The use of libraries by postgraduate distance learning students: a mismatch of expectations

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This paper, the first of a two-part study by Kate Stephens, Lorna Unwin and Neil Bolton of the Division of Education, University of Sheffield, UK, reports some of the findings of a survey of UK postgraduate distance learning students' use of libraries. Among the key findings is the influence of course providers' expectations in determining library use. Alongside this is noted the students' perception that course providers frequently underestimate the need for library use that their courses entail. The research shows that the impact of distance learning expansion is being felt by libraries other than those of the host institution, and also that students are making considerable use of public libraries, despite criticism about their adequacy.

Prior to this research, little was known of the library experiences of students registered on distance learning courses in the UK. There have been a small number of user surveys conducted on Open University students, for example, Masterson and Wilson (1975), Wilson (1978) and Swift (1981). Carty (1991), reviewing such studies alongside evidence of provision in Canada and Australia, concludes that provision of services is less than adequate in all three countries but that the UK Open University's method of dealing with the issue has been 'to relinquish responsibility to other libraries'. Similar opinions are expressed by Crocker (1987) and Fisher (1991).

A similar note of concern was expressed by Unwin (1994) in her survey of 350 postgraduate distance learning students at four UK universities. From student responses to the survey it was clear that there is a significant need for further reading which is frequently frustrated by lack of facilities and by a failure of course providers to equip students with necessary training and information. Some UK universities have developed special services in recognition of the library needs of distance learning students; most notably Sheffield Hallam University, the University of the West of England, and the University of Wales at Aberystwyth, and the evidence suggests that theses ervices are found to be useful (see, e.g. Walker and Ward 1994). But the extent to which

the development of special library services can satisfy the totality of students' library needs is unknown and the national picture remains bleak.

Some studies have been carried out on the usage of off-campus library facilities in the USA. Latham, Slade and Budnick (1991) and Slade and Kaskus (1996) have reviewed these studies which are largely concerned with the evaluation of services offered by individual institutions. A Canadian survey of institutional provision has pointed to the need for guidelines in this area (Slade 1988), while a study in Ontario (Burge, Snow and Howard 1988) has pointed to the need for better communication between librarian and distance educators. Yet despite the relatively well-developed notion of off-campus provision in North America and the existence of a biannual conference for off-campus librarians, Slade (1995) has noted a pressing need for research of a large scale and systematic nature. This conclusion has been confirmed by our review of the literature (Stephens 1996).

This absence of information is of concern, both because of the rapidly increasing numbers of these courses as campus-based universities spread their nets for recruitment, and because of increasing pressure for quality assessment of teaching. Adequate access to good library facilities is a criterion that applies to campus-based and franchised courses but it does not seem likely to be any less important for distance learners, despite the Provision of self-study material. Indeed, Unwin (1994) reports that distance learning students wish to see themselves as 'real students', and that using the library is regarded as an important component of an authentic learning experience. Most course providers we have talked to in the course of our research believe that their students need to go beyond the provided material in order to develop investigative skills and adequate subject matter expertise.

The study reported in this paper is part of a larger study in two senses. In the first place, it reports the quantitative aspects of results obtained from the administration of a questionnaire to a large group of postgraduate students and omits the qualitative data relating to student needs and perception; we will report on this evidence in a subsequent paper. Secondly, the questionnaire study itself is only a part, although a major part, of a broader investigation in which, in addition to the student sample, views of course providers, university librarians, and public librarians have been sampled. (Some of the conclusions from our interviews with course providers are reported in Stephens and Unwin 1997.) We have set out in the paper to achieve a number of limited, though important objectives, namely:

- to describe the characteristics of our sample in such respects as age, gender distribution, subject of study, employment situation, and previous university study;
- to survey the accessibility and availability of library services for these students and assess their use of them; relevant variables have included distance from host university (i.e. the university at which a student is registered), distance from nearest university library and from public libraries, extent of reported library use, and comments upon library services and upon course provider expectations of library use;
- to analyse the inter-relationships between these variables to discover which factors are influential in determining library use.

The questionnaire

The questionnaire was designed by the research team in consultation with course providers, librarians and distance learning students.

Questions addressed the following themes:

- characteristics of the respondents, including age, gender, disability and employment;
- course studied and length of study so far;
- expectations regarding library use;
- attitudes towards library use in distance learning;
- length of journey to nearest libraries in both time and distance;
- actual use of libraries, including number of visits to specified types of library;
- the usefulness of material they contain;
- how students consider themselves to have been received at particular libraries;
- detailed information about the facilities and services they have used;
- training received and wanted;
- access to information technology.

The sample

  The process of identifying the sample of students is worthy of a paper in its own right. Ideally one would have wished to sample systematically the total population of postgraduate distance lean-ting students, with a proportionate spread of subjects, providing institutions, geographical location of student, age and sex. This might have been possible to achieve if information had been available regarding the characteristics of the total current population. As it is, data regarding distance learning students are difficult to extract from data on part-time students in general. Figures for distance learning students are partial and difficult to obtain. Despite the recent growth in distance learning, statistical returns from universities have not systematically distinguished distance learning from other part-time students. HEFCE (1994) *Profiles of Higher Education Institutions* gives figures for 1992/3, but does not distinguish distance learning students from other part-timers.
  Indicative figures obtained directly from HEFCE for the year 1992/3 show a total postgraduate distance learning population for England, excluding the Open University, of 5,228, with 49 universities running such courses. Figures from universities in Scotland show a variable pattern of categorising distance learning students. The Higher Education Statistical Agency, which deals with university statistical returns across the UK, does not currently allow extraction of national data for distance learning students.
  The Open University holds a partial and voluntary database, currently in the process of being updated, of providing institutions with some information about levels of courses and numbers of students. This database provided the initial points of contact for this study. It is not, however, a statistical database and contains little information about the characteristics of the distance learning student population. Even as a map of existing courses, it contains some gaps in a rapidly changing field. It does not distinguish courses which are offered entirely overseas, and in some cases does not make clear the level at which courses are offered. For the purposes of our study, a few courses were identified by other means; for example, through a survey of advertisements in the press and on the internet, and by word of mouth.
  Another difficulty arose in defining the limits of the study. With increasing flexibility in modes of delivery of university courses there is an increasing number of courses, which may not use the term 'distance learning', but whose students experience similar problems of library access. For example in the field of Education, off-site delivery of Masters degrees (through, for example, residential weekends) and school-based postgraduate initial teacher training are not usually

categorised as distance learning, but their growth and scope needs to be recognised. The Open University was approached to see if some of its postgraduate students could be included in the survey. Informal contact with course team chairs and OU regional staff suggested that there was a great interest in participating in the study but the OU's central committee which evaluates questionnaires to be used with OU students decided that it was not appropriate. The OU is however included in course providers and librarian interviews to be reported in subsequent papers.

Response rate

Responses have been received from students following 21 out of the 23 courses in 19 universities to which questionnaires were sent. We have received 1,014 responses in all. Of these, 37 are not currently resident in the UK. This report is therefore based on the responses of 977 students. The response rate is in excess of 30 per cent, a comparable figure to that achieved in a Canadian survey of distance learning library use (Burge, Snow and Howard 1989). This figure conceals widely varying response rates between institutions. The figures in Table 1 indicate the Variation.

Representation of subject area

Taking into account the differing response rates between universities surveyed, the sample of respondents (Table 2) reflects the national pattern for a preponderance of students in certain subject areas. The largest group of students is in the area of Management and Business, with Education coming second. The level of returns from Librarianship and Information Science probably reflects the high degree of interest in this project from both course providers and students in this area.

If the subject areas are grouped, the preponderance of Management and Education is clearer (Figure 1).

Characteristics of the sample

Age

Approaching half of the sample falls between the ages of 30 and 40. The age range 25 to 45 accounts for more than 75 per cent of the sample. Numbers tail off slowly after 45 and sharply after 50. These figures suggest that the majority of students are likely to have commitments such as families and jobs which restrict the time available to them for visiting libraries.

Table 1. Variation in Response Rates between Institutions

University	Course	Response Rate
F	Dentistry	63
N	Education, Adult Education and Speech Science	33.6
M	Management and Computer Science	45.3
E	Construction Management	37.1
J	Management	0.04*

Table 2. Number of respondents in each subject area

Subject area	Number of respondents	% of sample
Careers Guidance	2	0.2
Construction	53	5.4
Arts and Cultural Policy	3	0.3
Dental Radiology	10	1.0
Education (various)	112	11.5
Geographical Information Systems	5	0.5
Law	41	4.2
Library and Information Science	78	8.0
Management	480	49.1
Orthopaedics	8	0.8
Public Relations	27	2.8
Special Educational Needs	136	13.9
Sports Medicine	17	1.7
Speech Science	1	0.1
Total	973	100.0

(Number of respondents for whom subject areas was unclear: 4)

Figure 1. Grouping of Subject Areas
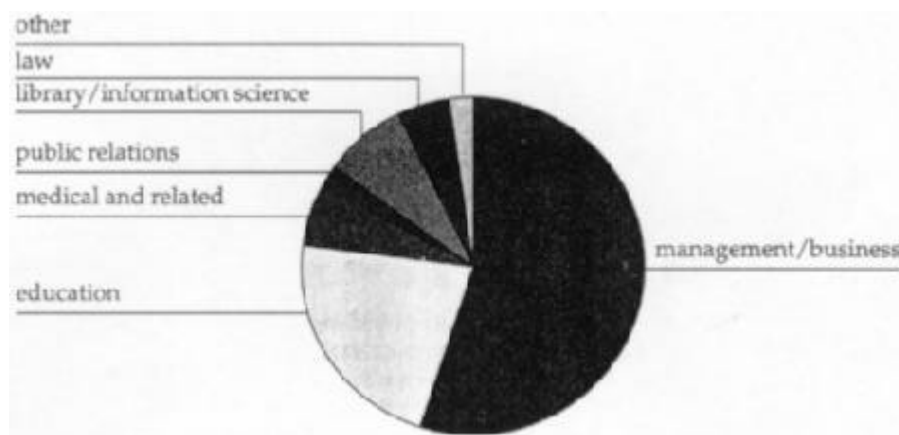
Gender

There are slightly fewer women then men: 42 per cent are female and their distribution varies between courses. While overall 58 per cent of the sample is male, 81.5 per cent of those studying Management are male and only 21.9 per cent of those studying Education are male. There is a preponderance of female respondents in Education and in Librarianship and Information Science,

which is out of proportion to the relative numbers of males and females in the overall sample. This discrepancy is highly statistically significant. (ChiSquare = 285.4; d.f. = 3; p<0.00001.) Any analysis of varying patterns of library use between different subject groups will clearly have to take into account the possibility of differences due to gender.

Employment

The vast majority (95.9 per cent) are in some kind of paid employment, and most of these work full time. This reinforces the point made above about other commitments and time available for library use.

Possession of undergraduate degrees

A significant minority of students (23.7 per cent) do not have an undergraduate degree. This is worthy of note because such students are unlikely to have had any experience of using a university library and indeed they may never have visited a university library before undertaking their present course.

Availability and use of library services

Distance from host university library

The average distance which a student would live from their host university library is 141.4 miles. The greatest distance is 400 miles and 7.6 per cent say they live 300 miles away or more. The most frequently estimated distance is 100 miles. Half of the sample say they live 105 miles away or less. A substantial minority actually live rather close to their host library: 17.6 per cent live 50 miles away or less.

Distance from nearest university library

The majority of students (75 per cent) live 25 miles or less from their nearest university library, with half of the sample living less than 10 miles away. A small number live at a great distance. 13 respondents live 100 miles away or more; one lives 300 miles away.

Distance from public libraries

The majority (75 per cent) live five miles away or less from a public library. The greatest recorded distance from a public library was 45 miles.

Summary of implications of distance

The data suggest that geographical remoteness from library facilities in general is only an issue for a very small number of students. The geographical accessibility of the public library service is an important factor and, as we see below, students are making extensive use of this service despite a number of comments about its shortcomings and issues of underfunding. In addition to this, university library facilities are not as geographically remote as the idea of distance learning

might suggest. The vast majority of our sample live 100 miles away or less from their host university library and 50 miles away or less from their nearest university library.

Variations in use between libraries

The following data show that the host library is the least used, with extensive use being made of nearest universities and specialist libraries. It is to their local public library, however, that students are most likely to turn for support.

Table 3. Total Number of Visits to Different Types of Library

Type of library	Number **of** visits
Host university	**494**
Nearest university	**1026**
Public libraries	**1538**
Specialist libraries	**1066**

Extent of reported use

The majority (72.5 per cent) said that they had already used library facilities for their course. Of those who said that they had not used a library so far, 61.5 per cent said that they expected to do so in the future. In all, 904 students said that either a library had already been used for the course, or that one would be used in the future. This represents 93 per cent of the sample.
The number who have used a library at least once in the last three months is rather smaller than those who have used a library at some time for the course, but still represents approaching two-thirds of the sample.

Use of libraries: course requirements and student needs

Interviews of course providers have clearly shown that some believe that their students should not need to use libraries because course materials are intended to be entirely self-sufficient. Even where library use is considered commendable, some course providers insist that a course can be successfully completed without using a library.
In our questionnaire we wanted to check how far this message comes across clearly to students. When asked, 'Is it a clearly stated requirement of feel to supplement course material with additional reading. Whilst 37.9 per cent of students say that course providers make the need to use libraries clear, if the 'no' and 'don't know' categories are combined, they amount to 62.1 per cent of the sample. Asked whether they feel the need your course that you make use of libraries?', the responses shown in Figure 2 were given.
However, when asked whether the need is felt to supplement provided course material with additional reading, the answers shown in Figure 3 were given.

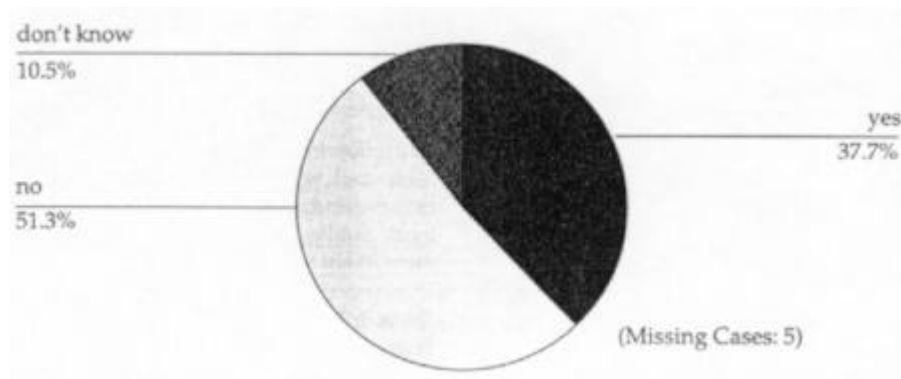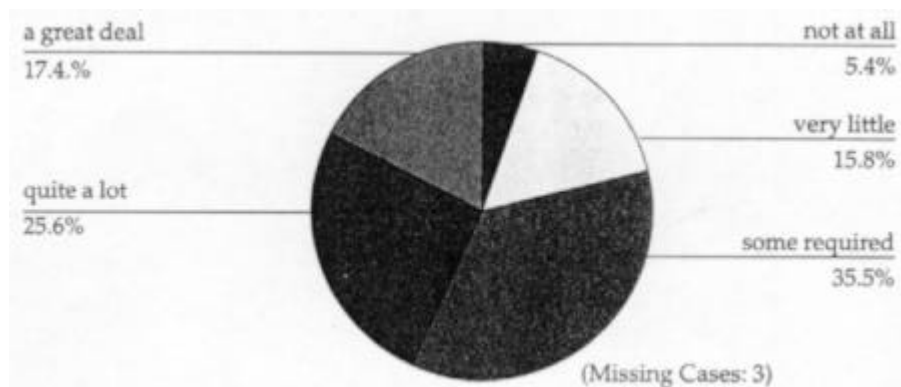**Figure 2. Responses Concerning Requirement to Use Libraries**

Figure 3. Responses Concerning Need to Supplement Course Material

Mismatch of expectations

The charts above show a serious mismatch between what students believe course providers expect, and the extent of the need they actually to supplement course material with additional reading, 78.8 per cent of the sample say that they need to do either 'some', 'quite a lot' or 'a great deal'.

Interestingly, the majority (67.4 per cent) of students who either feel that the need for additional reading is not made clear, or who are unsure whether it is clear or not, find that they *do* need to do additional reading, at least to some extent. This suggests that course provider expectations do *not* predict the need that some students will feel to use libraries: even where courses do not seem to be expecting students to use libraries, large numbers of students feel the need to use them.

Some determinants of library use: a preliminary analysis

Use of the library is, not surprisingly perhaps, related to subject of study, with Education and Library and Information Studies students making more use of libraries than other groups. Students who have visited the library in the last three months are also likely to have been clearly informed that library use is a course requirement and to have received training as part of the course. An experienced need to supplement course material and a perception of the usefulness of

material at libraries other than the host library are also significant factors. Women are more likely to have visited a library within this period than men. (Data regarding these points are fully presented in the final project report by Unwin, Bolton and Stephens (1996).)

There is a complex interaction of factors here. Whilst Education and Library students make more use of libraries, as assessed by this one criterion, we know that there are more women in these subjects than in the other large subject group in this sample, Management. Whichever is more important - subject or gender? And what of the importance, relative to these, of course expectations and training?

Adequate answers to these questions require a full and complex statistical analysis which is beyond the scope of the present paper. However, an indication of the overriding significance of course provider expectations on extent of library use, particularly libraries other than the host library, is suggested by analysing the interrelations between course provider expectations and library use within different Management courses. Whilst Management students appear to be making less use of libraries than other groups, we find that within this subject group, use varies with the expectations of the providers of particular courses.

Of the whole sample, 72.5 per cent report that they have used a library for their course and, on average, 61 per cent of Management students have used a library. Yet, for one Management course, where provider interviews confirm that library use is not expected, only 25.5 per cent of 51 respondents have used a library. While it is interesting that a substantial minority do use libraries, even when it is not expected, this low figure shows that course provider expectations do have an impact on student behaviour even within subject groupings.

Summary and conclusions

The sample of 977 students on which this analysis is based reflects the national pattern of predominance of Management and Education in postgraduate distance learning, with small numbers of students in a wide range of other subject areas.

The vast majority of students (75 per cent) live 25 miles or less from their nearest university library and so could, theoretically, be said to be within reasonable travelling distance of higher education library resources. This finding, however, has to be viewed alongside other findings which, together, provide a basic profile of distance learning students. That profile indicates that the typical postgraduate distance learning student is in full-time employment, aged between 30 and 40, and has family commitments which impact on his or her ability to make time to travel to and use libraries.

The majority of students live a considerable distance from their host university (average 141.4 miles) and so have to rely on libraries closer to their home or workplace.

Despite the fact that the majority of students are within reasonable travelling distance of a university library, they make at least as much use of their local public libraries.

The questionnaire has revealed a significant discrepancy between the expectations of course providers regarding student use of libraries and the actual experience of the students themselves. Whilst the majority of course providers appear to be stipulating that students do not need to use libraries as part of their course, the majority of students report that they have found they need to supplement their distance learning materials by consulting additional material in libraries. The evidence that some 10.5 per cent of students report that they do not know whether their course providers require them to use libraries highlights a finding from our interviews with providers that some of them had not considered the issue of library use when planning their distance

learning courses. Combined together, these findings reveal the need for an improved understanding of the learning processes and experiences involved in distance learning and for improved communication between course providers and students. In addition, these findings should be viewed in the light of concern from librarians we have spoken to during the research that they are often not consulted by academics in the planning of distance learning courses.

The survey supports the following points concerning relationships between variables:

- Subject of study is a key variable. It is related to sex, with males predominating in Management and females in Education and LIS; to having received training in library use; to course provider expectations; to the need felt to use libraries; to the number of library visits made; and to beliefs about whether or not course materials should be self contained. Generally, Education and LIS students are making more use of libraries than other groups;
- Students who have received training in library use are more likely to expect their courses to require use of libraries and reading beyond the course material;
- Use of libraries is related to perception of the usefulness of the material they contain. Judgements about usefulness of this material seem to have an impact on extent of use;
- While students who feel a stronger need to supplement course material are making greater use of nearby universities, the impact of this need is not being felt in terms of visits to the host library;
- Course provider expectations seem to have an overriding influence on extent of library use, particularly libraries other than the host library. Thus, while Management students appear to be making less use of libraries than other groups, this use will vary with the expectations of the providers of particular courses. The apparent influence of sex and age on library use seem to be over determined by subject of study and course provider expectations.

In general terms, there are, perhaps, two major themes which emerge from this analysis. The first is the significance of course provider expectations, both in their role in determining student use of libraries and in their underestimation of the need experienced by students to use them. The second is the use that postgraduate distance learning students are making of their local public libraries. Such findings have significant implications for the funding of courses: for university libraries and the services they can and are prepared to offer; and for public libraries at a time of extensive cut-backs to local authority budgets. There is an urgent need, therefore, for consultations amongst the various stakeholders (course providers, librarians and students) and planning beyond the level of individual universities if students are to be adequately supported in the use they make of libraries.

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