

# INVESTIGATING DISTANCE LEARNING ENGAGEMENT WITH ONLINE LIBRARY SERVICES TO IMPROVE PROGRESSION AND RETENTION

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## Abstract

This paper presents the results of a University funded practitioner research project exploring the role played by an 'Online Library' in supporting distance learners studying Social Sciences Qualifications at The Open University. This paper presents the research investigation as a case study.

Keywords: Distance education, digital libraries, case study, digital and information literacy skills, employability

## 1 BACKGROUND AND CONTEXT TO THE RESEARCH

The Open University (OU) is the largest distance education provider in the United Kingdom with approximately 71,545<sup>1</sup> FTE part time undergraduate and postgraduate distance learners. Students at the OU have traditionally registered for individual modules of study but during the past five years, and in line with the mainstream sector, registration and study have increasingly moved towards qualifications based delivery. The mission of the organisation is to support widening participation in higher education, and as such, there is no pre-entry qualification requirement to study. Students are able to choose from a wide curriculum and are provided with opportunities to investigate several inter-disciplinary subjects through the 'Open Programme'. The majority of OU students often combine their studies with full time work and other major personal demands on their time and resources. Significant and increasing numbers of students registered on OU courses cope with a wide range of disabilities.

### 1.1 The challenges of providing Library Services to distance learners

Traditional face to face Universities will often offer students a standard library induction as part of their initial student experience when starting higher education study. There is an expectation that engaging with Library Services will be a key part of their study development, enriching and contributing to their learning goals and successes. Assignments are often set which require students to search, find, evaluate and present scholarly evidence and argument, using resources curated and accessed via Library Services.

National benchmarks, such as the UK's National Student Survey (NSS) provide an indicator of the value that students place on their Library Service as part of their overall higher education experience. Additional measurement is often undertaken at more granular institutional levels e.g. institutional course evaluations such as the OU's SeAM (Students experience on a module) survey. These instruments specifically request students to comment on and rate their experience of Library Resources as part of their study experience.

Ensuring distance learners receive parity of access to the types of scholarly resources traditionally curated and promoted within campus based University libraries, brings its own set of unique challenges. There is a specific requirement to secure student engagement with online Library Services in order to deliver a suite of digital and information literacy skills which adequately equips students for study, life and work in an increasingly digital world. Recent research done by the UK, Joint Information Services Committee (JISC) has captured feedback from students indicating a range of challenges. These are amply illustrated in comments such as:

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<sup>1</sup> Figures quoted May 2015

“Please tell me which online references will help my grades and which will get me into trouble” and “Actually I am not that interested in computers- just tell me what I need to know so I can concentrate on my subject” (JISC, 2015)[1]

Set within this context of delivering virtual library services to distance students at The OU, academics from the Faculty of Social Sciences undertook a short focused institutional Scholarship project in partnership with OU liaison librarians.

The project investigated both the perception and use of Library Services by distance learners studying Qualifications in Politics, Philosophy and Economics (Q45), Criminology and Psychological Studies (Q48) and Social Policy and Criminology (Q57).

The research focused on two key questions:

- 1) What do students understand by online library services?
- 2) What employability skills do students think they will be equipped with after using online library services as part of their qualification?

The findings also correlate to alternative pedagogical research in the field relating to ‘threshold concepts’ (Meyer and Land, 2003 [2], Hofer, Townsend & Brunetti (2012)[3], Fister (2015)[4] and makes recommendations for further research to provide robust evidence based data on how effective use of digital Library Services can support retention, progression and achievement for distance learners.

## 2 METHODOLOGIES

The project used a combination of methods including an online survey and semi structured telephone interviews. The online survey targeted 1402 distance learners studying a range of modules contributing to qualification pathways listed previously. The response rate was disappointingly low at 5.28% (74) and the results therefore need to be contextualised in terms of the quantitative validity of the data. However the research was intended to provide an initial investigation into the research questions. The most valuable data presented in this case study is largely an analysis of the student qualitative feedback received from those who took the time and commitment to respond to the initial survey and the small sample included for follow up in-depth interviews.

Given that the purpose of the survey was to elicit data on perceived as well as actual use, data from respondents formed a useful rich qualitative data set for further investigation. The questions within the questionnaire were grouped into three sections.

- Section one captured data on qualification being studied.
- Section two captured data relating to the use of library resources focused on two strands to foster independent learning e.g. ‘Finding and using online information resources’ and ‘Developing new skills and getting help and support’
- Section three captured data specifically relating to library skills used or developed within specific qualifications contexts e.g. embedded in learning design and delivery

Students studying at all levels were targeted but only cohorts from Level 1 modules (initial study) and Level 2 modules (intermediate study) responded.

Out of the 74 respondents to the online survey, 12 respondents were invited to follow up semi-structured in-depth interviews. 11 agreed to participate and these distance learners were invited to explore in greater detail issues highlighted in their responses to their perception and use of Library Services in the context of their specific study pathway.

The semi-structured interviews were recorded and transcriptions analysed using Nvivo coding software to identify themes emerging from the interview data. Discourse analysis techniques were adopted, based on Silverman’s[5] use of Sacks conversation analysis (1998) and interview analysis research undertaken by Abell & Myers (2008)[6]. This ensured that all interviewees were asked the same questions and were subject to a semi-structured approach, whilst also allowing the researcher to explore areas in more detail depending on individual responses.

Goffman’s work (1974)[7] helped to inform the researcher’s approach to by attempting to understand the ways in which student’s framed their understandings of the concepts being explored. This was

very illuminating in identifying areas where understandings diverged around 'terms' or 'concepts' being explored e.g. student's understanding of the term 'digital library' as opposed to librarians or academics' understanding of the term. The use of 'terms' such as 'online library', 'digital libraries' and 'independent learning' were in themselves seen as 'troublesome' by students and during the follow up semi structured interviews revealed complex underlying assumptions held by the project team who initially developed the online questionnaire. These terms have specific contextual meanings which often do not 'travel well' across disciplinary boundaries between communities of academic practice, library practitioners and learners.

As the interviews were designed to explore students' understanding of certain elements, it was important for the discourse analysis to understand the ways in which they framed their understandings. Drawing on the work of Goffman (1974) was helpful as this method involves particular attention being paid not only to their frames of understanding, but equally importantly to the *limits* of their frames of understanding. For example, in response to the question: *What is your understanding of independent learning?*, the respondent's answer would be viewed not only in light of their response, but equally in light of what remained unsaid. This helped us to conclude that because library searching was not in many instances collocated with independent learning, it was not thought of as particularly important, even when students had in earlier questions said how much they enjoyed accessing the online library, or how much they felt it important to achieving their study aim.

### 3 THE FINDINGS

#### 1) What do students understand by Online Library Services?

The integration of Online Library Services within distance learning materials is achieved by liaison librarians working closely with Faculty. A team of academics, instructional designers and librarians develop the learning outcomes and module content and where specific online resources are used to directly support the teaching these are integrated within the module materials online through 'deep linking' rather than students being tasked to locate them independently through visiting the Online Library.

Students are able to access the Online Library in a number of ways via:

- their Student Home page
- their Module website
- their Qualification website
- directly through the Online Library website
- Content within the library collections are also made retrievable via 'Google Scholar' using a 'Find it at the OU' widget, configured through Google Settings.

The results of the qualitative discourse analysis provided some overarching themes which emerged relating to both 'perceived' and 'actual' use of online Library Services. There was also found to be a correlation across both modular levels of study (Level One = beginner and Level Two = intermediate learner) in two key areas which students often found 'challenging' when considering and evaluating the use and/or perceived use of online Library Services within a 'qualifications based' study experience.

Of the small sample that responded to the survey and given the high level of integration of library resources achieved within Level One (beginner) modules, it was interesting that 45% of students appeared to recognise that they had visited the library. This was also reflected by the relatively high proportion of students (35%) who recognised that the module materials had directed them to library resources. It was also surprising that 58% of students stated that they visited the library purely out of interest during their level one module (Fig.1).

Findings from Level Two modules indicated more students stated that they did not use any online information sources, although it should be noted that this only represented the views of 6 of the 38 respondents. Of those who did respond to this question 63% stated that they were directed there by the module materials while 50% indicated they were prompted by personal interest and 38% in order to carry out research for a Tutor Marked Assessment (TMA) such as an essay. Only 13% responded that their visit had been prompted by a tutor whilst 25% failed to give a rationale for their visit. (Fig.1)

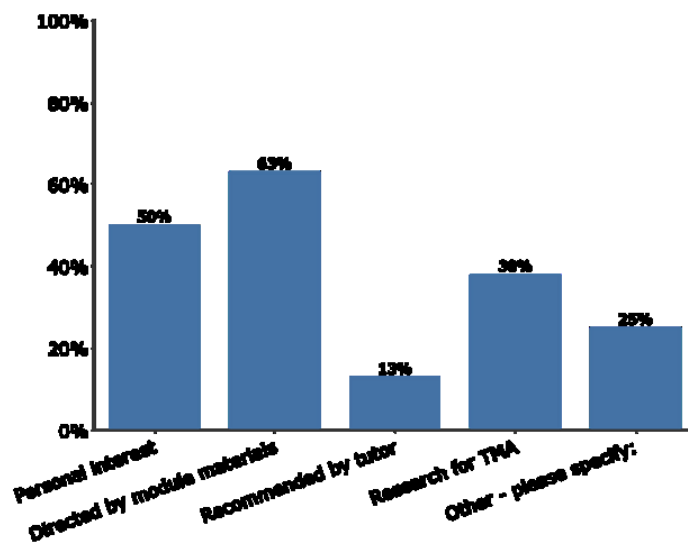


Fig.1 reasons for accessing the online library

Some students' understandings on what was meant by an online library were confused. They associated library with a physical building and actually coming to Milton Keynes Campus to use it. These correlated with research undertaken by Hemmig, Johnstone and Montet (2012) [8]

Studies of the perceptions of distance learners of completely online library services are limited. The distinction between perceptions of student users generally and distance learners is important as studies already cited describe a consistent correlation between the users' experience of the physical library space and the online library (Borgman (1999)[9], Pomerantz and Marchionini (2007)[10]).

Borgman discussed the discrepancy between users' concepts of a 'digital library' and that of the librarians arguing that "the ambiguity of terminology is hindering the advance of research and practice in digital libraries". Pomerantz and Marchionini, argued that in many ways digital libraries really are places in the conceptual sense, and will continue to broaden and enrich the roles that libraries play in people's lives and in the larger social milieu."

Of those students showing a high to moderate preference for using the Online Library, 13.6% indicated a preference for the Library Search facility, with an average of 11.3% indicating a strong to moderate preference for using a specific online library format (e.g. search for eBooks, journals) and 14% indicating a preference for using subject specific searchers (e.g. resources for your study).

In the area of searching for information to support studies or to research an assignment 67% indicated they would begin at Google or other internet search engine with only 11% beginning with Google Scholar. Only 11% of students indicated that they would begin their search via the Online Library, with 21.3% indicating that this would be their last port of call.

In terms of what motivated students to use the Online Library some interesting results were revealed in the qualitative feedback. Some students felt that they were positively discouraged from using it typified by comments like:

"But everything that I did on my first level course, it comes, you see, everything you need ... you've got there. So, at the minute, although I have had a look, I haven't actually had to, to use it for the studying, because I've got everything that I need" (Level One student)

The need to develop and evidence competencies relating to independent study and digital and information literacy skills are not only being increasingly addressed by Higher Education providers through refreshed curriculum initiatives, but are also being actively sought by employers. These types of skills are articulated within sector wide and specific professional competence based standards e.g. the Confederation of British Industry, Nursing, etc.

Qualitative analysis of our findings revealed some interesting student perceptions in connecting and relating use of their Online Library to employability skills. In order to make the most effective use of the

Online Library for study, work and personal use, there is an implicit requirement to employ a range of digital and information literacy skills. These are outlined below.

2) What employability skills do students think they will be equipped with after using Online Library Services as part of their qualification?

Of the seven skills shown in Fig.2 those most readily recognisable in terms of employability were: searching for information independently (88%) and how to evaluate different sources of information (94%). A fairly high percentage perceived 'how to think for yourself' to be important (63%) and 72% stated that summarising information was a skill engaged during online library work. Keeping up to date and continual professional development only featured in 44% of the responses but this may be due to the high level of responses from levels one and two. It is recommended that a similar study be conducted at level 3.

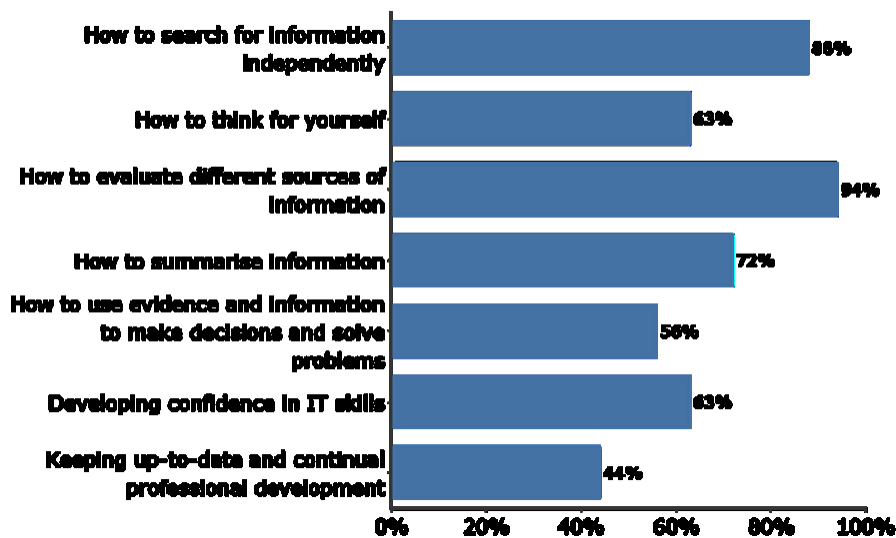


Fig.2 employability skills evidenced through use of the Online Library

Further analysis of the qualitative data further illustrated how many distant learners lack an understanding of how, when and why applying digital and information literacy skills, developed by engaging with online Library Services, could potentially have direct transferable benefits. For example, with equipping learners with valuable employability skills, in developing confidence and ability in using a range of digital sources, skills in criticality and information management.

Although all respondents said that they had contacted a librarian to seek support, only 22% of respondents stated that this contributed to their skills development. This compared to an average of 53% who recognised live training sessions as developmental and an average of 70% who recognised skills development resources on evaluating information (what to trust online) and keeping up to date in your subject area as developing new skills. This suggests that students more readily accept help as developmental if it is branded as such.

#### 4 CONNECTING THE LEARNER WITH THE ONLINE LIBRARY TO SUPPORT PROGRESSION AND ACHIEVEMENT

When reviewing the findings in the context of other research, such as Myer and Land's 'threshold concepts' it is useful to map the areas where students revealed significant challenges in understanding the purpose and role of the Online Library in their learning experience. The impact of the findings is being fed back into learning design considerations within the faculty and has highlighted the importance of designing a coherent, progressive engagement with the Online Library throughout the student qualification experience.

Meyer and Land (2003) stated in their original research that "a threshold concept can be considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which

the learner cannot progress” (p1) More recently, Fister (2015), working with faculty at a small institution in the US, introduced academics to the notion of ‘threshold concepts’ and how they might be used to identify “transformational moments students experience as they learn to work with information regardless of their discipline.”

Fister asserts that “information literacy isn’t just the ability to find and evaluate information. It’s a collection of experiences and skills and dispositions that make our students ready to engage in the world by being prepared to both use and create information”. Referring to recent radical work undertaken by the American Library Association to revise their information literacy framework, Fister points to their incorporation of new concepts such as, “metaliteracy, a phrase meant to broaden the definition of information literacy to include finding, producing, and sharing content in the participatory and fluid environment of the digital age. It emphasizes critical thinking and collaboration in a variety of settings, not just academic ones”.

Significant personal challenges were identified by some students relating to the navigation of complex information spaces such as the Online Library. The website is not a-typical when compared with others in the sector. Several students interviewed articulated a lack of personal confidence in their skills at mastering and exploiting their Online Library to support learning success. Some metaphorically equated the Online Library to a physical library with its spatial representation and relationship with standard book curation and had not been encouraged to exploit the scale, breadth and depth of digital material available to them to support independent distance learning, preferred to rely on material supplied directly to them through their module or qualification website.

Some students also struggled with the concept of ‘independent learning’ per se. They already perceived themselves as following a path of ‘independent learning’ by choosing to study as part time distance learners with the OU, even if they were not required by the module they were studying, to independently access and critique resources beyond those supplied within the module. Where they were not required to discover access and critique resources, some could not understand why not.

“What it means to me is the ability to take and work with the materials that I’ve been given as part of a particular module, part of the degree, but to sit there and to work through it myself, to make sense of it, to think it through and then ultimately to be able to do something with it...So it’s the ability to sort of sit there and work through on my own” (Level One student)

“Whilst you are going from A to B you may wander off to the side to explore something which you’ve seen and catches your fancy for a bit. Providing you don’t linger too long and get back to the main path you’re not going to be late in arriving at your overall destination. That’s what I would say is independent learning and it’s like independent exploring” (Level Two student)

“I wouldn’t say it was the main any use at all. They discouraged it” (Level Two student)

## **5 SITUATING THE FINDINGS WITHIN ‘THRESHOLD CONCEPTS’**

At a very high level, when attempting to map the outputs from our qualitative research to elements defined within the model of ‘threshold concepts’, ‘barriers’ and ‘troublesome knowledge’, it is easy to see a distinctly relevant pattern. At a practitioner level, undertaking such mapping at a far more detailed level could have real potential benefits for improving learning design for distance learners who will increasingly require digital skills to ensure progression and achievement of learning goals. There is scope here for further research.

A key part of the research aimed to investigate whether students viewed their use of the Online Library as helping to develop key employability skills. Developing digital confidence and competence with working online and effectively using digital information management tools and approaches are seen as valuable by employers. The research provided illuminating findings in terms of the distance learners’ perception of the synergies between employability and effective use of Online Library skills and resources.

Use of the online library (Threshold concept)		
'Barriers' Level 1 (beginner)	'Barriers' Levels 1 and 2 (beginner and intermediate study)	'Troublesome knowledge' Levels 1 and 2 (beginner and intermediate study)
Navigation to the online library	Learning how to use the online library	Independent learning
Ease of access and awareness of entering online library		Lateral thinking  e.g. transferring and applying digital and information skills used in exploiting Online Library to employment situations

Fig.3 Mapping findings to 'Threshold concepts', 'Barriers' and 'Troublesome knowledge'

## 6 RECOMMENDATIONS AND NEXT STEPS

Key recommendations were made to faculty as a result of the study which included:

- Many students are interested in engaging with the library, expecting this to be part of their studies, and this indicates there may be missed opportunities to enhance student employability
- Module teams could do more to ensure that students are aware of when students are entering and using library resources
- Module and Qualification websites could be more explicit about their expectations of the role of library skills and resources in relation to students' learning on a qualification and employability skills
- Students lack of knowledge about the library and confidence in using its resources could be improved by more directed activities and materials particularly before and between modules
- Further investigation of students' use of library resources at and between Levels One, Two and Three would show a fuller picture of students' expectations, skills and confidence across a qualification

## 7 FURTHER POTENTIAL RESEARCH

The qualitative and quantitative data used in the project was captured from student responses to pre-defined questions. Recommendations have been made to faculty to triangulate such data in future with broader learning analytics where possible. By adopting this approach it could be useful to match data captured from student perceptions with real usage data. The JISC Library Analytics and Metrics Project (LAMP)<sup>i</sup> have investigated how library analytics can provide a picture of student engagement with library resources through more evidence based approaches. The project is now feeding into the broader JISC Analytics<sup>ii</sup> initiative to provide a more enriched data set for review. Data will necessarily just be one part of the picture and more research is recommended to pursue more insight into the motivations and needs of distance learners to support their learning goals and achievements as we move forward into a world of increasingly connected digital learning.

## REFERENCES

- [1] JISC Digital Students are Different Poster (2015) <https://drive.google.com/file/d/0B4y3qNoTbFdYd0ttEx1STVyeDRFOGdvMVhkeWhMdjZYcVB/view?pli=1> File: JLF0002\_digitalstudent\_POSTERS-ALL-V2.pdf .Further information from: <http://digitalstudent.jiscinvolve.org/wp/> Einstein, A. (1916). General Theory of Relativity. *Annalen der Physik* 49(7), pp. 769-822.
  - [2] Meyer, J. and Land, R. (2003) Threshold concepts and troublesome knowledge: linkages to ways of thinking and practicing within the disciplines. Enhancing Teaching-Learning Environments in Undergraduate Courses (ETL) project, University of Edinburgh: Occasional Report 4, May
  - [3] Hofer, A.R., Townsend, L. and Brunetti, K. (2012) Troublesome concepts and information literacy: investigating threshold concepts for IL instruction. *Portal: Libraries and the Academy*, Vol. 12, No. 4, pp387-405
  - [4] Fister, B. (2015) *The Liminal Library: Making our libraries sites of transformative learning*, LILAC 2015, Newcastle University
  - [5] Silverman, D. (1998) *Harvey Sacks: Social Science and conversation analysis*. Oxford University Press.
  - [6] Abell, J. and Myers, G. (2008) Analyzing research interviews. In, *Qualitative discourse analysis in the Social Sciences*. Wodak, R. & Krzyzanowski, M. London, Palgrave Macmillan.
  - [7] Goffman, E. (1974) *Frame analysis*. New York, Harper and Row.
  - [8] Hemmig, W., Johnstone, B.T. and Montet, M. (2012) 'Create a Sense of Place for the Mobile Learner', *Journal of Library & Information Services In Distance Learning*, vol. 6, no. 3-4, pp. 312-322. Describes a consistent correlation between the users' experience of the physical library space and the online library
  - [9] Borgman, C.L. (1999) 'What Are Digital Libraries? Competing Visions', *Information Processing & Management*, vol. 35, no. 3, pp. 227-43
  - [10] Pomerantz, J. and Marchionini, G. (2007) 'The digital library as place', *Journal of Documentation*, vol. 63, no. 4, pp. 505-533.
  - [11] JISC Library Analytics and Metrics Project (LAMP) <http://jisclamp.mimas.ac.uk/>
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