

COMPUTER APPLICATIONS

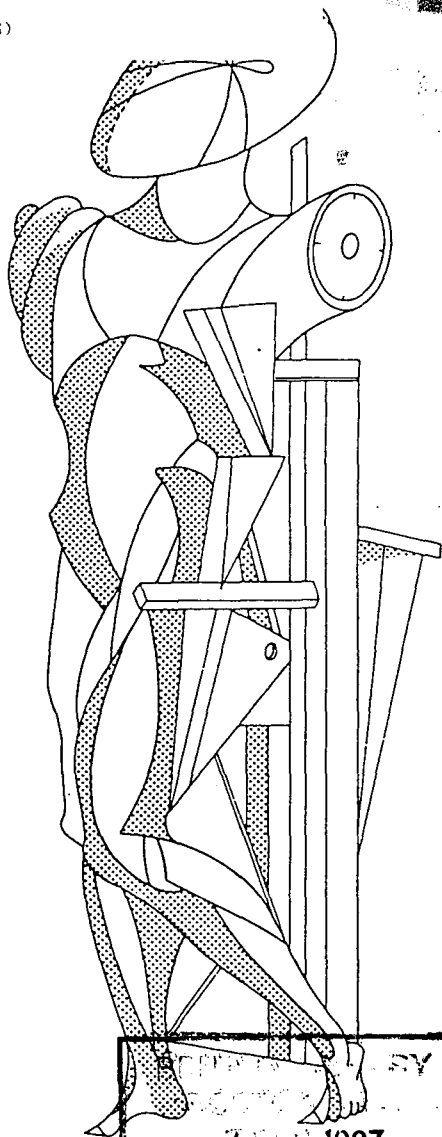
IN SOCIAL WORK

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EDITORIAL

This Edition marks the end of the first year of publishing CASW and I must thank all the many people who have helped to make this possible especially the Editors and of course you the reader I would like to welcome Bryan Glastonbury, Mike Ferriter and Howard Sharron on to the Editorial Team.

Could I remind you all that 1986 subscriptions are now due. We have been forced to increase our rates but we have maintained a personal subscription rate which is at cost price. If they do not already do so, please could you encourage your agency to subscribe in order that we can make further progress improving the Journal.

For the next edition of CASW we hope to have a new improved format and the enlarged Editorial Team will help us provide you with more information.

As part of this re-organisation we hope to recruit from our readers a number of associate editors who would contribute to the journal providing information, commenting on editorial policy and possibly organising local or specific interest groups. If you are interested, drop me a line.

This years Conference "Computers and Social Work 1986" is being sponsored by New Society and held in conjunction with Birmingham Polytechnic. There are: International speakers, more papers and more workshops than last year and as a result of the sponsorship we are able to hold our prices at last years level.

Thank you all again for you support over the first 12 months

Stuart Toole
on behalf of the Editorial Team

COMPUTERS - SCOURGE OR PARTNERS IN CARING

By

Bryan Glastonbury

When social workers and others at the coalface of the caring services think of computers it is unlikely that they are solely concerned with hardware and software, however useful and exciting these may be. In this setting computers provoke controversy, and those of us who want to promote computer-aided services are challenged to show that on balance the results will be beneficial. It is no bad thing to be hauled out of the hot-house of technological progress and forced to argue a place for computers in the politics, economics, ethics and practicalities of the personal social services.

Computers do not have a particularly good reputation amongst field staff, not of course for what they are, but for how they have been used. Most social workers are now on the periphery of management information systems (generally made up of data stores about clients, resources and, increasingly personnel), and this is the experience which has moulded attitudes. The enormous value these systems have in the effective running of welfare agencies is less apparent and appreciated than the well-known weaknesses. They are prone to error. No amount of diligence in explaining the GIGO principle (garbage in - garbage out) prevents the snorted assertion that computers are not the infallible gadgets they are set up to be. Every social worker who has come within a mile of a terminal has stories of receiving inaccurate information, and computer professionals admit that GIGO will not explain everything that goes wrong.

Computers take up the valuable time of social workers, who now have to add the provision of data for the information system to the chore of keeping traditional manila case-files up to date. There is a steady pressure towards standardisation, requiring that case records be tailored to fit the parameters of the computer file. In so doing they threaten the time-honoured social work belief in the dehumanising homogeneity. The concept of the 'dehumanising' computer can be taken further, and be seen as a barrier imposed between the worker and client, and hence an obstacle to the closeness needed in a

therapeutic relationship, though this is perhaps more a fear for the future than a response to experience.

The damage to confidentiality is another major issue. Again it should be kept in mind that social work theory places considerable emphasis on the privacy of what a client says to a professional, and the sight of this material on a screen, accessible to many agency staff, gives rise to a great deal of anguish. In truth the computer can be accused of aiding and abetting but not causing the gradual demolition of traditional safeguards to confidentiality. The trouble started when the formation of social services departments (1971), followed closely by local government reorganisation (1974), created vastly larger agencies, with many more staff having a valid need to look at the files. The implementation of the Data Protection Act, even at its most liberal, will only give clients a right to look at material which can already be freely viewed from one end of an agency to the other.

Management information systems also threaten traditional social worker 'discretion' to take actions, make decisions, and sometimes commit resources in relation to a client without having to refer back for managerial approval. The idea of the social worker as an autonomous professional (like a doctor) has largely vanished, but a lot of power has remained in the front line as long as the administrative system could not react fast enough to oversee responses to client emergencies. The computer has not transformed the scene, but it has speeded up response rates sufficiently to bring increasing potential for managers to keep an eye on day to day events. Many social workers resent this sort of remote control, however justifiable it may be in terms of organisational efficiency.

There are more uses of the information system which provoke shivers of apprehension amongst professional staff, especially in the field of work-load management. Individual, team and office case-loads can be identified, and compared across the board, to show where the big and the small loads are carried. Appropriate adjustments can be made to the deployment of resources and staffing, individuals can be assessed for their work contribution, and so forth. It would be irresponsible of

managers not to use such facilities, but it will not exactly raise enthusiasm with those on the receiving end.

These are the kinds of attitudes which are commonplace amongst practitioners, and which have to be weighed against the current paucity of directly perceived advantages. It is hardly surprising therefore that field workers' acceptance of computing is often grudging, suspicious, sceptical and decidedly luke-warm, if indeed they have any interest at all. It may be an over-statement to talk of computers as a 'scourge' to caring, but they are most certainly not yet seen as 'partners'. Why has this situation come about? What can be done to change it?

The origins of present circumstances must lie in the history of computer developments in social services departments. The first applications were in management aids (see, for example, Derbyshire, 1974 and LAMSAC, 1982) not through any decision to deny caring a comparable emphasis, but simply because in the early years both hardware and programmes had limitations. Once the trend was set, it has tended to stick, despite the rapid expansion in technological potential. Many social services departments have striven hard and successfully to break out of narrow boundaries into front-line computer applications (Glastonbury, 1985 chapter 3 documents an example), but even the most progressive have been hindered by tradition, and by seeing computer applications in caring as developments or spin-offs of management systems, rather than as major new initiatives. Some authors (most recently Giller, 1986 have argued that it is unhelpful and inaccurate to see fundamental differences between 'computers in management' and computers in caring'. In one important sense this is valid, in that both groups need information systems. Yet the losses caused by our failure to appreciate the full differences are numerous, for example in poor user-friendliness, in the limited exploitation of free-text systems, or in the inadequacy of review/analysis procedures within single files. The fact that most social services departments now maintain costly dual records systems, of computerised and conventional files, is mainly a result of approaching the whole issue of records from the viewpoint of the administrative card index rather than the practitioners' case files.

To put the matter succinctly, computers cannot be accepted or dismissed as partners in caring because they have not had a chance to show what is possible. The rest of this paper will argue that computers can and should become partners as long as three important developments take place, in policy, funding and software packaging.

A Policy for Computers In Caring. It follows from the earlier suggestion that promoting computers in caring as a spin-off of administrative uses is a flawed approach, that our welfare agencies need a fundamental reassessment of computer policies. In any large organisation there is likely to be a sensitivity towards the factors motivating organisational structure and functioning. Put at its simplest, does the agency run to suit the convenience of the organisation or of its clients? In social services departments this has provoked regular reviews of how services are operated, generally with the aim of advancing a concept such as that of 'needs led services'. A similar priority is implicit in the idea of a 'service led agency'. But can we, in the context of caring, talk about 'needs led computing'? In the early years of computing in social services departments such a philosophy would have been inconceivable. Computer access and functions tended to be on a 'take what we can offer basis', with the availability and capability of the equipment being the determining factor. As systems became more complex, so the needs of management could be advanced (though often in a compromise with other users), and through gradual progress and a few big leaps, like going on-line or getting their own computer, social services managers are well on the way to getting systems which meet their needs. Should they have enough influence and knowledge to get their needs stated in a 'computer-compatible' way, and duly implemented? It is hard to be optimistic about the outcome of such a task, and perhaps more realistic to suggest an urgent need for policy initiatives.

The central plank of any new policy should be to assert a commitment to the concept of 'caring led computing' as a clear agency priority. Through such a philosophy the necessary focus and motivation can be established for planning the components of the policy, and its implementation. Attention will have to be paid to the funding and the content of carer-computing, and

both of these will be considered later. Three other components might be suggested at this point. One is the encouragement of purpose designed programmes for social workers. The tendency at present is to give such attention, perhaps too much, to the potential of generic programmes (like data-bases), or to developments based on expert system shells. Neither local authorities nor the DHSS have pushed for specific programming for field workers.

A second item concerns the deployment of computer staffing. Many social services departments still employ no computer staff (other than keyboard operators), and depend for expertise on a general-purpose local authority service. Those who have appointed their own staff (like programmers) have tended to keep them at headquarters. The use of computer specialists is subject to the same sorts of issues as other specialists in social services departments. Should they be seen as HQ resources, or should their expertise be available in some sort of consultative capacity in the front line? Commonly there is a compromise, and a spread of expertise. If social workers are to move into computing they will need access to the experts.

A final policy issue is more controversial. Traditionally client records have stayed with the field staff, usually with more than a brief card index at HQ, as a basis for annual returns and other composite processing. The advent of the sophisticated information system, with many screens of data on each client, has surreptitiously moved client data away from the field staff to central management. Further expansions of client information systems are likely to focus on the quality and quantity of data on each client, and hence takeover increasing amounts of material currently held in folders in the local office. In most agencies the security arrangements permit social workers to see but not alter computer files, in direct contrast to the way they are responsible for the case files in their office. There is a conflict here. On the one hand computerised client files are gradually getting closer to traditional case files, and on all grounds of economy and efficiency must eventually replace them: while on the other hand control over the content and structure of the two sets of files is diverging. When the manila folder is shredded and the

computer file takes over, will social workers no longer determine how their work is recorded? A more sensible policy, in keeping with computer developments in caring, would be to transfer client files back firmly to the place where originated and are needed, in the local office.

Investment In Computers For Caring. An increasing number of social services departments have placed computers(whether terminals or micros) in social work offices, generally to act as links with agency information systems or as stand-alone word processors, but with wider potential. Talking to staff in these offices, the almost universal finding is that the equipment is used primarily or exclusively by clerical and administrative staff. Social workers rarely make direct use, and are more likely to ask someone on the clerical side to do the job for them. Reasons for this vary. The equipment may not be in a convenient place to get at, or it may too frequently be in use if the worker wants it (word processing is a major use and takes up a lot of computer availability). The social worker, despite a brief orientation course, may not feel secure enough to 'have a go', and so never reaches the position of being a familiar user. The computer may not have enough to offer to interest the field staff (this is taken up in the next section), or may be more of a dumb terminal than a stand alone machine.

Whatever the specific reasons may be, if social workers are to use computers there will have to be enough investment in them to cover decent provision of equipment and software, better training, and easily accessible expertise. ICL have embedded an important concept into one of their computer systems by labelling it 'one per desk', and though this may not be quickly attainable, it needs to be accepted as a target. This is a challenging demand for social services departments, given the tradition of poor office supports for social workers (Barclay, 1982), and will be costly. Local authorities can reduce costs substantially by being less blinkered in their commitment to expensive hardware, and more open to competitive tendering. However, the final justification for such investment will be its productivity, and this in turn will depend on carers getting a great deal of use from computers. The range and quality of software must be the critical factor.

Programmes For Caring. It is not the object of this paper to look in any detail at the range of possible application, and the interested reader can pursue this in other issues of the CASW journal, as well as other sources (eg. the new American journal, *Computers in the Human Services*, published by Haworth Press). The range is wide, and includes diary tasks, workload management, assessment aids, case review aids, word processing and report construction, aids to decision-making, and help with tasks like working out travel claims. The characteristic which overlays all these possibilities is that they reflect a mass of fragmented small efforts, sadly lacking co-ordination. A potential user who wants to lay hands on all of these programmes will have to work long and hard, and will then find that they all operate on different machines, are not compatible, and cannot interact with each other. At present there is no incentive for the carer-user, and there will not be until an integrated package of applications is available, so that the computer takes its place alongside the telephone as a vital piece of equipment.

By the way of conclusion it is perhaps worth recalling the depressing findings of David Dery (1981), in his study of computer uses in welfare services in America. There he found management information systems which presented much the same sorts of threat as was discussed earlier, especially the use of the database to determine the deployment of resources, and relatively little concern for the value the field staff might get from the computer. As a result the professionals retained the accuracy of their traditional records and played the computer system for their own ends. Some clients were graded as higher priority, some were invented, to make the computer files look good and big. At the same time the files lost any pretence at truthfulness and became useless to management. There is a moral. Social workers and other care staff supply the data for the information system, so they can make it comprehensive, truthful and up-to-date, or they can sabotage it. If they opt to make a nonsense of the system they will be able, perhaps, to hold on a bit longer to some of the entrenched practices and values of their work. On the other hand, if they exercise their power with responsibility, they have a price to pay and a task to face, for joining forces with computers will provoke a major reassessment of current

ways of working. At present it is easy to understand why social workers might be less than keen to take on such adjustments. Surely it is in the best interests of planners and managers in social services departments to make computing attractive and useful for their staff, so that they choose partnership?

Notes:

1. This article is based on a talk given to a BASW audience in Huntingdon. The title was set by the meeting organiser, Daphne Sanders of Cambridgeshire Social Services Department.

Bibliography:

Barclay, P.M. (1982): Social Workers; their role and tasks: Bedford Square Press.

Derbyshire, M.E. (1974): A Comparison of Five Computerised Information Systems in Social Services Departments: Lancashire County Council Social Services Department.

Dery, D. (1981): Computers in Welfare; the MIS-match: Sage

Glastonbury, B. (1985): Computers in Social Work: Macmillan.

Giller, H. (1986): Down to the 'Computer Shack'? in Community Care, No. 594, 16.1.86, p.26.

LAMSAC (1982): Survey of Local Authority Social Services Computer Applications. An enlarged and updated edition was published in 1984.

FOLLOWING THE TREND

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Introduction

In Social Work there are many areas of work that are concerned with change. The systematic use of information relating to changes can be useful in pursuing the objectives of promoting, damping or redirecting these changes. One way to collect information about changes is to repeatedly sample the same 'site' in the psycho-socio-political arena of interest. This will produce a set of data that will relate in some way to the pattern of change over the time period studied.

By way of example, a 'site' on a beach could be chosen, and the height of water above this point measured. The frequency of the measurements would influence the fineness of the resolution of the analysis to be carried out. For instance, hourly sampling would enable the tides to be plotted against time; but the waves would not be visible, nor would the longer term neap and spring tides. Changing the frequency and duration of the period of sampling would allow explorations of these latter characteristics and using particular methods of analysis will also help identify other patterns.

This general approach to the study of change processes is called Time Series Analysis. Each piece of data must be thought of as highly related to the adjacent ones, and they cannot therefore, be analysed with usual methods of statistical comparison. However, Exploratory Data Analysis techniques can be used to search for and help visualise trends by means of plotting a graph against time.

The Agency

The Family Centre on the Isle of Wight is a multi-faceted Local Authority establishment, set up to provide complementary services to those already in operation. A wide variety of approaches to direct work with clients are undertaken, and some policy development, precedural formulation and lobbying

work. As a part of its resources the Family Centre has a CBM (Pet) 8032 with double disk drive and a daisy wheel printer. Data base and word processing developments in administration parallel exploratory data analysis and statistical applications.

The Programme

A programme designed to offer Time Series Analysis is now in its last stages of development. The motivating need for this arose from a research project studying the processes of change in families attending Brief Family Therapy sessions at the Centre. Volunteer families completed a daily diary, one for each willing and literate member, giving scale ratings on the same four questions asked each day. The programme allows the relationship between these four ratings to be examined as well as each series alone. Menu driven options for the exploratory analysis of the data offer a variety of treatments to the data prior to the graphic display. Possibly the most powerful treatment is a technique known as 'running averages': the effect being that the high frequency fluctuations (eg waves) are smoothed out to help visualise the longer term trends (tides).

Since changes in the trends are the object of interest in these sorts of studies, there are provisions for the more detailed examinations of up to five sections of a series. These include totals of the number of missing values (important if self-report data collection methods are used), a histogram of the distribution of values returned (ie the relative appearance of the outer zones and the middle area of the scale), Standard Deviation and Linear Regression with Correlation Coefficient. These analytical techniques were included on the expectation that discontinuous changes (ie sudden, significant and one-way movements) might be found - as opposed to the simpler smooth-and-gradual continuous movements.

Such changes were of interest to the research project on the basis that if a discontinuous change could be identified in families making progress in therapy, then the implications for cost-effective service provision could be substantial. Various other applications being considered for this programme include:- an examination of the changes in the sentencing

patterns of the Magistrates Courts before, during and after the implementation of the Juvenile Justice legislation;
- the demand for residential care under Orders, voluntary receptions and the various types of fostering arrangements now developed in the Department;
- the monitoring of the evolution of the group identify in both treatment and preventative groups at the Family Centre.

Conclusion

It is hoped that this rapid overview of developments in the applications of Time Series Exploratory Analysis will encourage others to consider this approach to the delicate art of monitoring change processes as they occur. In Social Work this often forms a major portion of the task in a host of different shapes and guises, and is a necessary area of skill for the professional. All the same, computers may offer useful tools to help us in these tasks: there must be many applications worth serious thought. With the increasing use of computers in professional work, following trends may become an easier task to manage!

VOLUNTEER BUREAU & OPINIONS ON THE USE OF COMPUTERS

by

L. Williams

Kent Volunteer Bureau Project

1. Why Was There A Need For This Survey

The Volunteer Bureau Directory produced by the Volunteer Centre lists all the Volunteer Bureau (VBx) in the Country. At present, there are 299 VBx in the U.K. Apart from details such as the name of the Organiser (VBO), the hours open, and the address of the bureau, very little other information is available. Details such as the area covered by the VB and the type of office equipment that it owns or rents are sadly lacking.

The 1984 VBx National Conference was held at Leeds University. A workshop showing the potential uses of computer in VBx generated a lot of interest. It was thought at that time that a few VBx owned or had access to a micro-computer. However, details of these VBx were not available. Nor was it known whether the VBx were using the computer system for accounts, records or matching systems, word processing, training or for other applications.

2. Timescale

After piloting, the questionnaire was circulated with the August 1984 edition of Information Volunteered (the journal of the Volunteer Bureau Unit of the Volunteer Centre).

Initially, there was a slow response - 33% response rate after a month. A later follow-up to the non-respondents proved beneficial. The total number of returned forms by mid-February 1985 was 248 which represents 82% of all VBO's. It was apparent from this follow-up that a large proportion of VBO's had not received their initial copy of the survey form. Thus, in future, it is not recommended that questionnaires requiring a high response rate should be included with another circular.

3. Range Of Respondents

The location of the Bureau was requested to find out whether the bureau is situated in:-

- i) A rural/village setting
- ii) A town
- iii) A city
- iv) Other (this was confined to VBx situated in a town covering a large rural area)

This was to investigate whether VBx situated in town or cities have more resources than bureaux situated in villages. Do the opinions of VBO's vary, depending upon the type of area that they serve?

Information regarding the opening hours of the VBx was obtained from the Volunteer Bureau Directory.

A breakdown of the respondents, according to location and opening hours is shown in Figure 1. The majority of the bureaux that replied are situated in towns (153 out of 248 (61.6%)). The opening hours varied from 0-5 hours/week to more than 40 hours/week.

4. Office Equipment Currently In Use In Volunteer Bureaux

i) Typewriters

187 VBO's said that they own at least one typewriter (this represents 75.4%)*, 56 VBO's have access to a typewriter (22.6%) and 5 VBO (2%) do not own or have access to a typewriter. A breakdown of these results according to location and opening hours is shown in Figure 2.

ii) Photocopiers

62 VBx (25.0%) have their own photocopier, 25 (10.1%) rent a photocopier, 127 VBx (51.2%) have access to a photocopier when needed and 34 VBx(13.7%) did not own, rent or have access to a photocopier. A breakdown of these results is shown in Figure 3.

iii) Duplicators

85 VBx (34%) own a duplicator, 2 VBx (0.8%) rent a duplicator, 109 VBx (44.0%) have access to a duplicator and 50 VBx (20.1%) do not own, rent or have access to a duplicator. A breakdown of these results is shown in Figure 4.

iv) Ansaphones

61 VBx (24.6%) own an ansaphone, 1 VB (0.4%) rents, 6 VBx (2.4%) have access to an ansaphone and 178 (71.8%) do not own, rent or have the use of an ansaphone. A breakdown of these results is shown in Figure 5.

v) Wordprocessor

7 VBxx (2.8%) own a word processor (or have wordprocessor facilities on a micro-computer), 13 (5.2%) have access to a wordprocessor. 226 (91.1%) do not have access to or own a wordprocessor. A breakdown of these results is shown in Figure 6.

* All percentages refer to percentage of total number of respondents (248) not the total number of Volunteer Bureaux (299).

vi) Micro-computer

11 VBx (4.4%) own a micro-computer and a further 15 (6.0%) VBx have access to a Micro. A further two replies were received after the analysis had been carried out. These both had access to a computer - making this total 17 (6.8%). A breakdown of these results is shown in Figure 7.

vii) Computer Space

Only one VB mentioned the computer facilities of their local University being available to them.

These figures are summarized in Table 1 below

OFFICE EQUIPMENT IN VOLUNTEER BUREAUX

	Own	(%)	Rent	(%)	Acc	(%)	-	(%)
a) Typewriter	187	75.4	0	0	56	22.6	5	2.0
b) Photocopier	62	25.0	25	10.1	127	51.2	34	13.7
c) Duplicator	85	34.3	2	0.8	109	44.0	52	20.9
d) Ansaphone	61	24.6	1	0.4	6	2.4	180	72.6
e) Wordprocessing	7	2.8	0	0	14*	6.0	228	91.2
f) Microcomputer	11	4.4	0	0	17*	6.8	222	88.8

*These figures include two late entries, which were not included in the main analysis.

5. Current Use Of Computers In Volunteer Bureaux

As shown in Figure 7, it is not necessarily the big, full time city VBx that have access to, or own a micro-computer.

Out of the 27 VBx that currently own or have access to a micro-computer system, the current usage is as follows:-

<u>Use</u>	<u>Number of VBx</u>
Word processing	9
Records/Statistics (incl matching)	13
Accounts/Salaries	6
Training	6

Other uses quoted include producing a list of Voluntary Agencies served by the Volunteer Bureau.

Several of these VBO's stated that although they had access to a computer, they had not yet "learnt how to use it" or else the computer "does not work yet".

6. Interest In The Use Of Computers In Volunteer Bureaux

The question "If your Bureau had the necessary funds would you like to own or have the regular use of a computer?" was asked and the results are shown below.

	<u>No. of replies</u>	<u>%</u>
Yes	129	52.0
No	50	20.2
Don't know	44	17.7
No Answer	14	5.6
Already own a computer	11	4.5
	<u>248</u>	<u>100.0</u>

These results are shown in Figure 8. A further breakdown of these responses, according to the location and the opening hours of the Bureau is shown in Figure 9.

These show quite clearly that it is the Bureaux that are open longer hours that are likely to express a greater interest in computer applications for their work, than those bureaux open shorter hours during the week. This result is statistically significant ($\chi^2 = 28.1$ df = 32, $p < 0.05$)

The location of the bureau can also be linked to the opinions of the Organiser. Bureaux in cities are more likely to express an interest in computer application than are bureaux in rural settings. This is also statistically significant. ($\chi^2 = 28.1$, df = 12, $p < 0.01$).

Some Bureau Organisers comments included:

YES - "This bureau is in the process of buying a computer. I have been fortunate in coming to a decision in the choice of system to have, in that my son is a computer consultant and has given me unbiased information and advice".

NO - "We would not like a computer - unless we developed considerably from our own modest needs".

NO - "We could obtain the loan of a computer from the G.L.C. but its use would not be put to full advantage at present".

NO - "I feel to justify the purchase of a computer a V.B. would need to be dealing with a thousand or so volunteers a year. We deal with about 350 people a year".

YES - "This would be a most useful piece of machinery but with the financial restraints placed upon the Bureau we don't see where the resources would come from to purchase or rent one".

YES - "Funding and lack of space prevents any development at present".

NO - "I would rather keep things on a more personal level"

YES - "Although I can see many uses for a computer as a resource for myself and other organisations its usefulness would depend upon having trained operators available".

NO - "This does not mean that I will not change my mind if, in a years' time, the need for a computer arose".

DON'T

KNOW - "The future of this VB is uncertain at the moment due to the expiry of MSC funding and lack of funds from other sources. Therefore, the VB has other priorities and because of the uncertainty a computer would probably be underused".

YES - "The VB Project has evolved to such an incredible degree that the situation is almost desperate. My kingdom for a computer!".

NO - "No consideration being given to computer in foreseeable future".

7.The Potential Uses For Computers In Volunteer Bureaux

The two main applications VBOs can envisage as being useful for their bureaux are wordprocessing and record-keeping.

99 (39.9%) of respondents said that they would like to use a computer for word processing.

169 (68.1%) of all respondents said that they would like to use a computer for record-keeping purposes, often including "matching" (volunteers to agencies and clients) and "statistics" in this category. This figure included many of the "DON'T KNOW" categories for the question asking 'if your volunteer bureau had the necessary funds would you like to own or have the regular use of a computer'.

58 (23.4%) said that they would like to use a computer for accounting.

63 (25.4%) said that they would like to use a computer for training - often the training of unemployed volunteers in computer skills was commented upon.

20 (8.0%) said that they would like to use a computer for other applications.

8.Conclusions

The growing awareness of the potential of computers in normal office tasks cannot be ignored. Here, in the voluntary sector, under-financed but with a high reputation for cost effectiveness, the implications of computers are beginning to be understood. The high percentage of Volunteer Bureaux Organisers interested in, and able to see major benefits being gained from the use of computer systems, cannot now be underestimated.

Despite the interest shown in micro-computer systems, their proven abilities and their cost effectiveness (usually in time saving), funding is now the major limiting factor in the growth of their use in Volunteer Bureaux.

FIGURE 1 ANALYSIS OF THE RESPONDENTS

FIGURE 1.

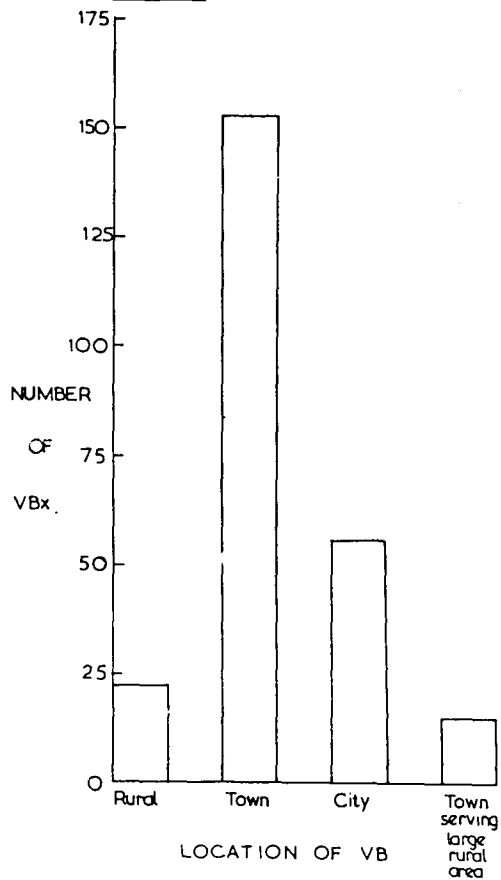


FIGURE 2.

1.1 LOCATION OF VOLUNTEER BUREAUX
1.2 OPENING HOURS OF THE VOLUNTEER BUREAUX

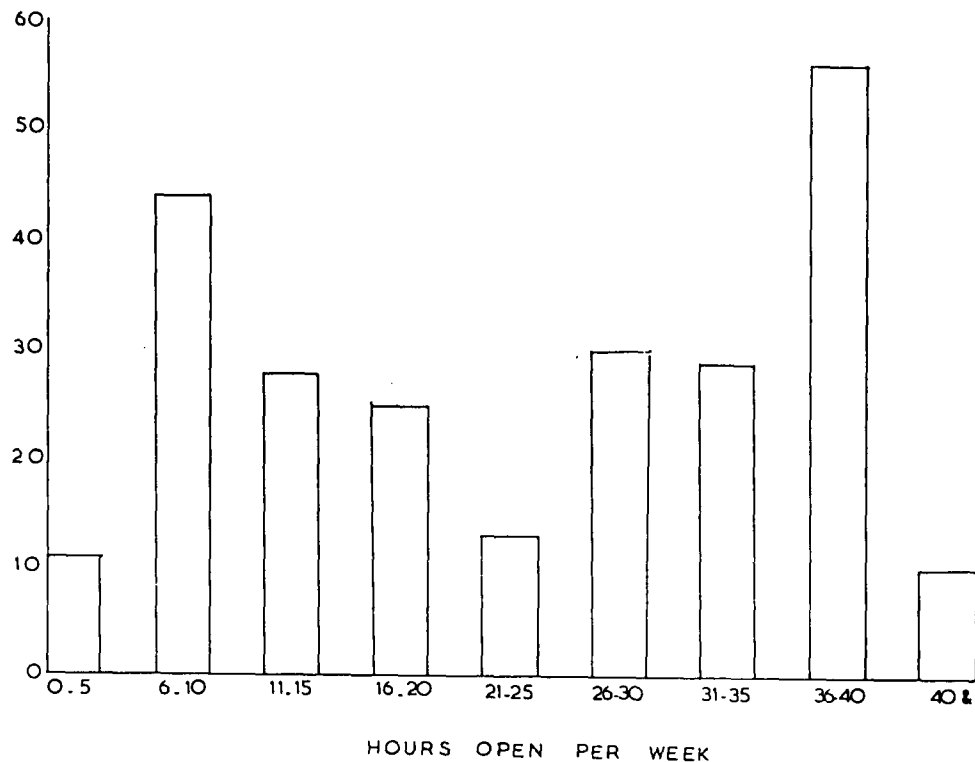


FIGURE 2 OFFICE EQUIPMENT IN VOLUNTEER BUREAUX. TYPEWRITERS

2.1 ANALYSIS, BROKEN DOWN INTO "LOCATION" CATEGORIES
2.2 ANALYSIS, BROKEN DOWN INTO "OPENING HOURS" CATEGORIES

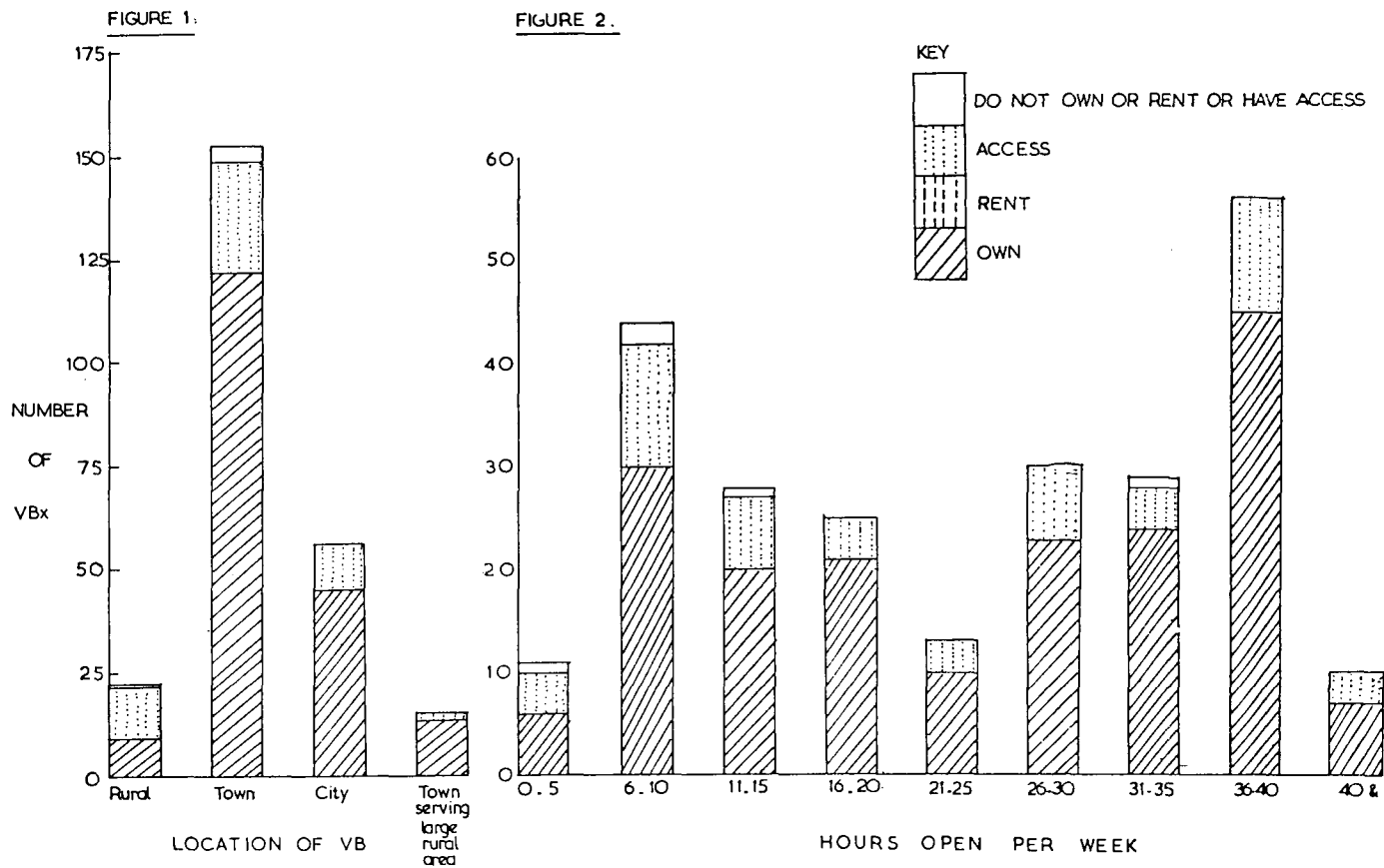


FIGURE 3 OFFICE EQUIPMENT IN VOLUNTEER BUREAUX. PHOTOCOPIERS

3.1 ANALYSIS, BROKEN DOWN INTO "LOCATION" CATEGORIES
3.2 ANALYSIS, BROKEN DOWN INTO "OPENING HOURS" CATEGORIES

FIGURE 1.

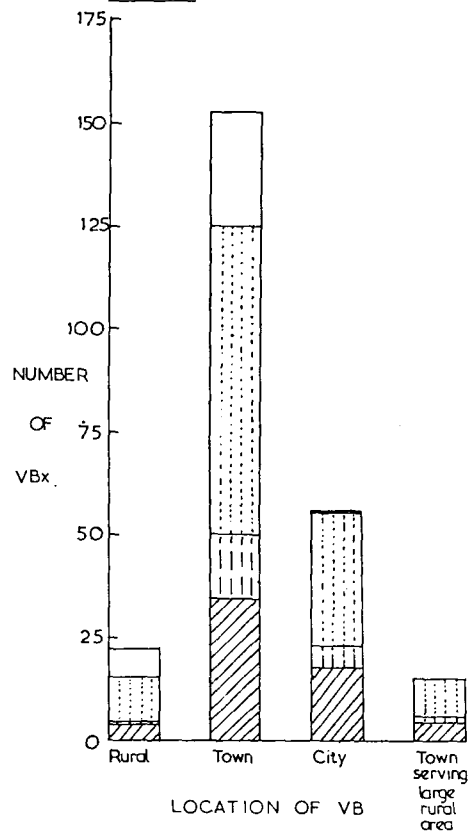


FIGURE 2.

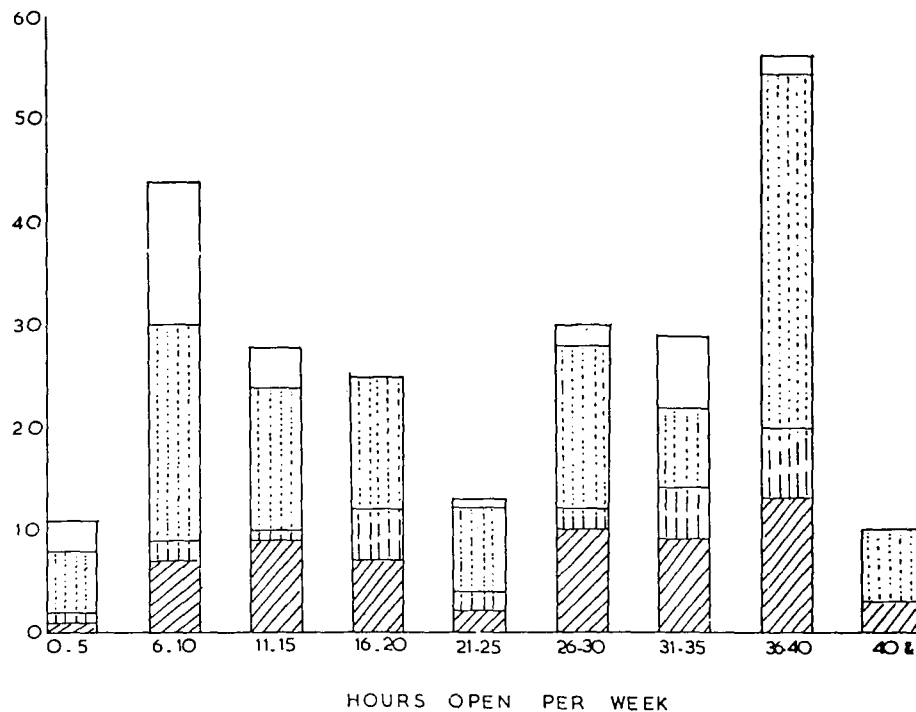


FIGURE 4 OFFICE EQUIPMENT IN VOLUNTEER BUREAUX. DUPLICATORS

4.1 ANALYSIS, BROKEN DOWN INTO "LOCATION" CATEGORIES
4.2 ANALYSIS, BROKEN DOWN INTO "OPENING HOURS" CATEGORIES

FIGURE 1.

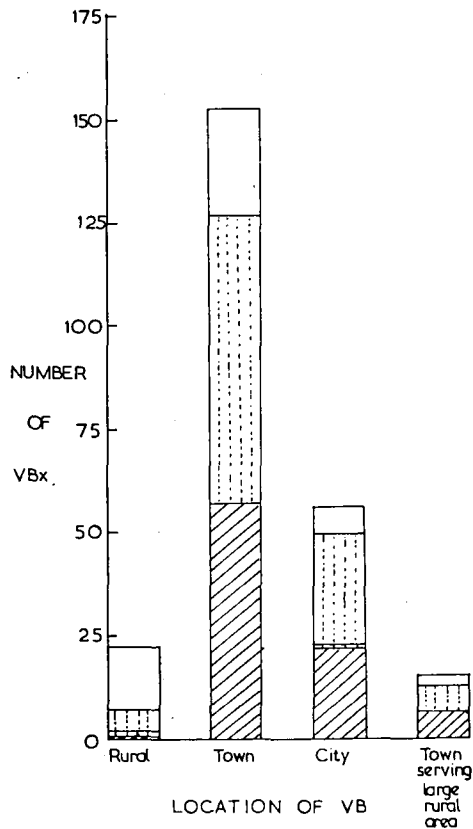


FIGURE 2.

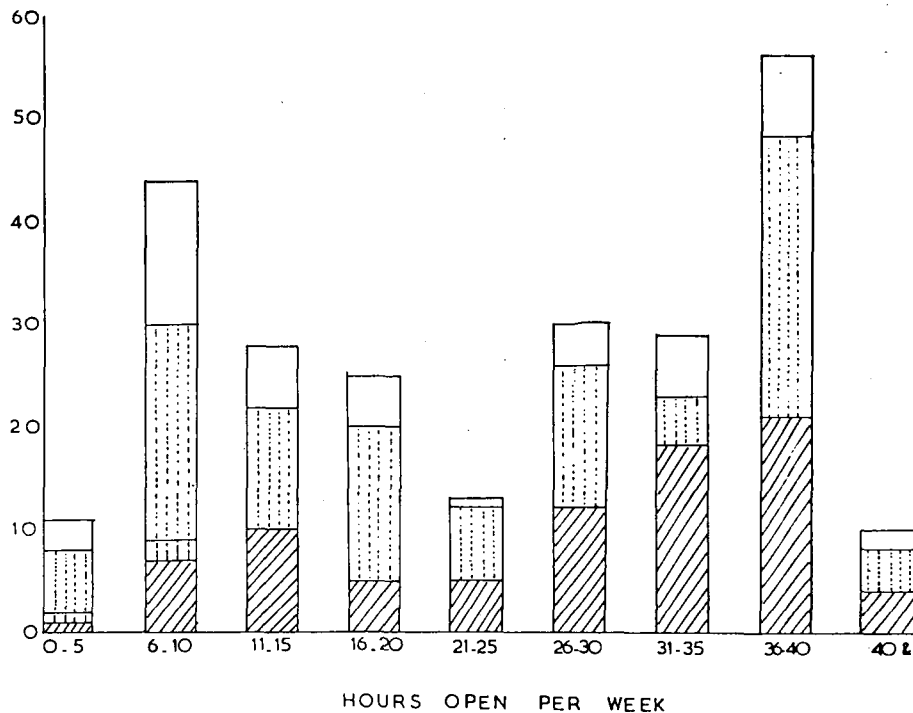


FIGURE 5 OFFICE EQUIPMENT IN VOLUNTEER BUREAUX. ANSAPHONES

5.2 ANALYSIS, BROKEN DOWN INTO "LOCATION" CATEGORIES
5.2 ANALYSIS, BROKEN DOWN INTO "OPENING HOURS" CATEGORIES

FIGURE 1.

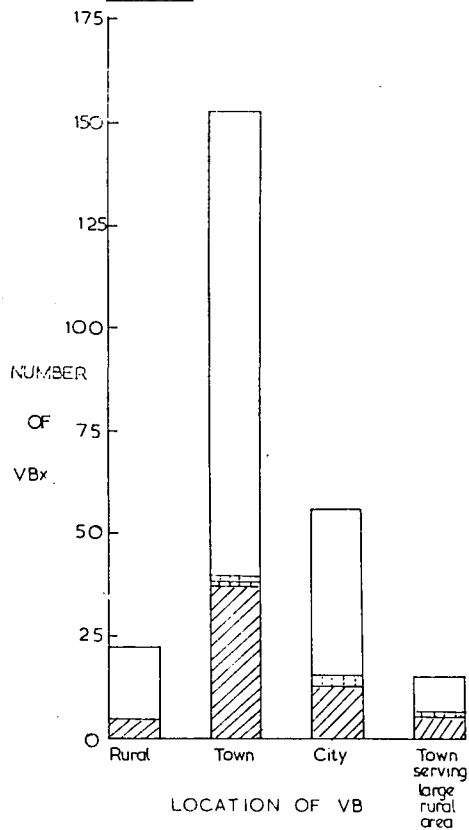


FIGURE 2.

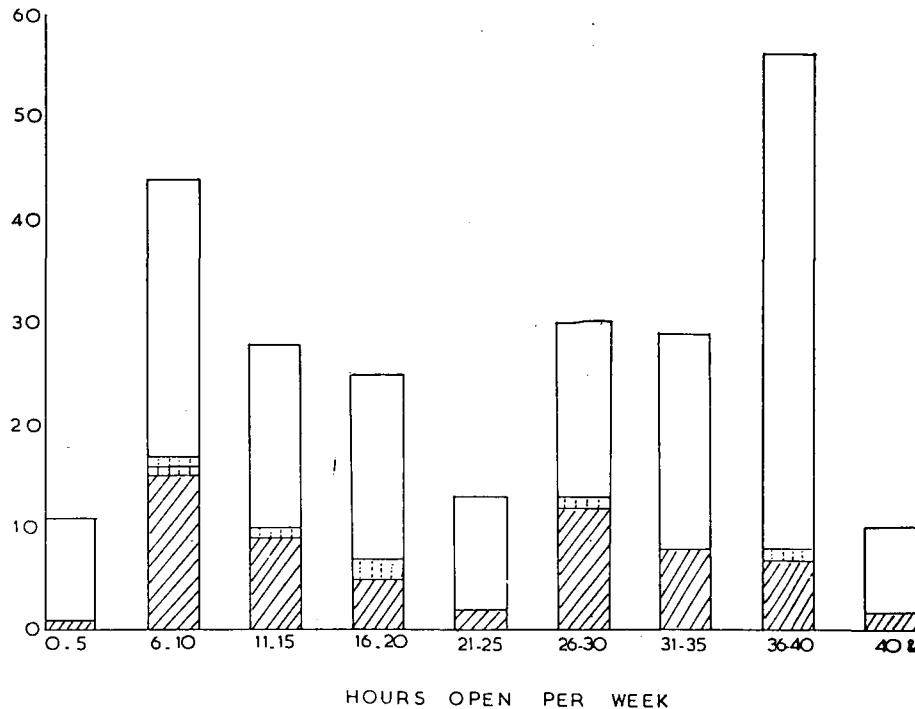


FIGURE 6 OFFICE EQUIPMENT IN VOLUNTEER BUREAUX. WORD PROCESSORS

6.1 ANALYSIS, BROKEN DOWN INTO "LOCATION" CATEGORIES
6.2 ANALYSIS, BROKEN DOWN INTO "OPENING HOURS" CATEGORIES

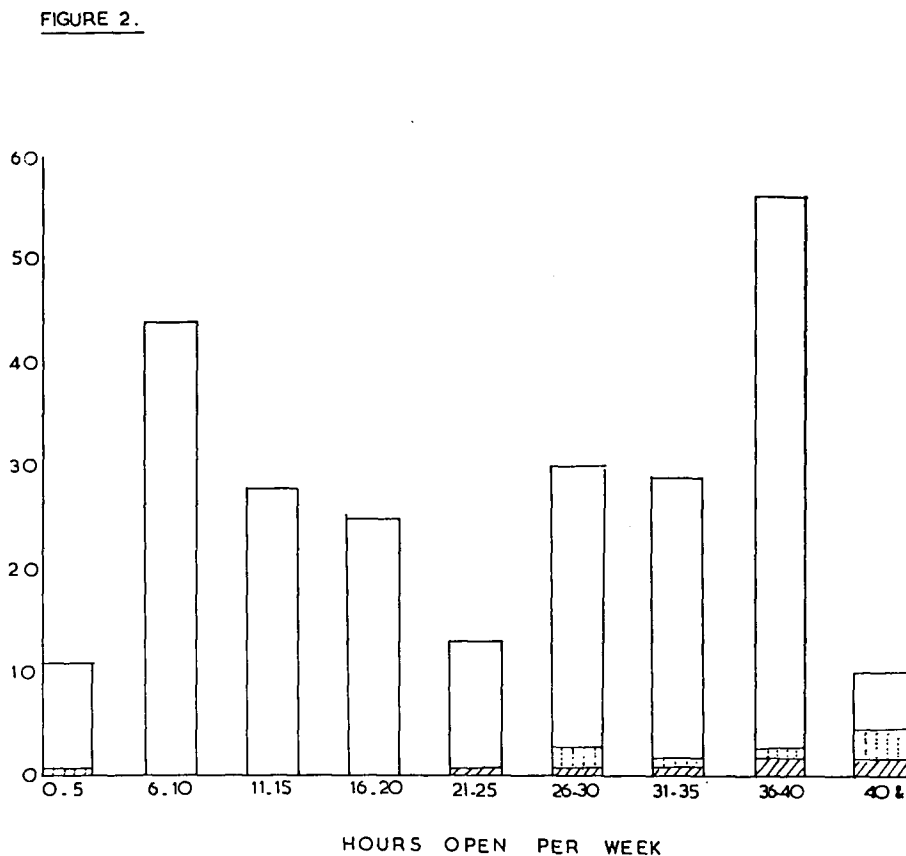
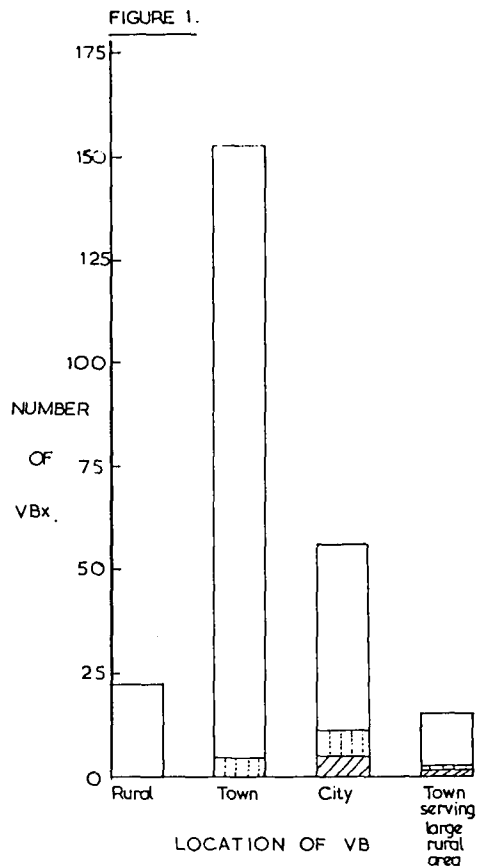


FIGURE 7 OFFICE EQUIPMENT IN VOLUNTEER BUREAUX. MICRO-COMPUTERS

7.1 ANALYSIS, BROKEN DOWN INTO "LOCATION" CATEGORIES
7.2 ANALYSIS, BROKEN DOWN INTO "OPENING HOURS" CATEGORIES

FIGURE 1.

FIGURE 2.

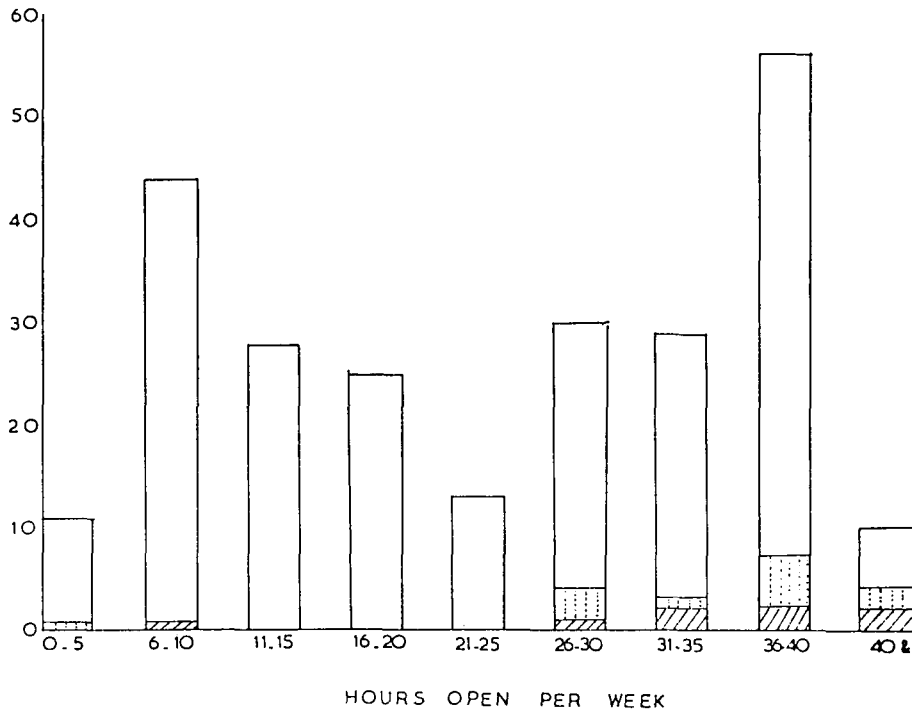
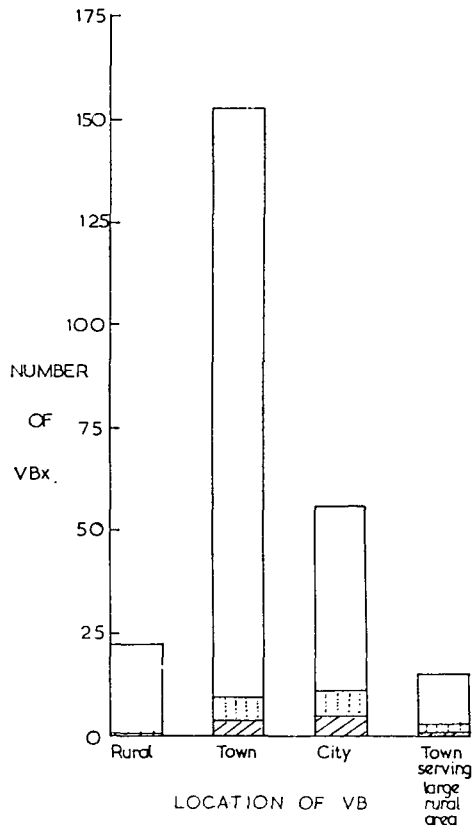


FIGURE 8 RESPONSE TO THE QUESTION, "If your volunteer bureau had the necessary funds would you like to own or have the regular use of a computer?"

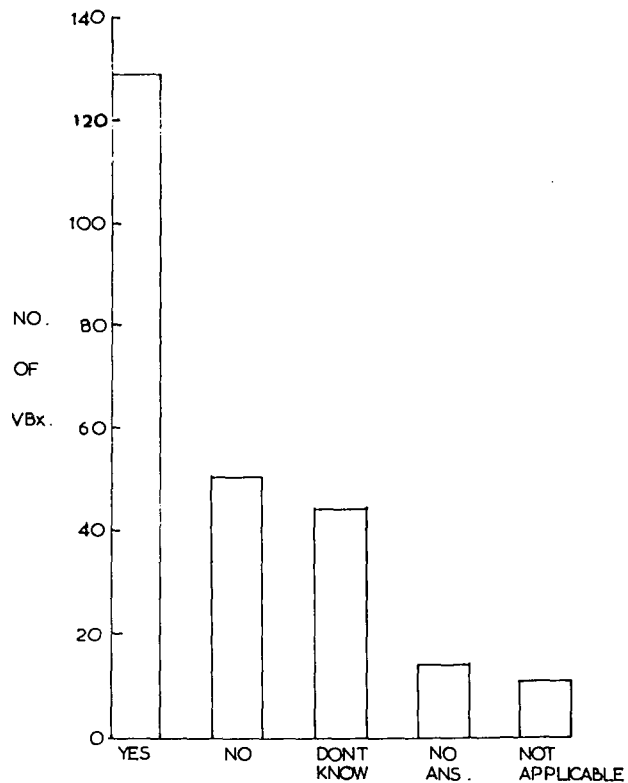
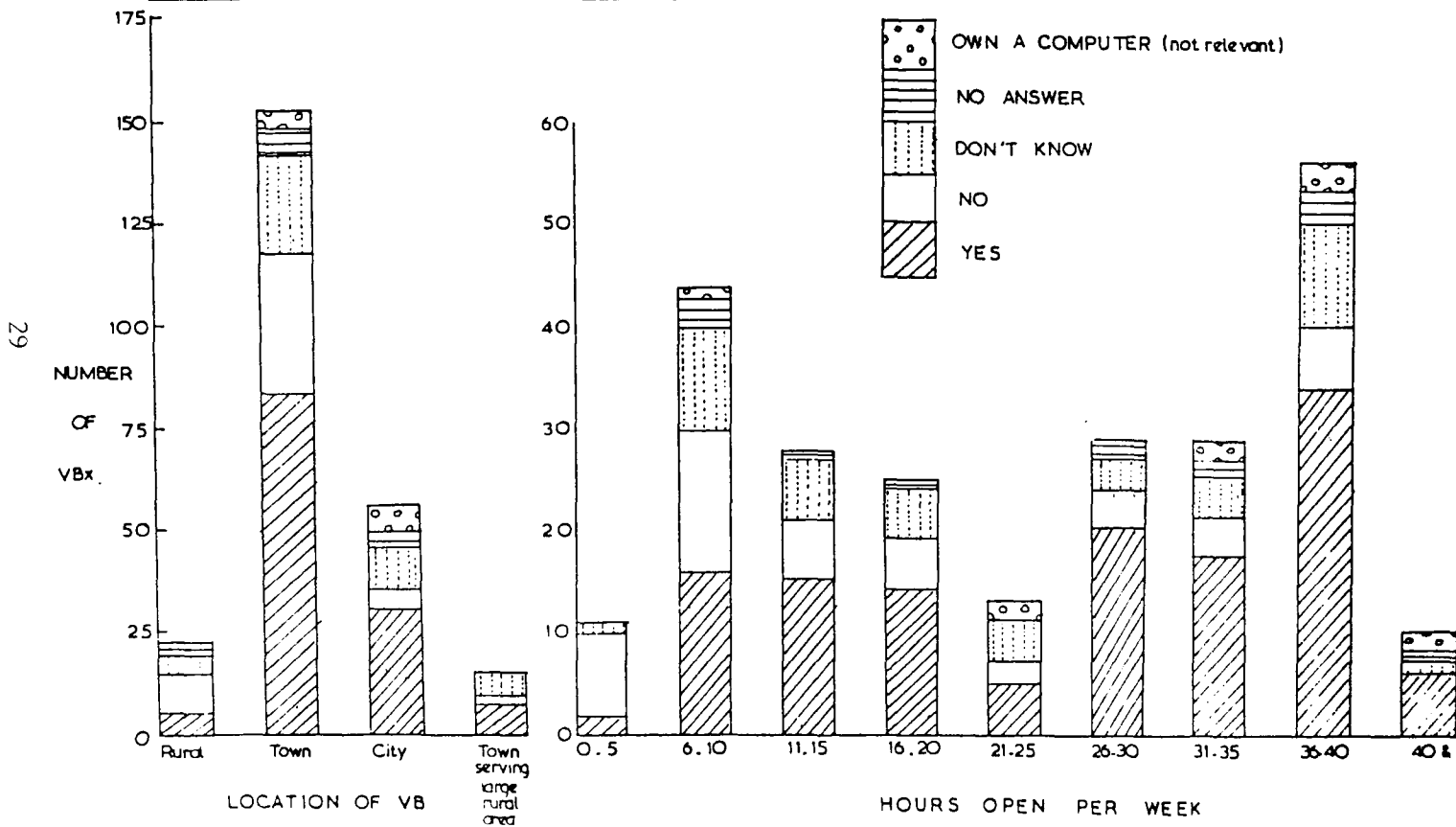


FIGURE 9 ANALYSIS OF RESPONDENTS TO QUESTION SHOWN IN FIGURE 8

9.1 ANALYSIS, BROKEN DOWN INTO "LOCATION" CATEGORIES
9.2 ANALYSIS, BROKEN DOWN INTO "OPENING HOURS" CATEGORIES

FIGURE 1.

FIGURE 2.



References

1. The Volunteer Centre (1984/5)
The Volunteer Bureaux Directory
29 Lower Kings Rd. Berkhamsted, Herts.
2. Information Volunteered (1984)
Journal of the Volunteer Unit
of the Volunteer Centre.

A MICROCOMPUTER FOR SPECIAL HOSPITAL SOCIAL WORK

by

Mike Ferriter

Senior Social Worker

Rampton Special Hospital

Rampton Special Hospital is one of four Special Hospitals in England dealing with psychiatric patients who are deemed to need treatment in an environment of special security. The catchment area of all the four Hospitals is the whole of England and Wales.

Rampton Hospital is in Nottinghamshire. It has 584 patients of both sexes and of all the four classifications under the Mental Health Act 1983, Mental Illness, Psychopathic Disorder, Mentally Impaired and Severely Mentally Impaired.

The Social Work Department provides social work services to all patients with a staff of eleven Senior Social Workers, one Deputy Principal and one Principal Social Worker. There are also two clerical staff and access to typing services in a centralised typing pool.

The Principal and Deputy Principal Social Workers had some time ago realised that although the Department was functioning adequately without computers, many of its services could be much improved and many new services added with the help of microcomputers. Other departments within the Hospital such as Pharmacy, Staff Allocation and Psychology already had microcomputers and found them useful in their particular fields. There was also the experience of other social work departments that had embraced the new technology.

It was realised however that merely purchasing the hardware would not solve any problems. Nor would expecting existing staff (no matter how computer literate) to develop computer facilities in addition to their existing caseloads. When it became possible for the department to recruit its thirteenth member of staff it was decided that the post should carry a clearly defined split responsibility; to carry a limited caseload of up to twenty-five patients and to develop computer

facilities and usage within the department.

I applied for the post with an interest in both aspects of the work. I had worked for five years in the computer industry before taking a degree in psychology. I had worked briefly in the Psychology Department of another Special Hospital, Moss Side, in a job that carried specific responsibility for working with the Departments' microcomputer. Post CQSW I had worked in the voluntary sector and had become much involved in developing modestly priced microcomputer systems as a management aid for small and financially hard-pressed charities. The advertisement for the Rampton post intrigued me, I applied, and was accepted and started work in June.

My working brief was to develop microcomputers in three main areas of work; as an aid to management, as an aid to social work and to clerical staff in their day to day work and as a research tool. The following gives some idea of the specific tasks we would hope the computer might fulfil.

One of our first priorities would be to develop a basic patient's data-base. Our Medical Records Department will eventually have its own mini-computer system with terminals in every department in the Hospital including our own but obviously such a large and complex system will take some time to implement. As a stop-gap we envisage a limited data-base; if we use Delta we would have 90 fields per patient, but even a limited data base would replace a whole host of cumbersome files and indexes which are the bane of our clerical staff's life at the moment.

Management have their eye on the patients' data-base as a means to save money. Although there are only eleven social workers our catchment, as had already been mentioned, covers the whole of England and Wales and at the end of the financial year our travel and subsistence bill is something to behold. With addresses of next of kin and local authorities already on the data-base management could advise social workers with visits in the same area to at least share transport. The savings in cost might not be large but almost certainly will be significant and in this area alone it might prove over the years to recoup the cost of the hardware.

We would be interested in using the computer as a "Progress chaser" for Mental Health Review Tribunals to inform us when patients became eligible for Tribunals and also to pinpoint specific areas of delay in the process. The "progress chaser" might also be linked into the word-processor to produce standard letters and memos and also linked into our rota of local solicitors who take on this sort of representation.

We would also hope to develop other data-bases and as a priority create a resources data-base for patients who are to be discharged into the community. It would be a considerable help if we could use the computer to scan for appropriate hostel and day centre places catering for specific client types in a particular geographical area. Creating such a data-base would be a mammoth task but we would hope to share the task between the Social Work Departments in all four Special Hospitals as we all share the same national catchment area. The data-base would also have space for assessments after visits by staff, a sort of computerised Michelin Guide to hostels!

We envisage that individual members of the department would use the microcomputer for their own purposes. Although we have full typing facilities they might choose to use the word-processor function to write one-off reports or papers and also to develop standard letter formats for their own caseloads. The computer would also be very useful for research projects using once again data-bases but also standard statistical packages for data analysis. As an example of more specialised applications one member of staff is very interested in Personal Construct Theory and will be looking into available standard software to take the tedium out of Reptest Analysis.

Although much of the above came out of discussions with the management (Principal and Deputy Principal Social Workers) a significant part came through a deliberate policy of involving every member of staff in the department, including clerical staff. I had discussions with all colleagues individually on how I felt computers could be used and their general potential. These discussions were tailored according to the degree of computer literacy held which ranged from those members of staff who still regarded computers as magic boxes

to those who could programme in a variety of languages and who had experience of micro and mainframe computers.

After my "sales pitch", which I hoped would enthuse them, I answered questions as best I could and, most important collected requests and ideas for future computer applications in the department.

The result of this deliberate policy of involving everybody was very encouraging and contrary to the popular belief and mythology about social workers being Luddites I now enjoy the full backing and support of all my colleagues including the clerical staff in getting our department computerised.

So far, so good. Management in my own department were obviously fully committed to the use of microcomputers, after all it was their idea in the first place, colleagues were now convinced that in broad terms computerisation would bring considerable benefits. The next hurdle was to convince the Hospital management, controllers of the purse strings, to vote us the money to buy the system.

We submitted a report that was to eventually get us the cash. This report outlined why in principle we desperately needed a computer, what specifically we would use the computer for, what the parameters of our computer system should be and finally suggested three software and hardware packages that would meet those specifications and their respective costings. Our parameters included a minimum 10mb Winchester Disc, access to a large range of software and a good quality, but quite fast printer. Originally we looked at three computers, the Olivetti M24 for cheap access to IBM compatible software, the HP150 for quality and reliability and the Apricot Xi because a number of other departments in Rampton and in the other Special Hospitals had already purchased these machines including Broadmoor Social Work Department. However since then all three companies have brought out new products and everything is in the melting pot.

By the end of December we hope to make the final decisions on hardware and in the new year the computer should be installed and running. Then the hard work really begins. We've raised a

lot of expectations about what the computer will be able to do, the next stage is to meet those expectations. Watch this space for progress reports!

STATE OF THE ART STATESIDE

by

Bryan Glastonbury

It is a feature of an astonishingly high proportion of publications about computers that their authors feel some sort of imperative to offer a genealogy of the subject, harking back to Old Testament styles. In the beginning there was Babbage, who was before his time, but nevertheless, with a little help from Ada, spawned Hollerith, and in due course along came Turing.... Or as an alternative format the reader is guided from computer generation unto computer generation, probably concluding that we are currently in the 4th and awaiting the 5th, though by the end of the year things may have changed.... There are many reasons for clinging to the tenuous thread of continuity, ranging from a desire to give depth and respectability to a new science, to a desperate attempt at maintaining a sense of logic and control over a technological explosion. A more mundane reason is that the dramatic spread of computing is continuously encompassing new groups of people who are starters, and need the story from the beginning.

Amongst such groups are well established professions, all with tried and trusted routines, but now challenged to reassess their activities in face of the pushy assertion that new technology will help them be more efficient, more productive, less costly, or whatever. The gauntlet that such groups are now bending to pick up, whether with enthusiasm, reluctance or compulsion, has been thrown down by computer makers and programmers in the realisation that to maintain the momentum of computer developments there must be an ever increasing range of outlets. Hence the theme 'Computer Applications in ---' is a recurring one, and of enormous importance to a modern industrial society. The glory of trail-blazing may rest with the designers of nth generation machines, but the task which will affect all our lives is the dogged graft of making the technology work for us.

Coming out of the clouds and down to earth, can computing be applied successfully to social work, or to that rather larger

grouping which the Americans call 'the human services'? Part of the answer is known, because computers already have vital roles in many welfare agencies. Indeed many social services departments would find themselves in great difficulty, unable to meet some responsibilities, if they were deprived of computerised management information systems. At the same time there are aspects to the question which have no answer as yet, and remain unconsidered or subject to experiment. Computer applications to social work practice, as opposed to management, come into this sector. It is a sign of progress, however, that the last year has seen the successful launching of a related journal on both sides of the Atlantic, with 'Computer Applications in Social Work' getting a head start over 'Computers in Human Services'.

The stimulus for this short article came from the opportunity to read and review Volume 1 of the American journal, dated Spring 1985 (Haworth Press). The temptation to prologue a review with some comparisons between the two journals is irresistible. There are a couple of instantly recognisable contrasts. CASW's journal looks like what it is - a new enterprise on a shoestring; resting for its success on the quality of its contents and not at all on presentation. 'Computers in Human Services' starts from a professional publishing base, with publishers who already have a list of established journals in closely linked subjects. The CASW approach also comes across as more practical, more obviously directed at people working in the services, whereas the Americans seem more self-consciously academic. For example, the references take up nearly a third of the total wordage of the first article..

However, the similarities are more striking. If a group of British computer people were asked what topics they would expect to see in early issues of a journal about computing in social work and allied services, the responses are predictable

a look at information systems because they are the commonest existing applications

the progress in using information systems as decision-making supports

the prospects for expert systems

the use of computers in training

a gaze into the crystal ball.

Those are the sorts of topics CASW pursued: they make up the first issue of 'Computers in Human Services'. Indeed, reading the American journal the dominant impression is that not only do our colleagues across the Atlantic have similar preoccupations to us, but also they are at a broadly parallel stage of development. In his opening editorial Dick Schoech suggests that the adoption of a new technology occurs in three phases-

1. Applying the new technology to things which exist...
2. Rethinking existing things with the new technology in mind...
3. Inventing things using the new technology which were not thought of or not possible before the technology existed..."

He goes on to suggest that although a few people are thinking of phase 3, and some are still toying with phase 1, the general level of application is somewhere between phases 1 and 2. Would a British analysis produce anything different?

The first article is called 'Mental Health Computing in the 1980s' and is the first of a two-part review of applications in this field. As would be expected, the major developments have been with information systems, and it is clear that in the USA, as here, a link with medicine offers a fruitful stimulus to computer innovation. Walter LaMendola follows with a short forward looking piece ('An Essay on the Number 42), ending with the vital message that we (human service or social workers, that is) need to get a controlling hand on computer developments, and move into the future in the driver's seat rather than at the side of the road hitch-hiking. Raymond Carlson then sends a reminder that however good the car looks, it still may have some major faults. He takes the reader through some of the weaknesses which can be built into the way we handle information systems.

One of the most controversial potential applications is to use the computer as an aid to decision-making. The computer is well equipped for this task, both because of its ability to call on an empirical database to derive and support possible decisions, and because of its ability to move coherently and comprehensively through a complex procedure. The controversy arises when the computer threatens to depose the professional decision-maker, put machine-made decisions in place of those previously made by skilled humans, and seemingly deny the uniqueness of the social worker/client relationship. Vogel's article looks at the prospects for decision support systems in the context of a set of ground-rules which are designed to allay these fears. The suspicion remains, however, that some people, especially managers, will break the rules or change them, so that Vogel's lucid statement of what computers could do is up against one of the biggest brick walls of opposition in social work practice.

The potential of expert systems is considered in an article by Dick Schoech et al., which combines a description of the standard received version of expert system development with an illustration of its use in handling child abuse. The presentation is impressive, and although described as "too simple for actual use" the example gives a taste of what should be possible. The pity about our approach to expert systems seems to be an inability, on both sides of the Atlantic, to get away from the tediously complex and stylised procedures of 'knowledge engineering'. Why do experienced social work researchers like Schoech seem to accept without question a methodology designed by computer programmers to safeguard their own interests?

Perhaps the answer rests in an assumption made about social and other human service workers, that computing is too difficult for them to understand. The service professions can place most of the blame for this insult on themselves, given the gusto and pride with which so many of them proclaim computer illiteracy. It is too tempting for computer people to sit back and enjoy this convenient protection of their mystique! 'Computers in Human Services' concludes the first issue by asserting the admirable intention of reviewing software, and promptly falls into the 'dumb social worker'

trap by cheering on a programme marketed by Knoware and designed to teach novices the basics of computing. Can we assume that the reviewer, Brian Klepinger, was holding back a giggle when he concluded that "In October 1984, Knoware, Inc., filed for bankruptcy"? More seriously, there was a time when it was sensible to assume that social workers knew nothing of computing. Perhaps it still is. Yet should we not move on to an assumption that they do know something, partly because a lot, quite possibly a majority, really do and partly because as a matter of policy we ought to abandon the 'start from square 1' approach and challenge the service professionals to accept a taken for granted platform of computer knowledge? Neither the journals nor those actively pushing computer applications can maintain forever a start-line of 'In the beginning....' Perhaps the second issue of 'Computers in Human Services' will start 'Now we are 2....'

SOFTWARE REVIEW

By

Colin Barnes

DEVELOPING ADOLESCENT PROJECTS

a program by

D.P. CHARLTON and A. KERSLAKE

School of Humanities and Social Sciences

University of Bath

For the BBC Computer (with disc drive)

The package consists of three single sided discs, each of which is able to be used on its own, together with a 20 page booklet of notes for the user.

Disc one allows the user to choose between an exercise on how to select from a group of children (to form subgroups for Social Work treatment) or an information file concerning social policy concerning adolescents. The aim of the exercise is to help develop the user's skills in bringing together children into groups so that the social work treatment which is used with them is likely to produce beneficial change.

Disc two is in three parts. The "Issues in Adolescence" section starts with simple questions concerning the user's own adolescence which are designed to facilitate reflection on the similarities and the differences between the user's life style and that of those adolescents who are referred to social workers. There are then a series of questions which test assumptions about delinquency. The computer will plot the user's answers on two scales; the first showing how close the given answer was to the correct one and the second giving an indication of the user's knowledge of social issues. The section on leadership styles is a further exercise in raising the user's awareness of his or her own responses. "Positive" and "negative" types of interventions have to be ranked. The computer then produces a graphical representation of the user's preferred interventions with adolescents which shows whether they are likely to be "authoritative" or "facilitative". The final part of the second disc is a simulation of taking a group of children away on a residential

weekend and it includes some colourful graphics.

The third disc allows the user to utilise what he or she has learned from using the first two discs. Either a real or imaginary group of children can be chosen as the subjects of group treatment. The user has to specify the aims of the project, the methods to be employed, and what resources are required.

The Intermediate Treatment workers who used the package found that it was the second disc which held their interest for longest. The theory on which the first disc selection exercise was based was faultless and care had been taken to ensure consistency. However, the information was presented in a rather off-putting way. There were key instructions on screen at all times leaving the information crowded. Some of the I.T. Workers lost interest on finding the exercises too complex.

It was probably the similarity to some computer "games" which allowed users to quickly come to terms with the "residential weekend" simulation. The information and entertainment to be gained from this part of the programme were well balanced. It is perhaps necessary for those Social Work Teachers who are designing a computer based learning package to present their work in a way which is more entertaining than they would if they were writing a book or manual. The type of exercises on these discs have to be completed while the user remains at the computer (if the computer is switched off the users' responses to the questions will be lost). I found that the Intermediate Treatment workers who had not used computers for their training before trying these programmes were expecting shorter "games" rather than the text based material which was used extensively on the first two discs in this package.

The programme on the third disc "crashed" for one novice user and those who did access the exercise found the screen editing for inputting material very slow and tedious. In fact the programming text extending off the screen is quite clever but failed to achieve its aim of creating "user friendliness". None of those using the programme managed to get to the stage of obtaining a "print out" of their proposed project which is

theoretically possible (if one has a printer attached to the computer).

The authors of this programme are to be commended for using the computer to encourage clear thinking and goal setting in the planning of social work with adolescents. They intend to produce versions of the programme which will operate on a variety of other machines (including IBM) in 1986. I doubt whether busy practitioners will find time to use all the facilities in the package. Indeed, very few of the workers in the Intermediate Treatment Centres I know of would find time to even read and understand the background documentation. The programmes will probably be used most in training institutions where there is considerable scope for simulations of Social Work tasks. Students might use the programme prior to their being launched into "in vivo" practice which so frequently results in a set of circumstances which mitigates against the sort of planning which is taught by the package. Perhaps one way to make programmes like this more relevant to practitioners might be to use the facility for the adolescents in treatment to also interact with the programme. The database of an I.T. Worker's own caseload would be created by the children referred to his/her workbase themselves. Unfortunately, in its present form this package would be too complicated for a youngster to input information about himself.

I fear that the managers of operational units (and the directors of some courses) will have worries about the high cost of these discs. The authors have prepared a demonstration disc which is available for only £5.50 plus V.A.T. The cost of this is fully refundable upon purchase of the complete package. If you buy the BBC version now you will be able to upgrade to the MSDOS version at a nominal cost in late 1986.

THE DHSS PROGRAM
Reviewed by Colin Barnes

available from: - GREEN EMU, 49 Cambridge Street, Rugby.
Warwickshire.

For Sinclair Spectrum (48k)

The problems of making ones first claim on the United Kingdom's System of Social Security benefits are translated into a four part game. The player of the game has to answer a succession of multiple choice questions until he is told by a cartoon character (called the Green Emu) that they have been able to obtain an Urgent Needs Payment. The authors of the game have obviously had some very bad experiences of trying to get help from Supplementary Benefit Officers and the player has to wait in long queues, make unsuccessful telephone calls, and, almost, starve to death even when making fairly reasonable choices (A request to one's probation officer for advice is fruitless as he is not at his office because of it being a Friday afternoon!).

The game is somewhat disrespectful of the Department of Health and Social Security and is also quite insulting to the player who is sometimes called "dimwit" and "idiot" for incorrect responses. The local benefits office would seem to have assumed some of the qualities of those "evil dens and goblins" which occur in children's adventure games.

The games within the program could be used in an education setting and would probably stimulate a good discussion about the need to come to terms with being dependant upon benefits. However, how much more useful would be a program which focussed on the problem solving skills of the user rather than just rehearsing a few "facts" such as the qualifying conditions for mortgage interest payments. Perhaps the best thing about the program is that it is written in Sinclair BASIC and could be easily modified for local uses or to take account of changes in income maintenance legislation. The authors of the program are now developing packages for Acorn machines which are more widely used in educational settings. One must commend them for working with applications which,

when properly developed, are central to much Social Work practice. I hope that their future products will show more evidence of background research and field testing than this one does.

WITH A LITTLE HELP FROM THE CHIP
Series of six Television Films by George Auckland
for the British Broadcasting Corporation

These films, recently shown on Network Television in the United Kingdom, survey the range of aids for disabled people that have been developed with the help of microprocessor based technology. Each of the programs has a different theme and are entitled:

- 1) Communicating
- 2) Learning
- 3) Getting About
- 4) Working
- 5) Daily Life
- 6) Inventing

There is a ninety-one page illustrated booklet to accompany the films which provides background information on the products shown. This booklet is presently available from the BBCtv, London W12 8QT if you send them a stamped addressed envelope.

The films are remarkably well made and were able, on occasions, to convey the truly liberating aspects of the new technology. Instead of a concentration on the technical complexity of some of the devices now being used in medicine, the simple ideas (such as using a home computer to open up the opportunities of being naughty to a multiply handicapped child) are in focus. The "human interest" is probably the most useful aspect of the films. A handicapped child moving at dangerous speed through a crowded (normal) school playground created so much envy in a group of children watching one of the programmes that they all wanted a computer controlled wheelchair too! The devices on show in the program emphasised the potential for aids for handicapped people to be normalizing influences rather than a visible sign of disability.

The booklet on its own provides a wealth of information and includes a glossary of terms and a useful list of addresses for further advice concerning all aspects of microtechnology as applied to the problems of disabled living.

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