figure 17 Third Party Copyright: Mitigating Actions



Respondents were asked to quantify incidents where action had to be taken to remove access to a thesis (Figure 18); 64% of respondents had none to report, with two respondents attributing this to the success of their system/procedures. Eight HEIs had between 1 and 3 theses removed. Only three HEIs reported higher figures (12, 15 and 50). However, 11 of the 77 HEIs that responded to this question (14%) stated that they had either not uploaded any theses to their repository as yet, had only recently started uploading theses and thus had very few in the repository, or did not currently have a repository. The responses “None” or “Not Applicable” given by the majority of HEIs may suggest that third party copyright is not creating a significant problem, but equally such responses do not rule out the possibility that the lack of cases is because they too have very few theses uploaded to the repository so far. Thus whilst these early indicators may seem encouraging, it may also be too soon to judge how much of a problem third party copyright actually represents for the submission and distribution of e-theses.

Figure 18 Third Party Copyright: Actual Occurrences

In the last academic year, roughly how many times have you been asked to take down an e-thesis?





8.3 Plagiarism

As was indicated in Section 2.3.2, plagiarism of an e-thesis made available on an Open Access basis has become a matter of concern for staff and students alike, but there is little evidence available as yet to determine how many actual cases of plagiarism have been reported.

The survey yielded 76 respondents (53% of HEIs) who were aware of concerns regarding the plagiarism of e-theses within their institutions. 54 respondents offered additional information on these concerns and of these, 40 stated that it was a general concern with no reference to actual occurrences. Respondents were then asked who within their HEIs were raising this concern. In line with Grieg's (2005) findings, the majority of concerns were raised by students (62.5% of the 72 respondents to this question), followed by supervisors (55.6%) and administrators (26.4%), Figure 19. A number of responses indicated more than one source of concern, hence the total is greater than 100%. However, the incidence of concerns raised about plagiarism was not high in the majority of responding HEIs – just 5 HEIs stated that concerns were raised “often” and none considered it a “top concern”, Figure 20.

Figure 19 Plagiarism: Number of HEIs where Concerns Raised

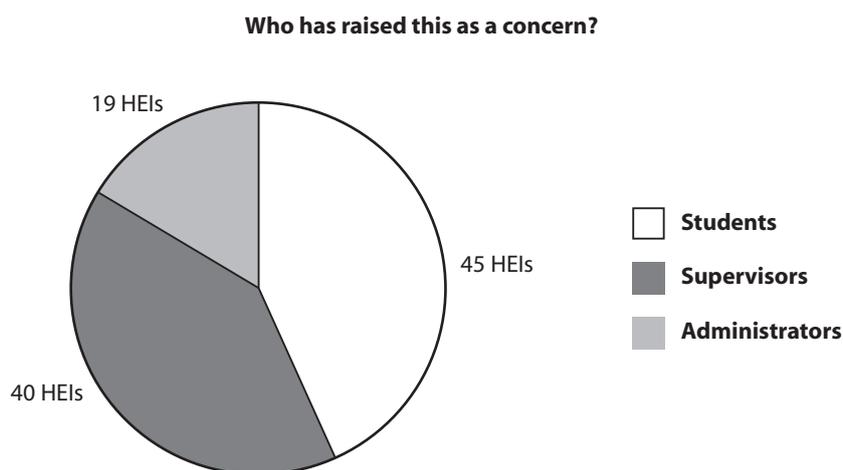
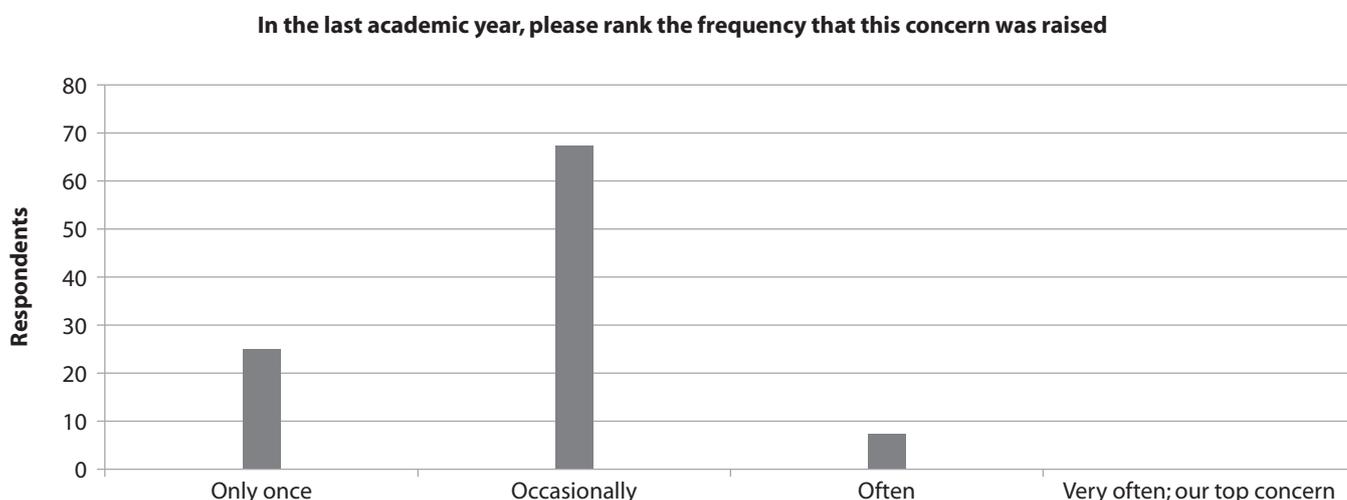
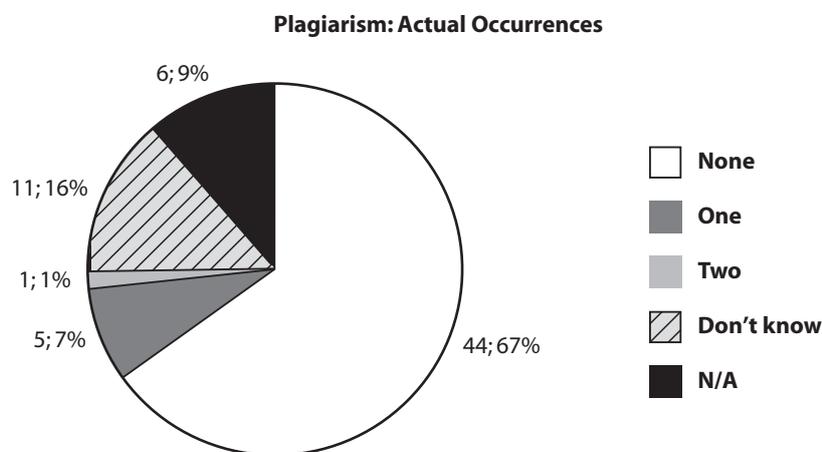


Figure 20 Plagiarism: Frequency of Concern



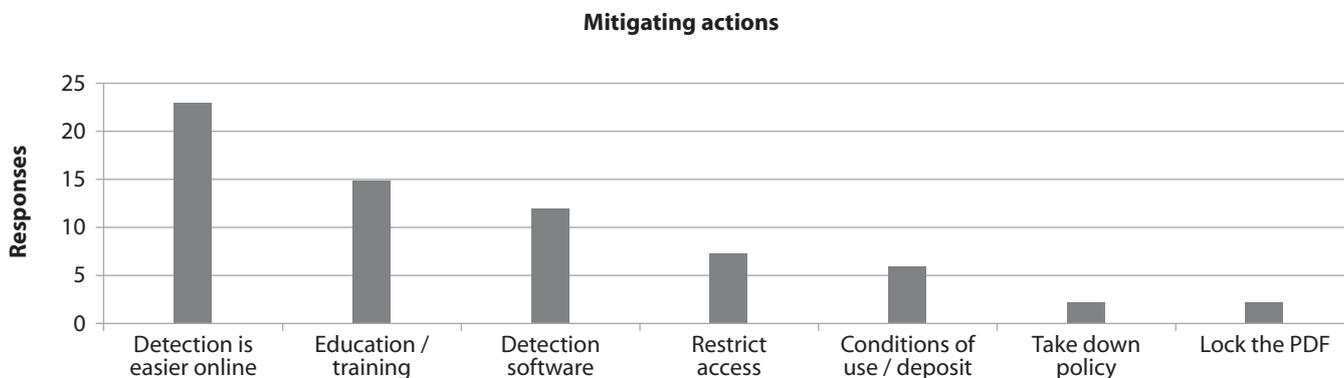
When asked to quantify actual instances of plagiarism, very few were reported. Of the 67 respondents to answer this question, 44 (67%) knew of none, five knew of one incident and only one reported two, Figure 21. The low number of actual known cases is encouraging, but 11 respondents stated that they “don’t know” and others qualified their answer in some way, for example, “none that I know of”, “the library service would not be directly informed of this” and “none: no theses have been uploaded yet”. The uncertainty evident in this data suggests therefore that it should be treated with caution.

Figure 21 Plagiarism



Of those taking action to address these concerns, a total of 64% (38 HEIs) stated that they concentrate on advocacy and education, and 23 HEIs stated that Open Access can actually assist plagiarism detection because ready access to the electronic copy makes it easier to check against (compared to print copies “hidden in the basement”), Figure 22.

Figure 22 Plagiarism: Mitigating Actions





Indeed, almost 20% of those answering the question (12 of 62 respondents) advocate detection software as a means of identifying plagiarism in authors' work and thus protecting the institution. Seven universities stated that they prefer to restrict access through an embargo. One HEI pointed out that users of EThOS need to register and identify themselves to allow access, thus presumably deterring plagiarism, whilst another commented that deposition (in the institution repository) serves to "date-stamp" the author's claim to priority.

Creative Commons licensing is another approach advocated by one HEI. Creative Commons (CC) licences have become a globally recognised and widely used means of licensing digital works. The CC licences are very much associated with sharing and collaboration, and so are frequently used in the management of open access resources. Six CC licences are available¹⁷ from which copyright owners select the most appropriate to determine the extent and types of re-use that they are willing to permit. CC licences provide resource users with clear information about the use that may legitimately be made of digital material, so offering additional protection for rights holders against plagiarism or changes to the content (Jones and Andrew, 2005).

Therefore, despite concerns raised about the increased possibility of plagiarism, there is a sense among respondents that such fears may yet prove unfounded and that e-theses may have a positive effect on efforts to detect and deter misappropriation. There is some limited evidence that this view also prevails beyond the UK. For example, the University Grants Commission in India in announcing the launch of the Indian Electronic Theses Database in 2005 stated that the service would help "overcome the serious problem of duplication (plagiarising) of research and poor quality of research resulting from the 'poor visibility' factor in research output", (IndiaExpress.com, 2005). The database was equipped from launch with plagiarism detection software. It is perhaps too early in the development of the Open Access movement to know what impact plagiarism will have on the acceptance of e-theses among authors. Nonetheless, JISC stated in 2009 (JISC, 2009) that enhancements to EThOS would include the detection of plagiarism.

8.4 Sensitive Content

The increased availability of doctoral theses afforded by e-theses placed on open access has raised particular concerns regarding the protection of sensitive material. As has already been indicated in Section 2.3.2, material may be regarded as sensitive for a number of reasons, including for commercial purposes, political reasons or to protect privacy. A report by UKCGE (Barnes, 2010) has already indicated that the presence of sensitive materials in theses results in a number of embargo requests each year, though overall the numbers are fairly low in the majority of institutions. However, the UKCGE report considered the wider issue of confidentiality of PhD theses, in which e-theses were only given limited consideration. The UCL survey is therefore helpful in focusing more specific attention on the influence of sensitive material on access to e-theses.

In the survey, 75 respondents (52% of HEIs) reported that they were aware of concerns in their institutions regarding sensitive data within theses. Additional information on the nature of the concerns was provided by 57 respondents, Table 2.

Table 2 The Nature of Concerns Raised by Respondents regarding Sensitive Material in Theses

Reason for concern	Number	% of Response
Contains personal information	26	46
Commercially sensitive	12	21
Politically sensitive	9	16
Publication may pose a threat to the life of the author or identifiable individuals	3	5
National security risk	2	3.5

Some respondents did not offer any specific reasons for the concern, just acknowledgement of an overall concern, whilst others offered more than one reason, hence the numbers in Table 2 do not add up to 100%. Concerns about publishing personal material related to the fields of medicine, psychology and social science, including research concerning information relating to court cases, counselling, child welfare, education and clinical studies. Many such instances raise issues about privacy and the ability to identify individuals from the material, such as where photographs are used.

17. Creative Commons licenses at: <http://creativecommons.org/licenses>

The protection of commercially sensitive material is a common reason for restricting access, particularly in the sciences, engineering and pharmaceuticals. It has long been accepted by HEIs that protecting the commercial interests of sponsor companies is a necessary condition of securing funding and access to data/facilities for the research (Barnes, 2010).

Politically sensitive material highlighted in the survey included animal experimentation, the use of confidential government statistics, research into religious issues, use of information relating to Fascist organisations and anthropological studies involving vulnerable communities. In a very small number of cases, the author of a thesis may feel that his/her life might be threatened if the material should become widely available, with one respondent referring to a case where the author could no longer return to his home country. The issue of national security was raised as a concern in research related to the Ministry of Defence, or intelligence and security matters.

Respondents indicated that concerns about sensitive data were equally divided between students, supervisors and administrators (based on 67 responses), Figure 23. Only 3 (out of 62) respondents reported this as a frequent or top concern, Figure 24.

Figure 23 Sensitive Content: Number of HEIs where Concerns Raised

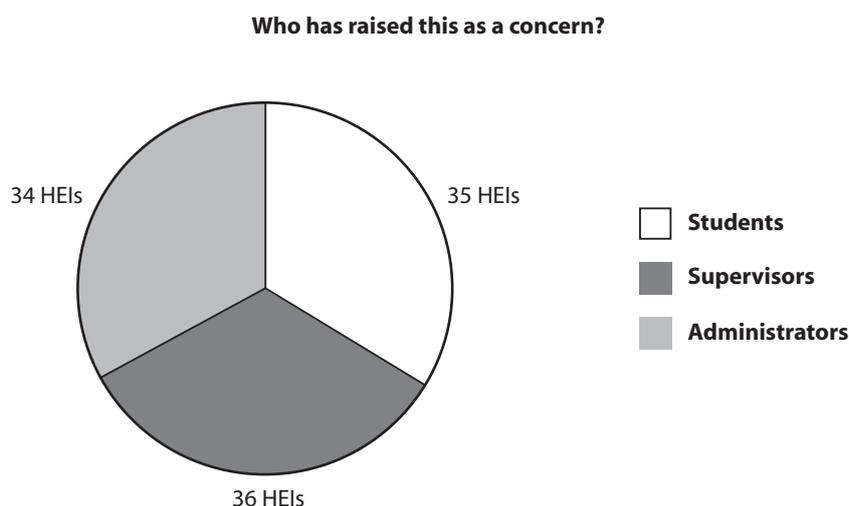
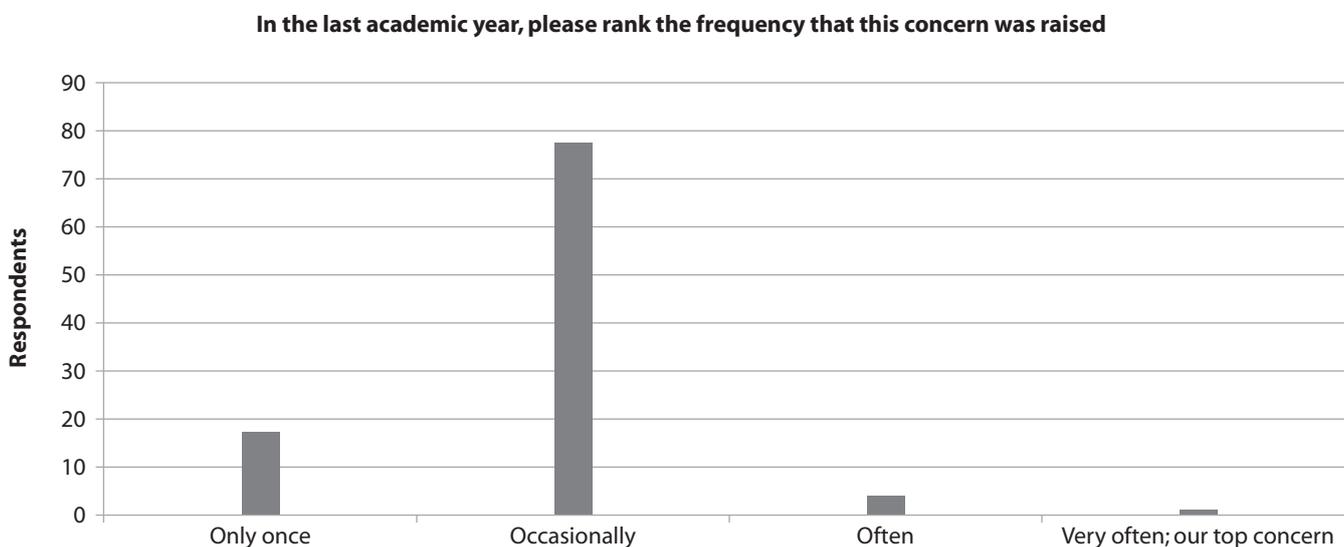


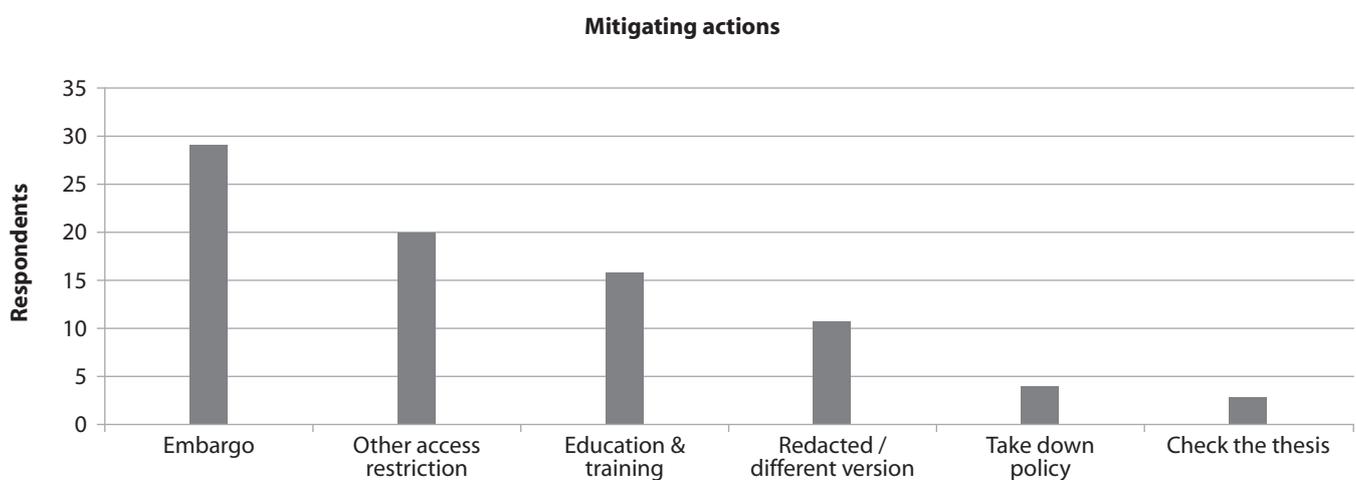
Figure 24 Sensitive Content: Frequency of Concern





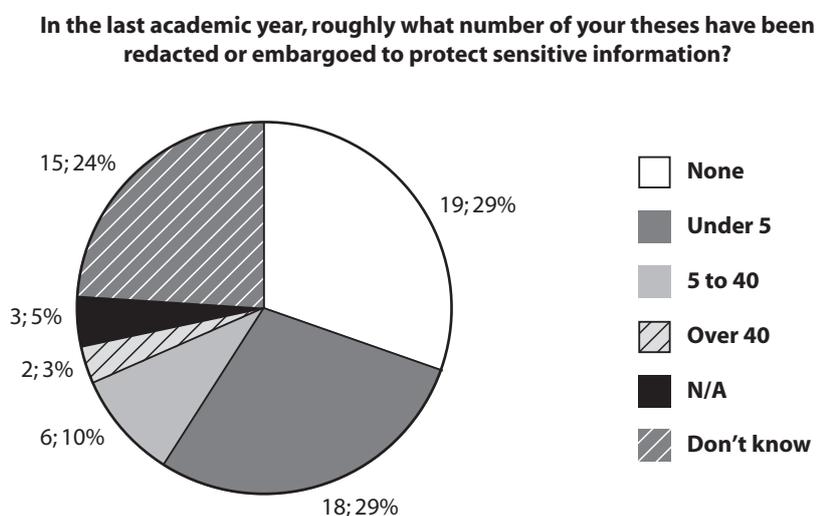
Of the 63 respondents that provided information on mitigating actions used to address this concern, the vast majority (79%) restrict access to the thesis, 47% via embargo and 32% via other restrictions e.g. opt-out altogether. Only 17% of HEIs advocate the creation of a different or redacted version for public access, with a range of strategies reported (for instance, the creation of an embargoed appendix to hold the sensitive data, with the main body of the thesis remaining openly accessible). Instead, 25% use education and training or expect candidates to omit sensitive data from their theses, Figure 25.

Figure 25 Sensitive Content: Mitigating Actions



When asked how many theses in the past year (2009/10) were subject to an embargo or redaction, only 29% of the 63 HEIs that responded said “none” – a lower result than for other concerns addressed in this survey, Figure 26. Of all the concerns identified by the survey therefore, the number of theses subjected to embargo or redaction in order to protect sensitive material provide the most significant and tangible evidence of a barrier to open access. As the above indicates however, the serious issues raised by the inclusion of sensitive material in a thesis make this loss of access a necessity.

Figure 26 Sensitive Content: Actual Occurrences

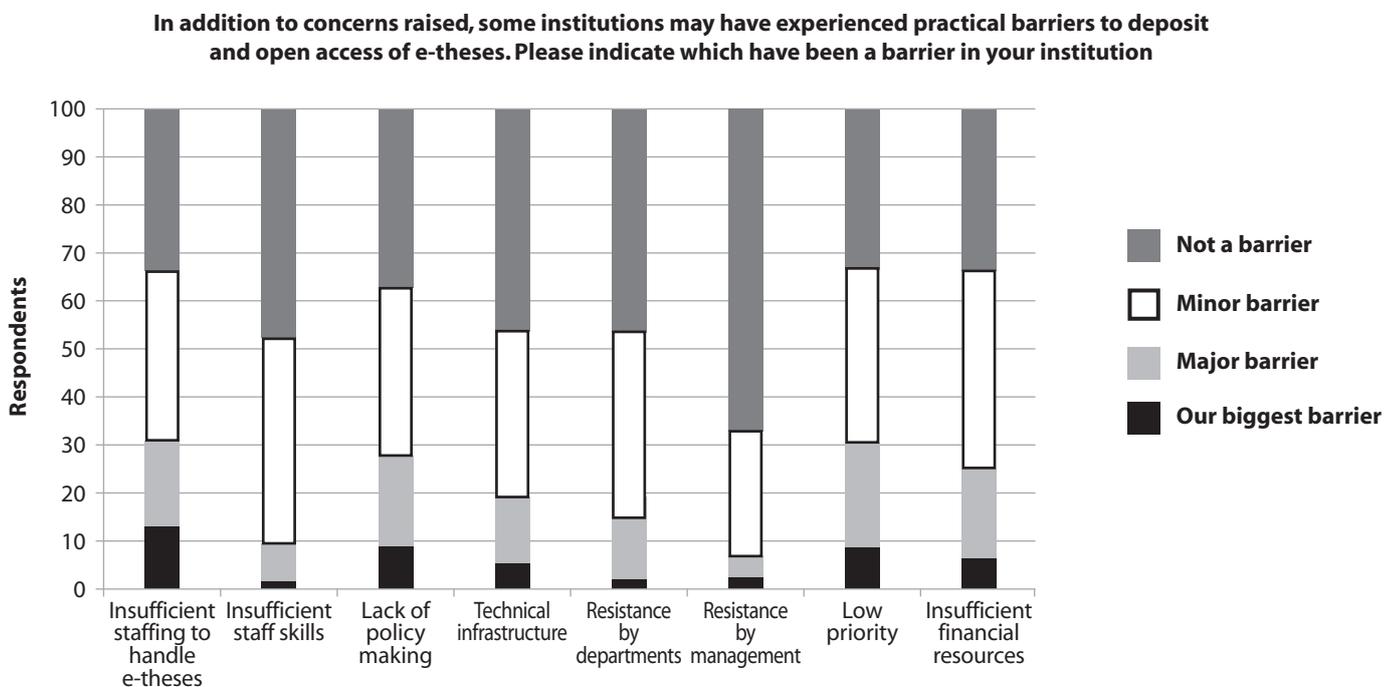


Another 29% had fewer than five affected theses, and a further 10% reported figures up to 40. Only two HEIs reported a higher number (300 and “a significant number”, both of which are high volume Russell Group universities). Of the HEIs that responded with “don’t know”, three noted that library staff do not receive embargo or redaction requests and were therefore unable to comment on the number of instances. It is important to note that a number of other responses were stated as estimates and thus there is some uncertainty in this data.

8.5 Practical Barriers

In addition to the prominent concerns already discussed, respondents were asked whether they have encountered practical barriers to the Open Access movement and the deposit and storage of e-theses.

Figure 27 Practical Barriers to E-thesis Deposit: Percentage Comparison



This question garnered a very high number of responses - 111 of the 144 institutions participating in the survey answered this question. Not surprisingly, given the tightening budgets of many UK HEIs at the time of the survey, a number of the practical barriers cited refer to a lack of resources – staff, skilled staff, issues with technical infrastructure and insufficient financial resources. Other practical issues were essentially concerned with the level of commitment shown to Open Access and e-theses deposit among UK HEIs – for example, “lack of policy making”, “resistance by departments”, “resistance by management” and a tendency for the issue to be given a “low priority”.

However, the numbers of respondents that regarded these issues as a significant barrier were relatively few. The item receiving the highest count (14 responses) for being “our biggest barrier” was that of “insufficient staffing to handle e-theses”. The items receiving the highest count for being a “major barrier” were: treating Open Access and e-theses as a “low priority” (24 responses) and a “lack of policy making” (21 responses), followed by “insufficient financial resources” (20 responses) and “insufficient staffing to handle e-theses”, once again, with 19 responses. It is worth noting that a large proportion of the responses indicated that the practical issues cited were a “minor barrier” only or “not a barrier”, as indicated in Figure 27. This would seem to suggest that despite some inevitable constraints on resources and institutional inertia, the Open Access movement is receiving, in the main, adequate attention and support by UK HEIs.

Some notable issues received only weak attention in the survey data, namely the digitisation of older, print theses, and developments in file formats used for e-theses and their implications for long-term preservation, as such formats can change with time. One respondent



indicated that the costs of digitising old theses and the difficulties associated with gaining the necessary permissions from authors and third party copyright holders are a particular challenge, and with tightening budgets, this HEI was unlikely to be able to offer this service. Two respondents commented that the advent of “born digital” theses is presenting challenges to HEIs with regard to unconventional file formats associated with doctoral submissions in the Arts.

The low incidence of such comments in the survey is surprising considering the implications of these issues for the future of Open Access and the serious debate surrounding them in the research library community in the UK and beyond (as indicated in Section 2.3.2). This may be partially explained by the fact that, as indicated earlier, many UK HEIs have only very recently begun accepting electronic theses, and in some institutions the number of doctoral theses submitted is also quite small. The observation made by Li and Banach (2011) that HEIs in the USA are focusing more on providing access to their research outputs (and gaining the benefits of that) than on the long-term stewardship of their digital assets, is likely also pertinent in the UK. This rather short term perspective coupled with limited (and possibly reducing) resources to deploy to such efforts may be leading HEIs to overlook these important matters or to give them a low priority. However, this situation is likely to have serious repercussions in the future, particularly if HEIs move increasingly toward accepting submissions in electronic form only (in order to save space and reduce costs). As the Open Access movement in the UK gathers pace, so too will the challenges associated with long term digital preservation, increasing use of new, more dynamic media and the demand for older theses to be made readily accessible in digital form. This survey suggests that such matters are not currently being treated with an appropriate degree of urgency.

9 Conclusion

The advent of the Digital Age and the facility to share information and knowledge via the Internet means that the move toward open access to doctoral theses in the UK is inevitable, and is in line with the academic principle of disseminating research for the common good. Despite this, progress toward open access to electronic theses has been slow in the UK and whilst much has been written about the issues that this unprecedented access to academia’s most important body of research has raised and the perceived barriers, a comprehensive picture of progress toward this goal in the UK was lacking. The survey by UCL Library Services provides the first clear and detailed view of the status of policy and practice in UK HEIs, incorporating inputs from 144 institutions currently awarding doctoral degrees. This report, based on that work, set out to disseminate the policies and practices to emerge from the work and also to establish what has been learned about the perceived barriers to the implementation of open access to electronic theses.

Previous work has highlighted the concerns of various stakeholders in the academic community about the implications of widespread and largely uncontrolled access to its institutions’ research outputs. This report however goes further in investigating the validity and the significance of these barriers. As such, this work has been able to differentiate barriers that are “real” from those which are unfounded and/or yet to be properly validated, and those for which the solutions are already evident versus those that require our greater attention.

The survey revealed positive results with respect to the present status in the UK of the deposit of electronic theses in either institutional repositories or with the national service, EThOS. Taking account of those HEIs already accepting electronic theses and those planning to do so in the immediate future, the survey revealed that the majority of UK HEIs (81% of those surveyed) will be providing open access to their theses in five years’ time. To facilitate and maximise open access to theses, the majority of HEIs have adopted an “opt-out” policy, mandating electronic submission unless a good case can be made not to do so. The number of HEIs known to have their own institutional repositories is currently only 50% (72 out of 144), but a number of others have plans to develop one, and among those that do not have such plans, some receive too few theses to make such a system viable and/or use the EThOS service instead.

The survey confirmed the findings of previous reports concerning the primary reasons for requests to restrict access to theses, and among these it was found that restrictions due to third party copyright, data protection and the protection of individuals were only applied to electronic theses (not print theses). HEIs accepting electronic theses were also twice as likely to have a formal policy on third party copyright and a corresponding take-down policy. This suggests that HEIs appreciate the seriousness of the situation created by open access. However, the survey also revealed that awareness of this particular issue is not widespread among the academic staff and students, and this presents problems not just in the potential for legal challenges, but also in some cases, exerting further pressure on already limited resources due to library/repository staff carrying out their own checks. In times of severely constrained budgets, making supervisors and students more aware of their responsibilities could result in much needed savings in the future. It may also reduce instances of whole theses being subject to an embargo, in favour of alternative approaches such as redaction.

The survey identified a number of barriers to open access regarding electronic theses - some being practical barriers, such as constraints on resources or a lack of the necessary infrastructure, whilst others were concerned with restricting access to the theses themselves. The most significant reason for restricting access to a thesis (usually by an embargo of the whole document) was concern about sensitive material contained in it. Other concerns, including third party copyright issues, the implications for future publications and plagiarism seem to be having little impact on access so far. Regarding plagiarism and the attitudes of publishers toward publications based on theses openly available via the Internet, there is some evidence to suggest that the concerns of students and supervisors may yet prove unfounded since so few incidences have so far been reported. However, the number of electronic theses made openly available in the UK is still very small, and therefore accurate predictions cannot yet be made. There is also considerable uncertainty still regarding whether open access will encourage or deter plagiarism, and no clear consensus has emerged among publishers on how electronic theses will be viewed. However, the uncertainty itself is likely to elicit a cautious response from students and supervisors who are understandably keen to maximise the benefits of their research. There is a need therefore for HEIs to disseminate the known facts and offer guidance such that thesis authors, and those who support them, are able to make a more informed decision about access to their work.

The survey also revealed that given the technical and financial challenges in providing an efficient and robust service for accessing electronic theses, some HEIs are pooling their resources and expertise in order to improve efficiencies, either in the development of their institutional repositories or in operating a joint service. EThOS is the most prominent of these, but other smaller scale collaborations serve to show that this can be a viable solution for HEIs struggling to progress on their own. An area where collaboration may also prove helpful, if not essential, is in the area of long-term preservation of electronic theses, which this report indicates is currently receiving little attention. However, the long-term implications of storing and preserving theses as electronic media continues to develop, and increasing demand to incorporate ever more sophisticated elements to the theses themselves, dictates that this is an area that HEIs need to consider. Co-operation across the HEI sector on this issue may be a good way of increasing progress.

But given that the key driver of open access to electronic theses in UK HEIs is to “showcase” their research outputs to the widest possible audience, another concern for HEIs in the coming years will be how to assess whether open access is enhancing the impact that these research outputs have in the world of research. There are no reliable means as yet to measure this impact, but some HEIs are already compiling simple metrics that reveal how frequently their theses are being accessed, thus giving an indication of the visibility of their research and interest in it. Early indicators, as illustrated by the examples in this report, suggest that electronic doctoral theses attract significant attention when made openly accessible. Such findings suggest that open access to electronic theses may indeed lead to a considerable acceleration in the sharing of knowledge and the progress of scientific discovery and human development.



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Appendix A – List of Participating UK Doctorate Awarding HEIs

Note: some survey respondents opted not to name their institutions

Aberystwyth University	Nottingham Trent University	University of Central Lancashire - UCLAN
Anglia Ruskin University	Oxford Brookes University	University of Chester
Aston University	Queen Mary, University of London	University of Chichester
Bangor University	Roehampton University	University of Dundee
Birkbeck, University of London	Rose Bruford College of Theatre & Performance	University of East Anglia, Norwich
Birmingham City University	Royal Agricultural College	University of East London
Bournemouth University	Royal College of Art	University of Exeter
Brunel University	Royal College of Music	University of Glamorgan
BSU	Royal Holloway, University of London	University of Glasgow
Buckinghamshire New University	Royal Northern College of Music	University of Gloucestershire
Canterbury Christ Church University	Royal Scottish Academy of Music and Drama	University of Greenwich
Cardiff University	Royal Veterinary College	University of Hertfordshire
Cranfield University	School of Advanced Study, University of London	University of Huddersfield
De Montfort University	Scottish Agricultural College	University of Hull
Durham University	Sheffield Hallam University	University of Kent
Edge Hill University	SOAS	University of Leeds
Edinburgh College of Art	Southampton Solent University	University of Leicester
Glasgow School of Art	St George's, University of London	University of Lincoln
Glyndwr University	Swansea Metropolitan University	University of Liverpool
Goldsmiths, University of London	Swansea University	University of Nottingham
Guildhall School of Music and Drama	Teesside University	University of Oxford
Harper Adams University College	Thames Valley University	University of Plymouth
Heriot-Watt University	The Arts University College at Bournemouth	University of Portsmouth
Heythrop College, University of London	The Courtauld Institute of Art	University of Reading
Imperial College London	The Open University	University of Salford
Institute of Cancer Research	The Robert Gordon University	University of Sheffield
Keele University	The School of Pharmacy	University of Southampton
King's College London	The University of Edinburgh	University of St Andrews
Kingston University	The University of Manchester	University of Stirling
Lancaster University	The University of Northampton	University of Strathclyde
Leeds College of Music	Trinity Laban	University of Sunderland
Leeds Metropolitan University	Trinity University College	University of Sussex
London Business School	UCL	University of the Arts London
London Contemporary Dance School	UHI Millennium Institute	University of the West of England (UWE)
London Metropolitan University	University College Plymouth St Mark & St John	University of the West of Scotland
London school of Economics and Political Science	University for the Creative Arts	University of Wales
London School of Hygiene and Tropical Medicine	University of Aberdeen	University of Wales Institute, Cardiff
London South Bank University	University of Abertay Dundee	University of Wales, Newport
Loughborough University	University of Bath	University of Warwick
Manchester Metropolitan University	University of Bedfordshire	University of Westminster
Middlesex University	University of Birmingham	University of Winchester
Newcastle University	University of Bolton	University of Wolverhampton
Newman University College	University of Bradford	University of Worcester
Northumbria University	University of Bristol	University of York
Norwich University College of the Arts	University of Buckingham	Writtle College
	University of Cambridge	York St John University

Appendix B - List of UKCGE Member Institutions (as of January 2012)

Full Members

University of Abertay
Aberystwyth University
Al Maktoum Institute
Anglia Ruskin University
Arts University College at Bournemouth
Aston University
Bangor University
Bath Spa University
University of Bedfordshire
Birmingham City University
University of Birmingham
University of Bolton
Bournemouth University
University of Bradford
University of Brighton
University of Bristol
Brunel University
Buckinghamshire New University
University of Cambridge
Canterbury Christ Church University
Cardiff University
University of Central Lancashire
University of Chester
University of Chichester
Cranfield University
University of Cumbria
De Montfort University
University of Derby
University of Dundee
Durham University
University of East Anglia
University of East London
Edge Hill University
University of Edinburgh
University of Essex
University of Exeter
Glasgow Caledonian University
The Glasgow School of Art
University of Glasgow
Glyndŵr University
University of Greenwich
Harper Adams University College
Heriot-Watt University
University of Hertfordshire
University of Huddersfield
University of Hull
Imperial College London
Institute of Cancer Research
Institute of Education
Keele University
University of Kent
King's College London
Kingston University
Lancaster University
Leeds Metropolitan University
University of Leeds
University of Leicester
University of Limerick
University of Lincoln
Liverpool Hope University
Liverpool John Moores University
University of Liverpool
London School of Hygiene and Tropical Medicine
London South Bank University
Loughborough University
Manchester Metropolitan University
University of Manchester
Middlesex University
Edinburgh Napier University
National Institute for Medical Research
University of Newcastle upon Tyne
The University of Northampton
Northumbria University
Nottingham Trent University
University of Nottingham
The Open University
Oxford Brookes University
University of Oxford
School of Pharmacy, University of London
University of Plymouth
University of Portsmouth
Queen Mary, University of London
Queen's University Belfast
Ravensbourne College of Design & Communication
University of Reading
Roehampton University
Royal College of Art
Royal Holloway College
The Royal Veterinary College
University of Salford
Scottish Marine Institute (incorporating UHI)
Sheffield Hallam University
University of Southampton
University of St Andrews
The College of St Mark and St John
Staffordshire University
University of Stirling
University of Strathclyde
University of Sunderland
University of Surrey
University of Sussex
Swansea University
Teesside University
Thames Valley University
UHI Millennium Institute
University of Ulster at Jordanstown
University Campus Suffolk
University College London
University for the Creative Arts
University of the Arts, London
University of Sheffield
University of Wales Institute Cardiff
University of Wales, Newport
University of Warwick
University of the West of England
University of the West of Scotland
University of Westminster
University of Winchester
University of Wolverhampton
University of Worcester
York St John University
University of York



Associate Members

AUT University, Australia
The British Library
Bishop Grosseteste University College
British Sociological Association
British School of Osteopathy
Canadian Association for Graduate Studies
Cork Institute of Technology
Markfield Institute of Higher Education
The Islamic College
National Union of Students
RMIT University, Australia
Royal Scottish Academy of Music & Drama
Royal Society of Chemistry
Society for Endocrinology
School of Advanced Study, University of London
Scottish Agricultural College

UK Council for Graduate Education

Published titles

ISBN	Title
0-9525751-0-8	Graduate Schools (1995)
0-952-5751-1-6	The Award of the Degree of PhD on the Basis of Published Work in the UK (1996)
0-9525751-9-1	Quality and Standards of Postgraduate Research Degrees (1996)
0-9525751-2-4	Practice-Based Doctorates in the Creative and Performing Arts and Design (1997)
0-952-5751-3-2	The status of published work in submissions for doctoral degrees in European Universities (1998)
0-952-5751-4-0	Preparing Postgraduates to Teach in Higher Education (1999)
0-952-5751-5-9	The International Postgraduate: Challenges to British Higher Education (1999)
0-952-5751-6-7	Research Training for Humanities Postgraduate Students (2000)
0-9525751-7-5	Research Training in the Creative and Performing Arts and Design (2001)
0-952-5751-8-3	Professional Doctorates (2002)
0-9543915-0-0	Research Training in the Healthcare Professions (2003)
0-9543915-1-9	A Review of Graduate Schools in the UK (2004)
0-9543915-2-7	The Award of PhD by Published Work in the UK (2004)
0-9543915-3-5	Confidentiality of PhD Theses in the UK (2005)
0-9543915-4-3	Professional Doctorate Awards in the UK (2005)
0-9543915-5-3	Access to Doctoral Examiners' Reports (2007)
0-9543915-6-0	Higher Doctorate Awards in the UK (2008)
0-9543915-7-7	Quality and Standards of Postgraduate Research Degrees (2009)
0-9543915-9-1	Preparing to Teach in Higher Education (2010)
0-9543915-8-4	A Review of Graduate Schools in the UK (2010)
0-9563812-1-7	Professional Doctorate Awards in the UK (2010)
0-9563812-2-4	Confidentiality of PhD Theses in the UK (2010)
0-9525751-8-3	Professional Doctorates in the UK (2011)





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