A wordprocessor at the Wolfson School of Nursing Library

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Although the Wolfson School Library has a small budget and limited stock and staff, information requirements are by no means small. They are often very varied and in addition a considerable amount of the librarian's time is spent in promoting and developing user education programmes. Preparation and updating of bibliographies, reading lists and library handouts are major undertakings. As a result library housekeeping has to be kept to a basic minimum.

In 1981 the library had three staff including a qualified librarian. Bookstock (excluding periodicals) was some 20 000 volumes, and apart from the main library at Vincent Square there was a site library at St Stephen's Hospital. The library was adding some 5500 volumes per year to its stock.

After looking at various methods of catalogue card production, as well as national cataloguing schemes, in 1981 we decided to investigate the application of new technology. After a thorough scanning of the literature, discussion with various specialists in the field and special libraries using wordprocessors, a decision was made to select a wordprocessor. Armed with a list of requirements we identified four machines which met these. Further investigations brought this list down to two, and eventually Wordplex was chosen.

During our search for a suitable machine two library staff attended demonstration sessions to gain hands–on experience and to give their opinion. Involvement of the operators at this early stage was considered to be an essential step in a successful selection process.

While the selection process was going on the Library was designated as the North-West Thames nursing libraries co–ordinating centre and one of the co–ordinating responsibilities was to set up a co–operative cataloguing service for the nursing libraries in the region.

The total bookstock in the nursing libraries in the North-West Thames region was calculated to be well over 100 000 volumes (1978 figures), a fact which had influenced our choice of wordprocessing system. The wordprocessor was needed for the following areas covering regional requirements as well as those of the Wolfson library.

Stock control and housekeeping

Ordering books
Pre-order stock checking and stock editing
Chasing unfulfilled orders
Budgeting
Maintaining classified catalogue and union catalogue (author)
          –periodical subscription records

Indexing periodical articles
Preparing–catalogue cards
       –union list of periodicals
       –subject headings to periodical articles and regular updating
       –subject index to classified catalogue and regular updating
       –authority file to classified catalogue and regular updating
Standard letters, minutes, reports, etc.

Reader services

Preparing–new acquisitions lists
       –select bibliographies
       –current awareness bulletins
       –library publications
Communication with other databases.

The Wordplex system was delivered in March 1982 and comprises a WPX 4-80 central processing unit (CPU) with two 16 megabyte (MB) discs, a WPX 80-3 stand alone/linked wordprocessor and printer.

    After basic and some advanced training of the library staff, followed by some initial experiments the actual input on Wordplex started in October 1982. Instead of dealing with one job at a time we decided to start several related jobs together. This caused some initial confusion and frustration. Staff soon realized that any small input error could inhibit correct retrieval, particularly in the less frequently used fields (i.e. retrieval by date, ISBN, order number, etc). As printouts using these fields were not often required mistakes remained unnoticed. So far we have had two major revisions of the files to correct earlier mistakes.

Present applications

Books

A book order file (Fig. 1) is kept on floppy discs (80–3) in A–Z author order. Each entry on this file has 19 retrievable fields. Of these 11 hold bibliographic information and 8 hold order/administrative references.

1   Class number
2   Author
3   Second author
4   Title/edition
5   Year of publication
6   ISBN, publisher and pages
7   Price
8   Series

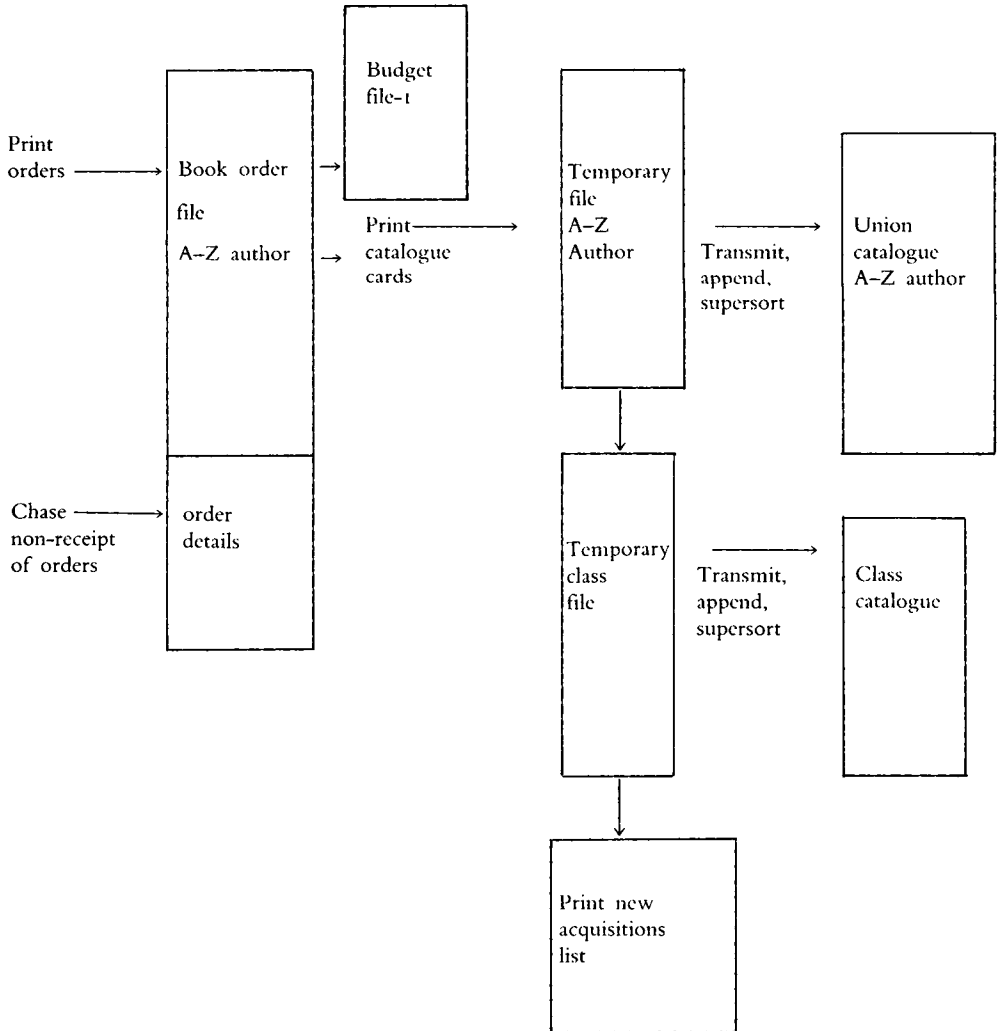**Fig. 1.** Book files and related activities on WPX.

9 Descriptors 1
10 Descriptors 2
11 Descriptors 3
12 Location
13 Accession number
14 Source
15 Date of order
16 Order number
17 Date received
18 Supplier
19 Reminder

The essential information from bibliographic fields (2, 4–7) is used to print out order forms and the print/insert facility is used to incorporate the supplier's name and address. The order details (items 15, 16 and 18) are then input into the order fields. These fields are used to find unfulfilled orders and can be used to chase the suppliers, using the print/merge facility. Information relating to the cost of a particular order is then transferred to a separate file, Budget 1.

On receipt of books, cataloguing and classification details are added/amended to the appropriate field. Catalogue cards are then printed using selected prompts for various headings (author, class, cross reference, added entry). On completion of catalogue card printing the printed entries are withdrawn from the existing order files and transferred to create a new temporary file.

This temporary file is used in the following ways:

1 A copy is sent to WPX4, appended to the existing file and sorted.
2 A sort command is used to convert this into a classified file after which:

    (a) a copy of this classified file is appended to a classified catalogue and sorted

    (b) a printout is made, edited if necessary, for a new acquisition list. The file is then deleted.

To sum up, at this stage using the same entry we are able to (Fig. 1):

Order books
Chase unfulfilled orders
Budget
Print catalogue cards
Print new acquisitions lists
Add to class catalogue
Add to union catalogue.

The union catalogue

The union catalogue is increasing all the time, and in the last 12 months some 3500 entries have been added, requiring splitting of this file several times to keep it to a WPX manageable size.

Increasingly a classified catalogue was found to be necessary for quick subject searches related to various bibliographical and managerial activities. The union catalogue is in alphabetical author order. As sorting these files frequently into classified order for each search was considered to be an unnecessary waste of wordprocessor time, a separate classified file incorporating essential bibliographical details is also being maintained.

The files now cover all late-1982 and 1983 additions of six nursing school libraries, and it is possible to print out a list of all items in any order desired. So far a complete alphabetical author list and a classified list of all entries have been printed out. It is hoped in future to produce the following from the union catalogue:

    (a) Select bibliographies using 3–4 constant fields and 4–5 variable fields.

(b) Printout of any one library's total holdings.

(c) Printout by the year of publication for stock editing purposes.

Periodicals

In 1983 the wordprocessor was used to compile both a Union List of Periodicals held by all nursing libraries in the North-West Thames region and individual libraries holding lists using the Union List entries. Finally, periodicals subscription details for the Wolfson Library were recorded. This file enables the library to assess the supplier's performance and to decide whether to continue with a particular subscription.

To date there has been no in-house periodical indexing as some confidence in using book files was needed before setting up the complete retrieval mechanism which would be required for this. Having had 18 months experience we now intend to go ahead with the indexing which is at present done manually on cards. The plan is to input up to three authors, title, date and journal references, and up to three descriptors and reference number up to a total of 10 fields. Entries may be searched through any of these fields and weekly/monthly indexes prepared and distributed locally and throughout the region as a current awareness publication. Each year we expect to add some 6000 entries. A yearly cumulation will be printed and the complete file discarded to make room for the next year's entries.

Subject index and authority file

Both lists have been prepared/updated and the wordprocessor has been a great help in the production of these.

Accounts

Two files are proposed to keep account of committed orders (at present Budget 1) and actual spending from different budgets. Experiments have taken place and implementation is planned for the 1984–85 financial year.

Library handouts

Several handouts have been updated and new ones produced using the wordprocessor, and it is intended to prepare others as they are an important means of communication with users.

Reports, minutes, newsletters, etc.

These are regularly prepared as editing is easy. Most are deleted after a master/final copy is made. Some reports are kept to be used in other formats. Several editions of the Nursing Interest Sub-Group (NISG) newsletter and Library and Information On

Nursing (LION), a current awareness publication of North-West Thames Nursing Libraries have been successfully produced.

Letters

Library standard letters are numerous and a wordprocessor can be a great help in encouraging a better response by personalising circular letters to individuals. At present the machine is so heavily used that this facility cannot be used to full advantage.

Communication

The WPX 80–3 is able to communicate with a range of other machines and as an intelligent terminal to many databases available. It is proposed to extend the use of the machine in this way to increase the range of services to users.

Copying files

It is essential while using any sort of magnetic file to keep an archival copy of the contents. Corruption of a disc, hard or floppy, is an unpredictable reality and on no account should chances be taken by not having a copy of the work. For our two hard discs we have two generations of back up on the removable 16MB hard discs and this copying is done whenever new material is entered on the database. Copying of floppies is also done and we have one copy of every floppy in use.

The VDU, keyboard and discs

Ergonomically the Wordplex VDU and keyboard were liked by all members of the selection team. The large character size on the screen is pleasing to look at and after 18 months of use our operators have not experienced eye strain or fatigue during or after using the machine. The height, tilt and brightness of the screen is operator-adjustable. The standard QWERTY keyboard is detachable from the screen and therefore allows the operator to choose a sitting position. The additional function keys which are situated on both sides and on top of the keyboard are easily accessible and easy to use.

WPX 80–3 takes two 5¼″ double-density, double-sided floppy discs, each with a capacity of 25 000 characters. Page size may be varied according to the use, up to 254 characters wide or 128 lines long. A document may be any number of pages long, and can reach up to the maximum capacity of a floppy disc.

The CPU houses two 16MB hard discs, one of which is removable. The maximum size of a file on WPX 4-80 could be 250 pages long. Once again page size can be determined according to the further use of the data input. WPX 4-80 can be 128 characters wide or 83 lines in length. Document transmission between 80-3 and 4-80 is easy and the discs are all soft sectored to allow maximum flexibility in use of space. Opening and deleting a file is simple on both 80-3 and 4-80, the file name automatically being indexed or deleted.

The printer

The printer is a letter quality bi-directional Qume model with changeable daisy wheels for different type faces. The 'emboldening' facility allows printing in bolder characters and this facility is often used in our various reports and publications for emphasis. The printer hood has reduced the printer noise considerably. A 'hopper' feeds the single sheets and a 'tractor' feeds the continuous stationery automatically. The printer is also used for printing orders on official hospital forms containing six self-carbonated sheets.

Several jobs can be sent to the printer at the same time and a queue system for printing operates. Operator intervention is possible to cancel or make alterations in the printing queue. This facility only operates in conjunction with 4-80.

Security

The WPX 4-80 offers a high degree of security by having three levels of passcode. This means that some confidential documents could be kept on the 4-80 suitably coded without any security problem.

Wordprocessing functions which have been found to be particularly valuable

Editing text easily
Printing multiple copies of items and printing queue for several jobs
Sorting information into alpha-numeric order
Searching files for a required item
Formatting one entry in different ways, i.e. it can be selective in the information it
    retrieves for printing or in creating new files
Highlighting and saving paragraphs.

Problems we have encountered so far

1 The two machines in use, even though compatible, have several differences which were confusing to start with, i.e. different page sizes (both in length and width), different file length capacity, and some differences in functions and operator aids.

2 As the files are enlarging all the time, especially on the 4-80, appending, sorting, splitting files, etc, were becoming increasingly cumbersome and labour intensive procedures. Creation of 'chain files' (one command activating a chain of commands covering a set of predetermined activities) has helped to overcome this problem.

3 Some automatic methods on WPX 4-80 are not popular with operators as, in their opinion, these are more irritating and labour intensive, e.g. Global change and replace where operator intervention is necessary every six pages. By contrast WPX 80-3 is very easy in this area. Global change and replace is a facility whereby the machine can be instructed to look for and replace automatically throughout the document, a set of up to 19 characters with another set of characters, not necessarily of the same length, exactly

as instructed, e.g. WSN to Wolfson School or Document to Report. Apart from ordinary editing functions, we also use this facility to insert/delete print instructions for certain types of printing. This facility is very useful for dealing with changes in large files. Change of a particular class number to another class number would be possible in this manner as we are going through a reclassification programme.

4 While using 'Global change and replace' on WPX 4-80 we often get the message 'index full – can't write', after every 20-odd pages. This means an attendant is needed all the time as the machine cannot cope with writing a file alone. In our case eight files each between 150 to 200 pages long means that considerable staff time is wasted in writing the files. As the files are getting bigger the problems caused to the staff are increasing. Wordplex staff are looking into this and hope to come back with a solution.

5 Any 'sort' or 'chain' command on WPX 4-80 necessitates the system being brought 'down'. This means that all workstations and printers linked to the CPU have to stop work until the sort/search is complete. The searching process is comparatively slow with an 8-bit processor and the time spent is further lengthened if the search command is complex. This is a matter of concern from the point of view of cost effectiveness.

6 The space on the hard disc is filling up quite fast, despite the policy of deleting unwanted files. As the writing is sequential the deleted items leave small gaps, while new items fill up further space and this gives rise to a false disc capacity reading. A tidying up of the files into a compact format could be done by Wordplex and we are waiting to see how much this process increases the empty space reading of a disc which at present has only 32% empty space left. So far we have found the sales and support staff of Wordplex very helpful.

Conclusion

Technology is advancing all the time and new machines and methods are coming out. However, no one can wait forever for the ultimate machine. Technology is constantly providing newer opportunities and if these are not taken we are going to move one step back every time the technology moves one step forward. We are glad that we have had the opportunity to have hands-on experience and to think 'automation'. We have been and will continue to be able to introduce improvements in many areas of library work, some of which would not have been possible given the existing staff position. Some say new technology reduces staffing needs: our experience is that it does not, but it increases the efficiency of a library beyond any doubt.

Acknowledgement