

## Towards an Information Rich-Society: electronic publications in UK public libraries

Colette Coles

Department of Information Science, The City University, London, UK

### Abstract

Discussed are the findings of a PhD research project "Use and non-use by library users of open access CD-ROMs in UK public libraries". The paper will focus mainly on the analysis of data collected during 1997 from a number of public libraries in the UK.. The findings cover 1) CD-ROM provision: details of which CD-ROM publications and type of hardware and services currently available for public use; 2) User profiles: a demographic profile of users; 3) CD-ROM usage: looks at the titles users have searched.

The conference provides an opportunity to present the findings of a study<sup>1</sup> into people's use and non-use of electronic media in UK public libraries. Outlined is the current situation regarding the implementation of electronic publications in public libraries, with particular emphasis on the provision of CD-ROM publications.

The study is concerned with two important aspects of electronic publication in public libraries.

1. *Role of public library*: does the public library offer the right environment for the successful take up of electronic publications? Can public libraries promote electronic publications or is the competition from elsewhere, such as the home computer or the college resource centre, too great? Can public libraries nurture IT literacy? Can electronic media be successfully implemented in public libraries when the users are so diverse and are not trained information handlers.
2. *End users and IT*: with the rise of self-service information, how do 'ordinary' people handle new forms of information? Are people turned on or off by electronic media? If the Information Society is to be an Information Democracy, with active information citizens, it is essential to understand how people relate to IT resources, otherwise it could become a society of information-literate and information-illiterate.

### CD-ROM provision

CD-ROMs first appeared on the UK public library scene in the very late 1980s. In 1989, only 29% of all library authorities had CD-ROMs, none of which were for public use (Batt, 1990). Over the following 8 years the landscape changed with more library authorities having CD-ROMs, as well as the types of access changing from staff-only to public access. By 1997, 65% of library authorities had CD-ROMs of which only third provided open access to the CD-ROMs. Nearly half the authorities had CD-ROMs for staff only<sup>2</sup>.

At the end of 1996, all library authorities known to have open access CD-ROMs were surveyed to establish levels of CD-ROM provision. In all 52 sites from 14 Authorities across

---

<sup>1</sup> Study is part of PhD "Factors affecting the use and non-use of open access CD-ROMs in UK public libraries" based at City University, London. For details please contact author (en646@soi.city.ac.uk)

<sup>2</sup> Most of the data for these statistics were gleaned from surveys by Chris Batt, William Shields and author

England, Wales and Scotland participated in the survey. The disparity between the CD-ROM services that authorities provided was perhaps the most striking thing to come out of the survey. With some Authorities, having sites with only one CD-ROM workstation with a handful of titles to some who had networked CD-ROM workstations across the whole of the authority providing an extensive range of titles to all library users.

### ***Date CD-ROM services started***

Of the surveyed sites 5% first started offering open access CD-ROMs in 1990. The momentum didn't gather pace until 1993-1995 when 62% of sites joined the bandwagon and made CD-ROMs available for public use. Public libraries certainly dragged behind academic libraries who have much longer well established CD-ROM services.

### ***Types of workstations***

The standard hardware was stand-alone, all but 4% of sites having stand-alone CD-ROM workstations. Nearly a quarter of sites had networked CD-ROMs. Networks were often a natural progression from stand-alones once a library started increasing the number of CD-ROM titles. Most of the networks were LANs, only very few sites had CD-ROMs networked between sites. This was usually the case in rural areas.

### ***Number of workstations***

The majority of sites (70%) had only 1 or 2 workstation available for public use. Only 2% of sites had 10 or more workstations. For many sites it was the physical limitations of the building that restricted the number of workstations. Bar removing the book-lined shelves, there was little opportunity to expand facilities.

### ***Internet access***

The survey was always interested in which other electronic facilities, such as the Internet, were available to the public. Very few sites, just over 10%, had open access Internet available. This figure will have changed since the survey in December 1996, as there have been recent initiatives and projects promoting Internet connections in public libraries.

### ***Number of CD-ROM titles***

There was great variety in the number of titles available at with 35% of sites having only 1-10 titles, reflecting sites with only a few workstations. Just under half however did have between 11-20 titles. The number of sites with large number of titles dropped with only 13% having with between 21-40 titles. Only 6% of sites had over 40 titles.

Overall the 52 surveyed sites had between them 829 copies of CD-ROM titles. This included up to 225 individual titles covering many subjects and of varying quality.

### ***Distribution of Titles across sites***

There appeared to be only a few titles that showed signs of becoming part of a core CD-ROM library service (see Table 1). Otherwise the selection process was very much down to individual sites, with 80% of the titles being selected by 1-5 sites. There was little in common between selection across the sites. Dorling Kindersley certainly dominated the number of titles which were most widely distributed. Perhaps a reflection on their good quality children's CD-ROMs at affordable prices.

**Table 1 Top most distributed titles**

<b>Titles</b>	<b>Publisher</b>	<b>% of sites with titles</b>
World Reference Atlas	Dorling Kindersley	52
Way Things Work	Dorling Kindersley	48
Encarta	Microsoft	44
Groliers Multimedia Encyclopaedia	Groliers Interactive	44
History of the World	Dorling Kindersley	42
Ultimate Human Body	Dorling Kindersley	42
Dinosaurs	Media Design Interactive	40
P. B. Bear's Birthday party	Dorling Kindersley	40
Information Finder	World Book Inc	37
Encyclopaedia of Science	Dorling Kindersley	35
Stowaway	Dorling Kindersley	35

### **User profiles**

The next stage of the study was to find out who was using the CD-ROMs. Public library CD-ROM users are a mysterious group of people as unfortunately there have been very few surveys done into end-user searching in public libraries (see Wiksten 1990; Batterbee & Nicholas 1995). Many CD-ROM end-users surveys have been done on students, academics, medical practitioners etc. But results from such surveys cannot be easily transferred to public library users, as they are an amorphous, non-information trained and diverse user group.

The findings discussed here are from a survey of CD-ROM users, using self-completed questionnaires. Twenty three library sites were sent the questionnaires and eighteen returned a total of 144 completed copies. Though interviews and observation would have been preferable it was impossible to visit all the sites and spend enough time interviewing CD-ROM users. As a consequence, there was very little control over the way the questionnaires were distributed in each library or how they were completed. The effectiveness of the questionnaires was also dependent on, not only the goodwill of the library staff, but in whether or not staff interpreted instructions properly, as in the case of the librarian who completed the questionnaire herself!

### **Demographic profile**

- *Gender*: there were slightly more female (53%) respondents than male (47%). This is perhaps surprising as IT tends to be dominated by male users.
- *Age*: half the respondents were 16 or under. This astonishing number is accounted for not only by CD-ROM's popularity with children but by the fact that many CD-ROM services are child-orientated. Also the fact that the questionnaire's front sheet had a cartoon character on it, possibly played a part in why so many under 16 year olds completed it. In fact some of the younger respondents had coloured in the black and white character! But CD-ROMs were not used exclusively by young people, nearly a quarter of users were between 30-49 years old.
- *Ethnic origin*: It was decided to have very broad categories for ethnic origin, while giving respondents the opportunity to be more specific if they wished. With the questionnaire going to so many different areas, each with varying different ethnic groups a more specific list would have had taken too much space on an already dense questionnaire. Users ethnic

profiles reflected the national make up with 92% of respondents describing themselves as white. Of the ethnic groups more Asians (4%) were represented than Blacks (2%)

- *Occupation:* nearly half the respondents were in education reflecting the number who were children. The second largest group were in employment (23%). Lowest user groups were those looking after the home and those who had retired.

### ***IT background***

The study was particularly interested in respondents IT backgrounds. One to establish how IT literate users were and second to establish what sort of access users had to IT.

- *Computer ownership:* 67% of CD-ROM users had access to a computer at home. This is higher than the national average which is a quarter of households have a computer (Office of National Statistics, 1997).
- *IT used:* most of the respondents had used standard software applications, such as word processors, spreadsheets and databases. Games were very popular with 80% of respondents having used computer games. Again this reflected the young user profile. A significant number of respondents (41%) had also used the Internet.
- *Places Internet was used:* respondents were asked where they had used Internet, only 13% of users gave details. The largest percentage (28%) had used Internet at University, with home use and office use both following with 22% each. Very few respondents (6%) had used Internet in public libraries.

### ***CD-ROMs used elsewhere***

83% of responded had also used CD-ROMs elsewhere (see Table 2), leaving only 17% of users who depended exclusively on public library for access to CD-ROMs. Most of places respondents had used CD-ROMs were either at school or at home.

**Table 2 Alternative places for CD-ROMs use**

<b>Location</b>	<b>% of responses (n=185)</b>
School	32
Home	27
College	12
Workplace	12
Other public library	10
Other	7

### ***CD-ROM usage***

The study was also interested in which CD-ROMs users had searched. Respondents were asked whether or not they had used the CD-ROMs that day and if so were asked for details about their search. The findings of which will be presented at the conference.

In conjunction with the CD-ROM questionnaire, sites were also sent log sheets for users to complete, simply asking users to list what CD-ROMs they had used that day. 41 library sites returned 144 log sheets.

### ***Titles used***

122 titles were searched 1073 times during a week's period at 41 different sites. The main categories of titles used were very broad (see table 3).

**Table 3 Titles used by category**

category	number of titles searched	% (n=1073)
General encyclopaedia/dictionaries	203	19
Children's educational (junior to secondary)	169	16
Newspapers/journals	147	14
Business/politics/law	116	11
Children's educational games (pre-school to infant)	108	10
Arts/literature/music/languages	70	6
Bibliographies/index & abstracts (general)	53	5
Travel/tourism/telephone directories	32	3
History/genealogy	24	2
Sciences (adult)	24	2
Miscellaneous/not specified	128	12%

The most widely used individual title was Encarta which was used 153 times compared to the next highest used titles which were The Guardian and PB Bear, both used 50 times each. The titles reflect the main user group which was young people: schoolchildren using encyclopaedias and newspapers for school projects, younger children playing educational games. There was high use of business titles, reflecting the number of working adults who use these titles for work-related research.

### Conclusion

Presented in this paper were the initial findings of various surveys which looked at several aspects of CD-ROMs in public libraries. Public library authorities differ greatly in the levels of CD-ROM services they offer their users. Some authorities appear to be fully committed to going down the IT road while others have only made an initial small step along the road. Users are predominantly young and in education. A very high number of respondents had access to a computer at home as well as having experience of a wide range of IT applications. A wide range of titles were used by library users, with encyclopaedia, children's education material and newspapers as the common categories used. These initial findings raise issues which will be explored at the actual conference.

### References

- Batt, Chris 1994 *Information Technology in public libraries*, 5th edition, library Association Publishing
- Batterbee, Colette & Nicholas, Dave 1995 *CD-ROMs in public libraries: a survey*, *Aslib Proceedings*, 47 (3), March 1995, 63:72
- Office of National Statistics 1997 *Family Expenditure Survey*, HMSO
- Shields, William 1996 *Union list of CD-ROMs in London libraries*, 2nd edition, Joseph Clarke
- Wiksten, Sten 1990 Learning the hard way: a public library's experience with CD-ROM, *The Electronic Library*, 18 (2), April 1990:107:109