

THE USE OF INFORMATION TECHNOLOGY IN THE COMMUNITY:

AN EVALUATION

by

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SUMMARY

This research describes the evaluation of SPRITE (Sheffield Peoples' Resource for Information Technology), an innovative project funded by the European Social Fund and Sheffield City Council Department of Employment and Economic Development. The aim of the project is to make I.T. resources accessible to unwaged people in their local community centres.

SPRITE was evaluated during the first two years of the project's implementation. The evaluation was set in an action research framework and evaluation findings were regularly fed back into the project. Therefore the emphasis of the research was on understanding the processes by which the project developed, as well as describing and analysing project outcomes. A variety of qualitative data collection techniques were used and the analysis and interpretation of this data is presented in a series of in-depth case studies.

The thesis provides:

1. An overall evaluation of the project, focusing on six research questions. These include an analysis of the impact that involvement with SPRITE had on unwaged individuals, and the impact on the community centres where the project was based.
2. An assessment of the extent to which the psychological literature can provide insights into the issues that the project raises, for example, the application of the organisational psychology literature to community organisations.
3. A review of action research as a technique in the light of the results of the evaluation of SPRITE.
4. Practical recommendations for those involved with the implementation of, or the evaluation of, similar community projects.

The results of the evaluation are discussed in terms of these four areas. The conclusions note that SPRITE was successful in making I.T. resources accessible to unwaged people in Sheffield, and that the tools of organisational analysis can be useful to organisations within the community sector. A model of action research which focuses on the different characteristics of feedback at various stages of an evaluation is provided. Additionally a list of recommendations aimed at service providers within the voluntary or community sector is produced.

For Susan

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POSTSCRIPT

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PUBLICATIONS AND CONFERENCE PRESENTATIONS
ARISING FROM THE RESEARCH

PUBLICATIONS

(**) Cassell, C.M., Fitter, M.J., Fryer, D. and Smith, L. (1988) "The development of computer applications by non-employed people in community settings". Journal of Occupational Psychology Vol. 61, No. 1.

(*) Cassell, C.M. and Fitter, M.J. (1988) "The impact of organisational characteristics on computer education in community centres: an evaluation". Computers in Adult Education and Training Vol 1, No. 1.

(*) Cassell, C.M. and Fitter, M.J. (1988) "Developing Information Technology applications with unwaged groups: empowering the receivers". in B. Glastonbury, W. La Mendola, and S. Toole (eds). Information Technology in the Human Services. Chichester: John Wiley and Sons.

(****) Cassell, C.M. (1989) "The use of I.T. in the community: a communications perspective". In N. Williams and P. Hartley (eds.) Technology in Human Communication. (In press: Pinter).

(*) Cassell, C. and Fitter, M. (1989) Final report on the SPRITE project. Available from MRC/ESRC SAPU. June, 1989.

CONFERENCE PRESENTATIONS

(*) Cassell, C.M. and Fitter, M.J. "The development and use of computer applications by unemployed people in community settings". Paper presented to the British Psychological Society Annual Occupational Psychology conference. Hull, January 1987.

(***) Cassell, C.M. "User control: how can it be achieved?" Play presented to the Community Computing Network annual conference. Newcastle, January, 1987.

(*) Cassell, C.M. and Fitter, M.J. "Developing Information Technology applications with unwaged groups: empowering the receivers." Paper presented to the First International Convention of HUSITA (Human Services Information Technology Applications). Birmingham, September 1987.

(****) Cassell, C.M.: "An action research project with unemployed people". Paper presented to the British Psychological Society sponsored 'Research on Unemployment' seminar. Stirling, December 1987.

(****) Cassell, C.M. "Computers and unemployed people: action research in practice". Paper presented to the British Psychological Society Annual Occupational Psychology conference. Manchester, January 1988.

(***) Cassell, C.M. "Our project - how we see it". Paper presented to the 'Access to training and Technology: the Sheffield experience' conference. Sheffield, April 1988.

(*) Cassell, C.M. and Fitter, M.J. "Community centres: organising processes". Paper presented to the Journal of Management Studies working conference on 'The textures of organising'. Exeter, November 1988.

(*) Cassell, C.M. and Fitter, M.J. "Responding to a changing environment: an action research case study". Paper presented to the Fourth International Congress on The Psychology of Work and Organization. Cambridge, April 1989.

NOTES

* Papers based on this research, written by myself and Mike Fitter.

** Paper based on this research, written by Mike Fitter, David Fryer and myself.

*** Plays written by myself in conjunction with SPRITE users, performed by myself and a number of SPRITE users in each case.

**** Papers based on this research, written by myself.

GUIDE TO THE THESIS

Chapter 1 introduces the aims of the research. The major aim is to evaluate the development and use of I.T. in the community with reference to a specific intervention in this area: the SPRITE project. Within the chapter an introduction to the underlying themes and assumptions behind the research is presented.

Chapter 2 presents a review of the research literature which provides insights into the issues within SPRITE. This literature is considered in three sections: firstly, I.T., unemployment and the individual; secondly, I.T. and the organisation; and thirdly, evaluation research.

Chapter 3 provides an initial description of the SPRITE project including its' aims and structure. The action research framework for evaluating the SPRITE project, and the six research questions that form the basis of the research, are then introduced.

Chapter 4 focuses on the techniques of data collection and data analysis used within the research. It describes how data from a range of methods was analysed to form the basis of a series of case studies.

Chapter 5 presents a case study of the SPRITE project. It describes how SPRITE as an organisation developed over the two years during which the research was taking place, and highlights the critical incidents which influenced its' development.

Chapter 6 presents the community centre case studies. There are three in-depth case studies of community centres where SPRITE was located. Each case study begins with the chronological presentation of descriptive data. The analysis of this data is then presented to address firstly, the research questions; secondly, the extent to which centre users achieved their aims and objectives from being involved with SPRITE; and thirdly, the nature of action research interventions within each centre. A description is then given of the other six centres where SPRITE was implemented.

Chapter 7 examines why SPRITE worked differently at the different centres. Drawing on the organisational literature and findings from the case studies, an analysis of the different outcomes between centres is provided. This analysis is based on an examination of the different organisational processes that emerged within the centres as a result of the implementation of SPRITE.

Chapter 8 focuses on the practical recommendations that arise from the research. By using the data in chapter 5 to examine the extent to which SPRITE was successful in achieving its' aims and objectives, a list of supporting and inhibiting characteristics to the project's success are presented. This list forms the basis for providing recommendations to other organisations that may want to set up similar projects to SPRITE. The literature on I.T., unemployment, and the individual is also reviewed to examine the extent to which it provides insights into research findings.

Chapter 9 reviews the role of the action research framework within the research. By analysing the nature of the feedback structures and processes used, a model of action research is derived which could be useful to other evaluations or interventions based on action research.

Chapter 10 presents the academic, practical and methodological conclusions of the research.

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CHAPTER 1

THE BACKGROUND TO THE RESEARCH

1.1 INTRODUCTION

The aim of the research presented here is to evaluate the development and use of Information Technology (IT) within the community. The major focus of the thesis is the evaluation of a project in this area funded by Sheffield City Council and the European Social Fund. This chapter will introduce the background to the research, identify some important underlying assumptions behind the project, and describe the context within which the project and its evaluation are set.

1.2 THE ACCESSIBILITY OF INFORMATION TECHNOLOGY

Information technology is an increasingly central feature of our society. Although conflicting opinions have been expressed about the changes that rapidly advancing technology will bring, most authors agree that those changes will be dramatic. Forester (1985), for example describes such developments as:

"The unleashing of a tidal wave of technological innovation which scientists are now calling the 'Information Technology Revolution'. This revolution is not confined to the world of science and technology: it is bringing about dramatic changes to the way we live and work - and maybe even think." (p. xiii)

The "Information Technology Revolution" is no longer confined to the world of work but has permeated into other spheres of people's lives. The advent of cheap micro-computers has meant that I.T. is now accessible to people in their homes, as well as in the workplace. It is now common place to see

people using micro-electronic computers in all aspects of everyday life from housework to banking and medicine.

In the development of the "Information Society" computerised information and the skills to access and transform it, are becoming increasingly valued commodities, the distribution of which is far from equal (Darwin et. al., 1985). It is important to recognise that the technology itself is not value free, but instead reflects the social relations in which it is firmly embedded. As Glastonbury et. al. (1988) argue:

" There is little doubt that I.T., like knowledge, is viewed as a source of power in society, and there is a temptation for those who already exercise political and economic control to use I.T. as a form of reinforcement." (p. 329)

This point is supported by Bevan (1988) who expresses concern about the impact of I.T. on social relations:

" The new conventional wisdom on Information Technology is that an I.T.-led revolution is in progress with a new kind of society emerging. This society will facilitate the empowerment and liberation of previously excluded groups of people by bringing them the power of information, a technological cure for information disability. I suggest that we need to examine this idea more critically. There is a strong argument for the opposite case; that the new technologies will all too easily serve to reinforce existing power relationships. There could be increased inequalities of access. The rich and powerful will have the up-to-date equipment and software, leaving the rest of us struggling to adapt yesterday's technologies."(p. 330)

In acknowledging the importance of access to I.T. resources, Nowotny (1982) suggests that there are various disadvantaged groups who are likely to appear on the margins of an information society. Inequities have developed to the extent that "information rich" and "information poor" groups are clearly emerging. She argues that:

" While it is a truism that every society has its marginals, we owe it to those who are likely to be the most affected by the

incumbent changes to look towards their plight in order to intervene when and wherever possible." (p. 106)

In the distinction between the information rich and poor there is, in particular, a growing gap between the waged and the unwaged in terms of access to computer resources and skills (Darwin et. al. 1985). Unemployed people usually have neither the opportunity to develop skills by exposure to IT in the work place, nor the disposable incomes to purchase computing equipment for the home.

Lack of access to I.T. is reinforced by the inappropriateness to the unwaged of much of the technology being developed. The vast majority of non-leisure computer education and software which is available, is oriented towards the commercial world of the employed, and particularly the employer. The new technological needs of unemployed people are rarely recognised, let alone partially met. It seems unrealistic to expect applications of new technology appropriate to the unwaged to develop through market forces - precisely because they lie outside the market.

Information poverty, like other forms of poverty, is ultimately linked with individual, group and collective powerlessness. Therefore, the information poverty of the unwaged clearly reflects the distribution of resources within society generally. As Nowotny (1982) suggests, the pertinent question is how these inequalities in access can be challenged so that unwaged people have more options available to them in a society where their options are already severely limited.

1.3 THE COMMUNITY

One area where computers could be accessible to the unwaged is in their local communities. When assessing the potential of computers in this sphere, it is important to define clearly what is meant by the label 'community'. As Wirth (1964) states:

" The term 'community' like other concepts taken over from common-sense usage has been used with an abandon reminiscent of poetic license." (p. 297)

Problems emerge when attempting to find a working definition of "community". In lay terms the community is generally thought of as a geographical area. Indeed Webber (1964) suggests that spatial proximity continues to be a necessary condition in any definition. However this definition can give rise to problems in that in the strictest sense, the word assumes a cohesion of groups with similar attitudes, needs and interests. Brookfield (1983) suggests that neighbourhood inhabitation carries with it no inherent pre-disposition towards community as a two mile square area for example, can contain a diverse number of groups whose membership and focus can shift over time. This has led sociologists to consider communities of interest where needs, interests and goals are shared. A distinct geographical location is then no longer a pre-requisite for a community. As Roberts (1979) comments:

" The community exists when a group of people perceives common needs and problems, acquires a sense of identity, and has a common sense of objectives. Thus a profession maybe a community despite its lack of a physical locus." (p. 27)

Such a definition does not preclude the possibility that neighbourhood residency can be an interest in itself that unites a particular community.

The focus of this research is the unwaged population within Sheffield, who as Darwin et. al. (1985) suggest:

"... do not form an homogeneous group with uniform needs and interests. Often they act as local collectives for particular interests: pensioners groups, unemployed, ethnic groups and single parents. These groups usually act autonomously." (p. 170)

Within the title 'the unwaged' there will be various communities of interest involved which will need to be described and analysed. A working definition of community also needs to include the notion of spatial proximity in that the research is restricted to particular centres that encompass geographical areas. These areas are most appropriately defined by the residents themselves and sometimes also reflect administrative and political boundaries. Therefore the term 'community' is employed here to cover the different definitions. It will include both a geographical area within which a number of interest groups may co-exist, and a distinctive interest group that may contain members from a wider geographical area.

1.4 COMPUTERS WITHIN THE COMMUNITY

Over the last decade two major approaches to the development of computing within the community have emerged. The first originates from the tradition of Adult Education and focuses on the provision of computer training for adults within their locality, using similar teaching techniques to other Adult Education classes. The second has a somewhat different focus and examines I.T. applications within voluntary organisations. This latter approach is concerned with identifying and promoting computer applications useful to community organisations or groups.

Within Adult Education classes, usually provided by a Local Education Authority from a community base, there has been a growth of interest in the use of computers. As Gerver (1986) notes:

" There is now a clear and urgent need for everyone to have a general understanding of how to use computers for specific purposes, to recognize their usefulness and their limitations, and to be able to make informed judgements about the implications of computerisation on society - to be, using a term now widely accepted, computer-literate." (p. 1)

Many authors agree that computer literacy is now a basic skill that every individual requires, together with literacy and numeracy. Nowotny (1982) describes its importance in the following way:

" It has taken centuries to wipe out illiteracy, and to provide all members of society with a modicum of universal education free of charge. What we are facing now is a more hideous form of computer illiteracy: more hideous because its demands are higher and more difficult to meet, for reasons of costs, of equality of opportunities and of the individual's capability and willingness to meet these demands." (p. 108)

Included within the concept of being computer literate is the notion that an individual is aware of the computer's potential and limitations, and is able to use simple programs relevant to their needs. Some authors go further than this suggesting that the concept includes the ability to discuss computing concepts, applications, and issues intelligently (Bostock and Seifert, 1983)

Others see the importance of an evaluative component where the computer literate assess whether a computer is the most appropriate way to perform a particular task (Papert, 1980; Gerver, 1986).

It is evident that there are differences in the access that various groups have to I.T. resources and that this can be a direct cause of differences

in levels of computer literacy. However, whether computer literacy is currently as important as numeracy or basic literacy, or will ever develop to be so, is another issue. One could (cynically) suggest that concern about computer literacy has mainly emanated from those with an interest in there being a demand for computer education and resources, such as computer literate teachers and writers. Another question refers to the applicability of such skills. Perhaps the advantages of having computer skills lie more in the psychological consequences that those skills facilitate, such as confidence, rather than the ability to apply them practically.

These issues will be discussed more fully in the light of the research. Besides the ideal of computer literacy, Gerver (1986) points to a number of other reasons why adult educators would be interested in using computers. The most obvious is that there is a strong public interest in the use of computers, indeed in Britain alone over one million micro-computers are sold every year. She suggests that the use of computers can therefore encourage adults who would not normally look towards education to seek new ways of learning. Different programs can help accommodate the different learning styles and individual differences within adults, and can be specially adapted where necessary, for example for people with disabilities. The use of computers therefore offers adult educators new opportunities for facilitating the development of skills by their students.

There are other reasons why community groups may want to use computers. Such groups are notoriously under-resourced and therefore there are attractions in using computers to increase both the quality and the quantity of the work done. Gerver (1986) suggests that there is a range of

activities within community organisations for which micro-computers are particularly well-suited, mainly associated with their capacity to handle data which needs to be altered in specific ways, or to do particularly repetitive work. Mailing lists, newsletters and leaflets all lend themselves to being computerised with the aim that groups will become more efficient and effective in servicing their users.

During the 1980s there has been a considerable growth within the field of 'community computing'. As Marsh and Jarrett (1985) suggest:

"As a result of rapid advances in technology in the last decade computers are not just for high fliers: they are for everyone. The introduction of smaller computers has also made them more accessible to people in the voluntary sector. The change in funding patterns to small, one-off capital grants has helped fuel the demand for computers." (p. 1)

The recognition of the potential of community computing is increasing all the time. In Scotland, a government-sponsored project has existed since 1981 to encourage the development of community education about computers. (Scottish Community Education Micro-electronics Programme). Other organisations have also emerged to service the computing and training needs of community and voluntary groups. (For example the London Information Technology Resource Unit and Interaction Community Computing, C.I.P., 1985). A national network (The Community Computing Network) has also been established with the aims of encouraging the growth of community computing projects around the country and providing information and communication between the groups concerned.

However, the computerisation of small non-commercial organisations has not been without its problems. Until recently, many groups were hostile to the

technology that has been portrayed as destroying jobs or de-skilling workers. As community groups became interested in the potential, it became apparent that that there are common problems with computerisation that most non-commercial organisations share. As Ryan and Sheridan (1987) suggest:

" What unites all of them (non-commercial organisations) is that when it comes to computerisation they don't fit. Computers and computer systems were not developed with groups like these in mind; on the contrary they were invented for military purposes and evolved primarily to assist business." (p. 1)

This has meant that many groups have been left to develop computer applications without much support. As they continue:

"There is no large scale government project - like the Micro-electronics in Education Programme - to encourage charities, trade unions and campaigns to exploit the potential of computers for their own purposes. So when such groups have decided to join the 'information revolution' they have often found themselves struggling, alone, with hardware and software designed for organisations whose aims and methods of work are different, indeed often directly hostile to their own." (p. 1)

Despite initial problems many non-commercial organisations are now using computers to their benefit and case studies from those organisations are emerging to help provide guidelines for other similar groups (eg: SCEMP 1982, Marsh and Jarrett 1985, Metzendorf 1988.)

The aim of this research is to consider the development and impact of I.T. resources within the community. This chapter has set the context for the evaluation of a specific community computing project within Sheffield. The aim of the community computing project is to provide access to I.T. for unwaged people within their local communities. The next chapter considers the relevant psychological literature that will provide insights into the issues that are expected to emerge from the research.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The aim of this chapter is to review the literature that is relevant to the research. There is no one body of literature that provides insights into the specific focus of this thesis. Accordingly this review 'dips' into a number of diverse areas and briefly examines approaches in order to provide an understanding of the more general issues underlying this research field. The chapter is divided into three main sections:

1. The literature that considers new technology, unemployment and the individual. This section will cover general attitudes to new technology, the relationship between computer use and self-esteem, and the psychological effects of unemployment.
2. The literature that investigates the impact of introducing new technology into organisations. This section will focus on organisational behaviour, organisational change, and technology and change.
3. The literature concerning the particular methodology of the research: action research and process evaluation.

2.2 I.T., UNEMPLOYMENT AND THE INDIVIDUAL

This section reviews the literature that aims to provide an understanding of the experience of individuals in interacting with new technology. The starting point is attitudes to new technology.

2.2(i) ATTITUDES TOWARDS NEW TECHNOLOGY

In attempting to predict how groups will respond to new technology, it is worth examining their specific attitudes towards computers and discussing any representations that they share. Moscovici and Hewstone (1984) describe how social representations have some similarity with the notion of attitudes but go beyond that to consider knowledge in the form of common sense theories about all aspects of society. In studying groups in the community the key issue from this perspective is their collective view of new technology. In the discussion that follows, most of the literature refers to attitudes to new technology rather than representations. However, it will be argued that there are indications of a social representation of new technology.

Evidence suggests that attitudes and beliefs about new technology have a complex structure. It is clear that within individuals there is no one pro versus anti technology dimension. Etzioni and Nunn (1974), in a major review of quantitative research about the topic, concluded that the public as a whole are not committed to a single view of the impact of science and technology. Breakwell et al (1985) demonstrated that attitudes to new technology are only weakly structured and not yet fully integrated with

other patterns of social beliefs.

One explanation of these findings can be found in the nature of the subject itself. 'New technology' is an all encompassing label that conjures up many images from microwave ovens to advanced computers. It is therefore a multi-faceted concept. It is not surprising then that attitudes towards technology are multi-dimensional. La Porte and Metlay (1975) suggest that the social meaning of technology resides not in the machine as an actual inanimate object, but rather in the use to which it is put, that is until technology is put to use it has no meaning, only in use can it be judged by its ends to be either positive or negative.

Within the differing dimensions of attitudes there does, however, seem to be some agreement. Generally the advancement of new technology is seen to be inevitable (Taviss, 1973; Huws, 1980), the average 'person in the street' having no control over its progress. Yet despite its inevitability its impact is generally viewed as beneficial. Taviss (1973) found that 75% of respondents to a survey conducted in Boston, USA, agreed that "technology does more good than harm". This corresponds to another question in her interview schedule "Overall would you say that technology is more beneficial or more harmful?" where 83% thought it was more beneficial and 7% more harmful, only 10% not being sure.

The dimensions of such beliefs have led to many authors describing attitudes to new technology as ambivalent. This ambivalence, as well as being a characteristic of the attitude, is likely to be exaggerated by the nature of the methodology used in the survey technique. Conventional

Likert-type scales generally require respondents to indicate to what extent they agree or disagree with a statement. Because technology is multifaceted, it is easy for people to see both the benefits and the dangers of it, thereby agreeing with both positive and negative statements about technology. For example in Taviss's (1973) sample 94% agreed that "machines have made life easier" whereas 71% agreed "people today have become too dependent upon machines".

Taviss suggests that one of the deficiencies of survey research is that it is difficult to interpret the results at a more detailed level. She deduces from a number of intensive preliminary interviews that when people agree for example, that "we have become too dependent on machines", this constitutes no more than a philosophical comment, rather than a belief that affects their behaviour and general attitudes. Most respondents indicated that technology was such an integral part of their lives that they could not imagine being without it. Again the distinction between various technologies is important - if individuals were asked about specific technologies they may produce more specific reactions rather than philosophical generalizations. Indeed, in reviewing attitudes to Information Technology, Kemp (1987) argues that:

" A global evaluation of information technology as 'good' or 'bad' is perhaps less useful than considering, in some depth, specific applications of the technology." (p.193)

Anderson and Lipsey (1978), in a sample of 255 respondents questioned about attitudes to technology and energy conservation, concluded that attitudes could be characterised along two dimensions: one referring to an evaluation of utility and the second an affective response. These two dimensions were used by the authors to construct a matrix which placed respondents into one

of three groups:

1. Highly enthusiastic group who characterised technology as both extremely useful and necessary (high positive utility) as well as extremely exciting and good (high positive affect);
2. A more ambivalent group who reacted less positively in affect but agreed with the enthusiasts on the utility of technology;
3. A group who rated technology low on both dimensions.

Despite these distinctions all three groups rated technology positively. Anderson and Lipsey suggest that comparisons between the three groups showed that they differed markedly in their orientation to science and technology and the use of technology within their everyday lives. They also suggest that, in comparison to surveys where a single pro/anti dimension towards technology is used, the two dimensions of utility and affect are useful for identifying a cohesive set of attitudes to the development of science and technology generally.

Overall then, the general representations that people have about technology suggest that evaluations about its benefits and problems are characteristically ambivalent whilst there is general agreement that further developments are inevitable. These seem to be social representations in the true sense of the term - a common belief about the impact of technology and its inevitability. In looking for similarities within a population it seems that they relate to technology and the future in terms of its inevitability.

However within a population one might expect different groups to have different evaluations of technology. Taviss (1973) asked her sample whether computers, automation and the space programme mostly benefitted or mostly harmed the respondent herself/himself, working people, business people, scientists, and people in general. As might be predicted in all cases business people and scientists were seen as benefitting the most.

If technology has different rewards for different groups then we would expect different groups to have different evaluations of technology. There seems to be a clear gender difference with attitudes to new technology. Breakwell et al (1985) found that women were less convinced of its value, though there were no differences in the extent to which women and men wanted a technical training. Both sexes were convinced of the inevitability of new technology. The authors suggest that when one considers the implications of new technology for women, it is not surprising that they display more negative attitudes. This is plausible when these implications are considered. Bereano, Bose and Arnold (1985) suggest that the primary gains from new household technologies in the home have not gone to women. Whilst the physical work may have been reduced, the number of hours that the average woman spends in housework remains the same. Rather than the technology being responsible for this, they lay the blame firmly on the social relations within patriarchal societies that require women to work within the home for free. Within this framework of social relations it is unlikely that any technological advance would particularly benefit women.

Within the workplace, several authors have suggested that the introduction of information technology will serve to reduce the number of jobs available

for women, particularly in the office sector where there is a high female labour force. (Downing, 1980; Huws, 1982). It is understandable then in terms of cost-benefit analysis that women in general have more negative evaluations of new technology than men.

Differences in evaluations have also been found between occupational groups. Taviss (1973) divided her sample into four occupational groups: professional-managerial, sales and clerical, skilled and semi-skilled manual, and unskilled workers. She found that in general skilled workers were the most negative and professional-managerial workers the most positive, in evaluating technology. Taviss suggests that skilled workers are more fearful of losing their jobs as a result of new technology and therefore have more negative evaluations, indeed whereas 57% of the skilled workers agreed that "machines have thrown too many people out of work" only 12% of the professional-managerial group agreed with this statement.

Other differences in evaluations could originate from an individual's or group's political perspective, where attitudes to new technology may be a component of a general political outlook. In their study, Breakwell et. al. (1985) hypothesized that conservatism and the protestant work ethic would be positively correlated with pro-technology attitudes, an interesting hypothesis when one considers the true meaning of the word "conservative". This hypothesis was confirmed within their sample of 601 undergraduates. It would seem then that attitudes to technology are part of a wider ideological framework. Particularly interesting with this sample is that regardless of their political orientation, respondents all accepted the inevitability of technological change.

Within this picture of attitudes to new technology, it is relevant to debate how unwaged people would respond. Would their attitudes as a group be different from the population as a whole or would different evaluations of technology be relevant to different groups of the unwaged? One consideration is the question of access to computers. Taviss (1973) found that greater information about technology was associated with a more positive attitude towards it. This result concurs with studies that have considered the reactions of clients to the use of computers within the service sector. Cruickshank (1984) in a study of patients' attitudes to the use of computers by doctors in General Practice found that patients who had experience of a computer as a diagnostic tool, or had used a personal computer, had more favourable attitudes towards the use of computers in medicine.

Within a community computing project one could suggest that those groups which put themselves forward to learn about computing may have more information about its potential and therefore a more positive evaluation of the general benefits than other groups in a community centre or society at large. Therefore within the research there needs to be some examination of to the extent to which the sample are self-selecting as groups who have expressed an interest in learning to use computers, and the extent to which the project can attract groups within the unwaged who have negative evaluations of technology.

2.2(ii) SELF-ESTEEM AND DESIRE FOR CONTROL

As well as computer familiarisation having an effect on the attitudes of an individual, it may also have other psychological consequences. Access to computers and computer literacy has been shown to have a positive impact on an individual's self-esteem and sense of identity (Turkle 1985). This arises primarily from the sense of control that an individual can gain as a result of successfully using a computer. An interesting discussion on this subject comes from Turkle (1985) who views the computer as a subjective instrument which can act as a projective screen for an individual's concerns. Her study comprised of a questionnaire answered by 95 New England computer hobbyists, and in-depth interviews with 50 individuals who owned home computers. She found that many of her interviewees used the computer to formulate a sense of identity as it provided them with an activity that stretched beyond a hobby, and therefore encouraged a belief that they could be intellectual and understand technical subjects. For example Turkle suggests:

" Most first-generation hobbyists have technical educations, but many of them, like Barry, feel they have never been part of what is most exciting and important in the scientific and technical cultures. They see themselves as the low men on the totem pole. Working with computers, even small computers, feels technologically "avant garde". (p.171)

Turkle goes on to describe how people feel safe and protected in their constructed computer worlds. For many, their personal relationship with their computer compensates for the alienation they feel at work and their perceptions of their own failure in not reaching the top jobs. Forty percent of those who responded to the survey were employed, or had been employed, as programmers working in large teams where they had little

opportunity to get a feel for the whole task. Their outside computer activities allowed them to see what their real capacities were in carrying out non-fragmented work.

Turkle concludes by describing how the hobbyists she interviewed were excited and enthusiastic with how they were using their computers, indeed they were deriving great pleasure from developing "non-alienated" relationships with them. However, she cautions the reader that:

" It would certainly be inappropriate to rejoice at the holistic and humanistic relationships that personal computers offer if it turns out, that when widespread, they replace religion as an opiate of the masses." (p. 269, 1987)

Within this final comment is the assumption that computers can offer holistic and humanistic relationships to individuals. For most of her sample the relationship with the computer replaced something else that they felt they should be achieving from life, be it status at work, or perceptions of "manhood" that are seen to originate from technical knowledge. These goals may not appeal to everyone. One could question the desirability of a computer fulfilling these purposes/desires in a person's life. Indeed, in political terms, the fulfilling of the desire for control is particularly pertinent. Lloyd and Newell (1985) present an alternative view from their experience of working in the computer industry. Though they approach the subject from a different angle to that of Turkle, they also explain the pleasure in using the computer in terms of control. They suggest:

"The technical side of computing can be addictive - so much so that people seem to relate only to the machines and to the technology, at the expense of human relations. The result can be deeply alienating. With the advent of personal computers, the "micro in the attic" syndrome is creating a new generation of computer widows." (p. 248-249)

They continue by suggesting that many men within the computer industry find interacting with computers more satisfying than interacting with people, primarily because they can control them with ease. For women, the absorption of themselves in computing may not have the same attraction. Indeed, Lloyd and Newell argue that the obsession with control is less likely to develop within women as their lifestyles and socialization do not allow them to forget personal responsibilities and attachments in the same way. They therefore make a similar link to Turkle, between an individual's desire to control a computer and other aspects of their social or work-life. However they point out that the opportunity to compensate for lack of status or satisfaction at work is not available to all. Rather, the amount of time that individuals have available to spend developing 'relationships' with their computers can be at the expense of personal or social responsibilities and therefore increase, rather than decrease, alienation.

The pertinent question about this work is how the findings would relate to a sample of unwaged people. Turkle's sample were a particular group of individuals, largely male, approaching middle age and reasonably 'well-off'. It is difficult to imagine generalising the results from this population to others, for example a busy housewife without the leisure time available, or the unwaged, for whom access to a home computer may not be financially possible.

Turkle does not divulge what the hobbyists use their computers for. The use to which technology is applied clearly has an impact on an individual's

evaluation of that technology. There could be a link between desire for controlling a particular form of technology and the purpose for which it is used. Within a community project for example, it might be that a user group have an interest in a specific type of technology because of its potential advantages to that group. In this case, controlling a computer for their benefit would clearly be a collective goal. The important consideration here is the consequences that the control of a specific form of technology has. In Turkle's sample the results of developing relationships with and controlling computers are self-esteem and a sense of identity, whereas, alternatively, they could be increased efficiency in a given task. The former would indicate a direct personal, psychological gain, the latter a possible psychological gain through the achievement of a collective goal.

Linn (1985) argues strongly that Turkle's analysis neglects the social context of technology, and that this approach is symptomatic of the value free way in which computers are discussed when compared to other elements of popular culture:

" Turkle reproduces the sense of magical possibility around computers and programming by dismissing the social constituents of computer use; by refusing to recognise the many labours of computer production; by ignoring the cultural definitions of particular user groups; and by failing to critique the exaggeration of computer power in popular representation. These are all matters of sociological method. Yet the popularity of Turkle's book is some testimony to the pervasive suspension of social concerns and critical debate which surrounds the topic of computer technology. Had she written in such an ahistorical and asocial manner about the educational use of film, there would be no such deference". (p. 98)

Linn's critique highlights the problem of making assumptions about the link between the use of technology and control out of the appropriate context. It also suggests that the analysis of such relationships needs to take into

account the representations of computers, and their potential, that groups of people share.

The whole notion of the potential of effective computer use as an aid to encouraging ones self-esteem through increased perception of control raises interesting questions. The opportunity for control over ones own life is perceived to be a crucial factor in the mental health of an individual (Warr, 1987). For particular groups of the population, such as the unwaged, the opportunity for control over their own lives maybe lacking. This is one of the factors that contributes to unemployment having a psychologically harmful effect on the mental health of individuals. The fact that unemployment has been shown to have a negative effect on self-esteem (Warr and Jackson 1983), is particularly relevant to this project where the population are unwaged people. Therefore to set the discussion within the appropriate context, the next section of this chapter considers the psychological effects of unemployment.

2.2(iii) THE PSYCHOLOGICAL EFFECTS OF UNEMPLOYMENT

Research into the psychological effects of unemployment was first conducted in the 1930's and focused mainly on the effects that mass unemployment had on individual communities. The Marienthal study, for example (Jahoda, Lazarsfeld and Zeisel, 1933), examined the impact that the closure of the only factory in an Austrian town had on the local community. This early work suggested that the psychological effects of unemployment were diverse but nonetheless devastating ranging from loss of status, identity and self-esteem to shame, self-doubt and isolation. The increase in

unemployment during the 1980's has seen a resurgence of interest by researchers in the psychology of unemployment, with research attempting to understand further the impact of unemployment on individuals.

Most of the psychological literature has concentrated on what is lost when one becomes unemployed. Studies have examined the differences in the mental health of employed and unemployed people (eg: Hepworth, 1980), or investigated how the mental health of unemployed people changes over time (eg: Cohn, 1978; Jackson et al., 1983). Such studies have mainly been descriptive, and either cross sectional or longitudinal.

A number of studies have suggested that unemployment has a major impact on psychological well-being. For example Warr (1978), in a study of 1665 steel workers six months after plant closure, found a significant decrease in their present life satisfaction. Studies using measures of self-esteem and related concepts such as identity and lack of self confidence have generally asserted a link between unemployment and falling self-esteem (eg: Swinbourne 1981).

Other studies have measured psychiatric vulnerability using the General Health Questionnaire (Goldberg, 1972), which is designed to detect minor psychiatric disorder in the general population. Liem and Liem (1978), in a study interviewing 80 unemployed men matched with 80 employed men from a variety of occupations, found that being unemployed was strongly associated with higher levels of psychiatric symptoms. Other studies have reported similar results with populations of young people (e.g.: Warr, Banks and Ullah, 1985).

The psychologically harmful effects of unemployment have therefore been well-documented in the literature, as have the moderator variables which help to explain why the experience of unemployment is different for different individuals. Such moderating variables are sex, race, levels of activity, age, job involvement, etc. Indeed, Warr (1982) suggests that there are twelve possible moderator variables, a list that is not necessarily exhaustive.

The literature describes many facets of the psychologically harmful effects of unemployment. However it seems lacking in explanations of why these effects happen. Fryer (1986) suggests a theory of the psychology of unemployment is lacking, although there are one or two "proto-theories", as he describes them, that are worth considering. These fall into the categories of stage theories and deprivation models. Stage theories of unemployment were present in the 1930's literature and usually describe a series of progressive stages that an unemployed person passes through from the onset of unemployment to an eventual apathetic acceptance. Though the actual labelling of the stages may be different (eg: Gatti, 1937; Briar, 1977) the basic concept remains the same.

It is clear that looking for common shared points in the experience of unemployment is interesting and the description of common experience useful, however, stage theories appear to be another way of describing the effects of unemployment by imposing an organised structure on them, rather than the stages being explanations in themselves.

Deprivation models, on the other hand, seek to explain the psychologically harmful effects of unemployment by suggesting that the unemployed are likely to be deprived of various important functions in their lives that were previously served by employment. In Jahoda's (1982) model, employment is seen to have both manifest and latent functions, the manifest being pay and conditions and the latent being less obvious: imposed time structure; shared experience and contacts; personal status; social identity; enforced activity; and variety. An unemployed person is therefore deprived of these specific supports that work provides. According to Jahoda, only employment can fulfil these functions in an individual's life.

Deprivation models have their advantages and disadvantages which have been discussed elsewhere (Jahoda, 1982; Fryer, 1986; Hartley and Fryer, 1984). One particular assumption of such models needs consideration in the light of the current research. The view of human beings that such models espouse is that of reactive and dependent individuals in need of the structure that employment imposes on them: a structure that, in this sense, can only be viewed as beneficial. The model therefore omits any acknowledgement of the alternative that unemployed people may be quite active, resourceful people, who develop constructive strategies to deal with the situations in which they find themselves.

A more recent model which addresses the characteristics of both work and unemployment is Warr's (1987) vitamin model. Warr suggests that there are nine aspects of the environment that together act to determine a person's mental health. These are: opportunity for control; opportunity for skill use; externally generated goals; variety; environmental clarity;

availability of money; physical security; opportunity for interpersonal contact; and valued social position. He proposes that the relationship between these environmental features and mental health is not linear, rather, as with vitamins to physical health, their absence gives rise to an impairment in health, but their presence beyond a required level does not further enhance health. Warr suggests that this model provides a comprehensive framework for viewing together the environments of jobs and unemployment. In general, unemployed people will be low in respect of all the nine features, but this does not necessarily have to be the case, rather each of the nine has to be considered individually. This premise means that the model can help explain differences in psychological reactions to unemployment. As Warr notes:

" There is a shortage of good theories about why unemployment is in general so harmful. Research has tended to focus primarily on outcomes rather than processes. The present approach can be extended to account for the mental health impact of unemployment through nine different types of process. Furthermore, concrete applications of the general framework may yield practical ways forward to help the unemployed. For example, it might be possible for local communities to develop institutions and processes which provide increased opportunities for personal control and skill use." (p. 162)

This latter point is important. In contrast to the dominant way of investigating the psychologically harmful effects of unemployment only a handful of studies have been concerned with intervention, either to prevent or ameliorate such distress, in an evaluative or action research mode.

At an individual level, investigation has been made of people coping particularly well with unemployment (eg: Fryer and Payne, 1984) but with little progress in developing guidelines for advising those who cope less well. Others have explored the potential difficulties and merits (Breakwell

et al., 1984) or actuality (Fineman, 1983) of counselling unemployed people, though without evaluation of the success of the enterprise.

At a collective level, psychologists have investigated surrogate employment schemes such as the Subsistence Production Society experiment in South Wales in 1938 (Jahoda, 1987), U.K. government job creation schemes (Stafford, 1982; Braithwaite and Garcia, 1985), and the potential for psychological research concerning trades union sponsored unemployed workers' centres (Winfield, 1981). The Open University has produced an Action Planning course for unemployed people (O.U., 1986). In Sweden, psychologists are conducting a three pronged action research project involving initiation and evaluation of structural challenges to unemployment (for example, efforts to heighten media awareness, social services collaboration), political self-help groups (along the lines of 'traditional' popular movements), and social activity circles (arts, crafts, etc) (Levi et al., 1984). In the U.S.A., psychologists have investigated the use made by an unemployed steel work community of "actions and programmes of community mental centres and other human service agencies" (Buss et al., 1983). A central finding was that from a wide range of support services, the unemployed people actually sort help less from every outlet except the loan agency.

Thus, evaluative studies from a psychological perspective that attempt to initiate or assess ameliorative action are spread widely but thinly. This is surprising when one considers that evaluation methodology and practice is one of the spectacular growth areas of occupational/ organisational psychology (Legge, 1984). Additionally, early research from this

perspective is well-documented. The authors of the Marienthal study (Jahoda et. al. (1933), which first systematically charted "the vicious cycle between reduced opportunities and reduced levels of aspiration", asserted that there was an increasing need for 'creative innovations' that would enable individuals, groups and communities to overcome situations of deprivation. Marienthal was the first well-documented, action research project concerned with ameliorating the negative psychological effects of unemployment. The researchers adopted a ...

"... consistent point of policy" that "none of our researchers should be in Marienthal as a mere reporter or outside observer. Everyone was to fit naturally into the communal life by participating in some activity generally useful to the community."(p. 5)

This policy was put into effect in many ways. For example, a course in pattern design was put on by the researchers. This ran twice a week for eight weeks and was attended by 50 women from the village, an early acknowledgement that women too suffer psychological consequences of unemployment. The researchers noted the twin benefits of action research: for the unemployed women the course "satisfied the desire common to all unemployed for some kind of activity" and for the researchers the course provided an unobtrusive way to collect data. The Marienthal investigators pioneered a collective level of analysis, emphasizing the importance of studying "the unemployed community, not the unemployed individual".

As with the Marienthal study, the focus of the study reported in this thesis is also primarily at the collective rather than the individual level. This research adopts the assumption that different groups of unwaged people should exercise collective autonomy in implementing new technology in ways beneficial to themselves in settings defined and controlled by

them. These assumptions are consistent with the criteria and recommendations established by Jahoda et al. (1972). Therefore the emphasis on analysis at the community level, with an emphasis on action research, distinguishes this research from the majority of research about the psychological effects of unemployment conducted during the 1980's.

2.2(iv) SUMMARY

This section of the literature review has considered the important issues when examining the reactions of unwaged individuals to using information technology. Individuals and groups of unwaged people also need to be viewed in the context of the organisations in which they operate. The next section of this review considers the literature concerning organisations, with particular reference to community centres and the introduction of information technology.

2.3 I.T. AND THE ORGANISATION

Human behaviour within organisations is the focal point of a wide body of literature that can be grouped under the heading of 'organisational behaviour'. This section considers some areas of that literature with two aims. The first is to gain an understanding of the impact that a community computing project will have on the organisational dynamics of a community centre. The second is to consider the processes that will affect the development of such a community computing project.

The organisational literature, whilst providing valuable insights into behaviour in business organisations, has rarely been applied to organisations within the voluntary sector, such as community centres (Handy, 1988). When studying the impact that new technology will have within a community centre from the perspective of the organisational literature, a number of conceptual issues arise. Firstly, relationships between individuals and groups within the organisations traditionally studied by psychologists are primarily economic, the individual being an employee or customer of the organisation. Within community centres however, the dimensions of relationships are more varied. Though some community centres will have employees, community centre users are generally involved in centres on a voluntary basis and therefore will have more control and choice about their involvement within those organisations. When relating to other users, the power relationships that typically exist within business organisations may be of a different nature, or even absent.

Another important difference is that community centres often aim to

democratise their structures in order to facilitate participation from their users and members. Their organisational climate and the associated procedures for decision-making will be different from business organisations. Within every organisation a key element crucial to survival is the control of performance (Buchanan and Huczynski 1985). The criteria of effectiveness and associated control mechanisms within a community organisation will be different from those of a commercial organisation. Generally, emphasis will be placed on serving the needs of the user groups, rather than being geared towards other aims, such as making comfortable profits. Therefore, in reviewing the relevant literature on organisational behaviour such differences need to be taken into consideration.

Although there is little information on the organisational dynamics of community groups, at the wider classificatory level of voluntary organisations, research is beginning to emerge. The publication of "Understanding Voluntary Organisations" by Charles Handy (1988) is the first step in this direction. Within the book, aimed at practitioner audiences within the voluntary sector, Handy suggests that a number of voluntary organisations do not take the tasks of management and understanding organisation seriously. There are quite valid reasons for this:

" To many in the voluntary sector, organization means management, and management reeks of authoritarianism, of capitalism, of business, of bureaucracy.... Management to many sounds like manipulation. The essence of a voluntary organization, after all, is that people are there because they want to be there... If you join something because you believe in its cause and its values, because you want to, you are not about to submit yourself to some anonymous authority, to subject yourself to bureaucratic whims, or to do, automatically what someone tells you to do. (p. 2)

Whilst recognising the validity of such a view, Handy suggests that

voluntary organisations can learn considerably from the management and organisational literature:

" While renouncing many of the assumptions which underlie the management of businesses they should not ignore the fact that they themselves are organizations made up of people and that there are things known about the way people interact with each other and with organizations which are likely to hold true in their world as well as in that of business. It may not feel good to be managed but it is still better to be organized than disorganized." (p. 5)

In line with this comment, this review will consider aspects of the organisational literature that are relevant to the research focusing on organisational structures and cultures; organisational environments; technology and change; and the nature of community groups.

2.3(ii) ORGANISATIONAL STRUCTURE

The way in which organisations are designed and structured is crucial in determining their success. Blackler and Shimmin (1984) suggest that the term 'organisational structure' refers to:

" the generally fixed relationships that exist among members of an organisation including, for example, job definitions, the delineation of units or departments and the lines of authority within the organisation." (p. 60)

All organisations therefore have structures and a variety are found. Pugh and Hickson (1968) suggest that different organisations will have different structures designed to represent the goals and policies of the organisation. Within these structures there will be choices made about the division of tasks into functions, sections and divisions. One of the first writers to comment on the design of organisational structures was Weber (1947) who described a particular type of structure: bureaucracy. The term was used to describe a type of formal organisation based on authority and

rules which he viewed as the most efficient form of social organisation. Rules, based on rational and logical needs, contributed significantly to the efficient operation of a bureaucratic form of organisation. Webers' views about the benefits of bureaucracy have been increasingly challenged, particularly from those who have suggested that bureaucratic structures are inappropriate and unsuitable for the personal development of the individuals who work in those organisations (eg: Argyris, 1973).

Rather than describing 'ideal' forms of structures, other writers have sought to describe typologies of organisational structures. The development of the contingency approach to organisational structure in the 1960s, (Burns and Stalker, 1961; Blain, 1964; Woodward, 1965) questioned the view that there was one 'correct' form of structure in efficiency terms, arguing that the most appropriate form of organisational structure was contingent upon the factors within the situation that the organisation operated in. The critical factors within the situation were perceived in different ways by different theorists. For example, Woodward (1965) suggested that it was the complexity of the technology used by an organisation that determined the most appropriate form of structure. Other theorists have focussed on the environment within which the organisation is operating (eg: Lawrence and Lorsch, 1967).

Burns and Stalker (1961) suggested that there are two major forms of organisational structure which reflect the extent to which organisations have the capability to adapt to changing demands and circumstances. The most appropriate way to describe the differences between the two typologies is to look at the extremes. Organisations with '**mechanistic**' structures

are strongly bureaucratized and rely heavily on the formal demarcation lines and stable, predictable goals that bureaucracy demands.

'Organic' structures, on the other hand, are designed primarily to enable the organisation to respond to the differing demands that emerge from the environment external to the organisation. Organic structures encourage open communication and a continual re-assessment of priorities, whereas within mechanistic structures there is a preponderance of vertical communication.

Blackler and Shimmin (1984) suggest that pure forms of the two structures rarely exist. In many instances a mixture of the two types may be seen, indeed all variations between the extremes are possible. Within this context of categorising structures, community centres would clearly fit into the latter category of organic structures. Most centres aim to be flexible and adaptable to the different needs of user groups. Communication patterns tend to be informal with the emphasis being on consultation between management committees and users. Clearly through, with reference to Blackler and Shimmin's point, there will be variety in the extent to which mechanistic procedures form part of the structures of community centres. Therefore, within this research the structures of the centres need to be analysed to examine where they would be placed on the mechanistic/organic continuum.

Miles (1980) suggests that 'differentiation' and 'integration' are the cornerstone concepts of understanding organisational structure. These two concepts serve to explain the degree of structural complexity within an organisation. Differentiation represents the extent to which an organisation is segmented into a number of components related to tasks.

Integration refers to the extent to which these units are linked together, or the extent to which they are required to remain independent. These terms emerge from the work of Lawrence and Lorsch (1967) who evaluated the appropriateness of organisational structures in responding to environmental factors, for example to changes in markets. Since different organisations operate in different environments they argued that companies had differing needs for specialization that were reflected in their organisational structures. This reflects the contingency approach to organisational design, that is the idea that an appropriate design is contingent upon a number of factors. Lawrence and Lorsch however, state that the determining factor of organisational structure is the environment within which an organisation operates.

Lawrence and Lorsch suggest that differentiation and integration are inversely related. Organisations that are highly differentiated and have a number of task units, are difficult to integrate. Organisations develop specific integrative mechanisms to enable the differentiated units to come together. This approach is useful in evaluating the structures of different voluntary organisations. Handy (1988) gives the example of;

"A fund-raising organization for the developing world, for instance, may decide that it is providing education as well as raising money and may need to recognise the difference in its structure by creating an educational division to augment its money-collecting activity". (p. 108)

One can see that within larger voluntary organisations, a whole number of sub-divisions are created. To take an example, the Campaign for Nuclear Disarmament (C.N.D.), has sub-sections for Trades unionists, Students, Ex-service men and women, Christians, Young people, Labour Party members, and Conservative Party members, to name some of them. All these

sub-divisions organise their groups autonomously, within the organisation. To ensure integration between these divisions the organisation has a National Council with representatives from each of the divisions that meets regularly to co-ordinate activities. Clearly, such a differentiated organisation would need complex integration mechanisms when planning collective action.

The example of C.N.D. illustrates an organisation that is differentiated at the horizontal level. All the different groups have equal authority within the organisation. An organisation with high vertical differentiation will have a number of management levels with differences in the amount of authority attached to each level. One could argue, based on the differences between community and business organisations highlighted earlier, that within community organisations horizontal differentiation will be more likely than vertical differentiation. This would be in line with the philosophy of such organisations.

In creating organisational structures there are a number of choices. Lorsch (1970) suggests that the structure of an organisation is a complex set of variables about which management can exercise considerable choice. That is, a structure is never "an immutable given". Child (1984) suggests that the requirement for any organisation is that it creates a structure which suits its particular needs. This structure needs to be consistent between its various components and to be able to adapt to changing circumstances over time. Rather than viewing organisational structure as being contingent on technological or environmental factors, the 'strategic choice' perspective (Buchanan and Huczynski, 1985) sees the design of organisational

structures as being:

" an essentially political process in which constraints and opportunities are functions of the power exercised by decision makers in the light of ideological values." (Child, 1972, p. 2)

Within any organisation, there are choices to be made about structure by the decision makers. Such choices refer to design of jobs, levels of management, division into departments, control of performance, reward systems and how the organisation can respond to change. Crucial to the way an organisation is structured is its objectives. Child (1984) points out that structural design is therefore a political as well as a technical question. One needs to ask who controls and determines the objectives of an organisation and similarly the way an organisation is structured.

Salaman (1980) describes sociological approaches to the analysis of organisational structure. He suggests that sociologists have adopted two differing perspectives in viewing how different structures originate. One approach is to view structure as an emergent feature as a result of ongoing negotiations and interactions, and the other is to consider structure as a result of imposition or constraint. Salaman points out an important distinction that exists when studying organisational structure: that between 'official' descriptions of structure, and that of the behaviour of organisational members. This is important in that the two are not always the same thing. Structures in theory may be different in practice and:

" This makes the description and analysis of organizational structure problematic since a number of different structures will be apparent to those within the organization, who view it in terms of different priorities." (Salaman, 1980, p. 57)

Therefore in conducting research in community centres, it is imperative that a structure as described by a management committee for example, is not

taken as given. Instead, different opinions as to the ways structures operate need to be sought. Additionally, it needs to be recognised that organisational structure is not a given factor. Rather, structure can be viewed as a process that emerges as an organisation is developing. So for example, a new community centre may expand rapidly and find that more workers are needed to play particular roles. The structure of the organisation will therefore be adapted and will 'emerge' in such a way that is relevant to meet the organisation's objectives. Within the current research, the introduction of a computing project into a community centre may mean that further co-ordinating mechanisms are needed to integrate that project into the work of the centre as a whole.

A consideration of the factors that influence organisational structure and the different types of structures that can exist or emerge can offer insights into organisational processes in community centres. Closely tied in with the concept of organisational structure is that of organisational culture. This is discussed in the next section.

2.2(iii) ORGANISATIONAL CULTURE

" Organisations are as different and varied as the nations and societies of the world. They have differing cultures - sets of values and norms and beliefs - reflected in different structures and systems. And the cultures are affected by the events of the past and by the climate of the present, by the technology of the type of work, by their aims and the kind of people who work in them." (Handy, 1976 p. 176)

The quote above introduces the concept of organisational culture. The culture of an organisation cannot be rigorously defined, though it is likely that its members will have a 'feel ' for the prevailing culture

within the organisation. Handy (1988) suggests that it is only in the last decade that writers on organisations have accepted that cultures can vary from one organisation to another. The recognition of this 'cultural blindness' as he describes it, has led to an increased interest in culture from writers on organisations. Morgan (1986) suggests the increased interest in culture corresponds with changes in international industrialism:

" Ever since the rise of Japan as a leading industrial power, organization theorists and managers alike have become increasingly aware of the relationship between culture and management. Whilst different theorists have argued about the reasons for this transformation, most agree that the culture and general way of life of this mysterious Eastern country have played a major role. The changing balance of world power associated with the OPEC oil crisis of 1973, and the growing internationalization of the large corporations, have also increased interest in understanding the relationship between culture and organizational life." (p. 111)

This increased interest has led to writers attempting to describe the factors that will influence the particular culture of an organisation, and therefore to this extent, the concept has been treated similarly to that of organisational structure. The two are clearly inter-linked. A starting point with culture, as with structure, is to look at the ways in which different organisational cultures have been described and categorised.

Harrison (1972) has identified four prevailing organisational ideologies or cultures: role culture, task culture, power culture and person culture. Each gives rise to different structural arrangements within organisations. **Role culture** reflects the bureaucratic tradition as initially described by Weber (1947). The varying functions of an organisation are depicted as the pillars upon which the organisation stands. The structure is viewed in terms of the roles that members of the organisation fulfil, the definition

of each role being arrived at through special procedures such as job descriptions and rules. Power within such cultures arises from the positions which individuals within the organisation have.

An organisation with a **task culture** is project orientated and its corresponding structure reflects this with tasks being prioritised. The appropriate people are usually organised in teams with the emphasis being on ensuring that the task is completed effectively. The relationships between task group members are based on their contribution towards the task, rather than on any hierarchy based on roles.

The third form of culture is **power culture**. Here the emphasis is on power which may be in the hands of an individual or small group. Therefore specific individuals exercise control and there are few procedures or rules. Such a culture is very dependent on the skills and abilities of the key individuals.

The final form of culture is **person culture**. Handy (1976) suggests that this culture will not be found pervading many organisations, yet many individuals will cling to some of its values. Within this culture the role of the organisation is viewed as serving the needs of individuals within it for whom it has been created. The individuals within the organisation are perceived as having collective aims and objectives. Its structure is as minimum as possible, and control mechanisms, such as role hierarchies don't exist, except possibly by mutual consent. Although this form of culture is not prominent in many organisations, it is a useful way to consider the culture of community centres which often attempt to avoid conventional

hierarchies.

In classifying cultures in this way, there is a danger that culture is treated as a stable phenomenon. This contradicts the view of sociologists who view culture as a process that is continually being produced and re-produced as a result of social processes. This point is taken up by Morgan (1986) who puts the case for culture as a process:

" We must attempt to understand culture as an ongoing, proactive process of reality construction. This brings the whole phenomenon of culture alive. When understood in this way, culture can no longer just be viewed as a simple variable that societies or organizations possess. Rather, it must be understood as an active, living phenomenon through which people create and recreate the worlds in which they live." (p. 131)

This view assigns individuals and groups with proactivity in the creation of organisational cultures. A number of sociologists and psychologists have focused on this action approach, describing the ways in which human beings structure their realities (Mead, 1932; Goffman, 1959). Characteristic of these approaches are dramaturgical metaphors about the way people 'act' on the 'stage' of life. For example, Weick (1979) suggested that the process of 'enactment' is crucial for reality construction. The underlying point from this perspective is that culture is a process that an organisations members create for themselves, and are continually interpreting.

The action perspective of culture is particularly interesting when related to community centres, as the view of human beings that it presents is closely aligned to the prevailing culture of many community organisations. Many community centres have an 'empowerment' culture. Because many centres function to provide services to those groups that traditionally have little power within our society, such as the unwaged, the emphasis of centre

philosophies is often to address this inequality in power. The philosophy of empowerment does not necessarily rest on the idea that one group be given the skills or abilities required to dominate another group. Rather it is dependent on a different interpretation of the concept of power. As Bevan (1988) outlines:

" A different view of power has developed within the feminist movement: power is seen as an enhancement of the ability to live and to make one's own decisions. Here the term power is not used to mean domination over others. Power is autonomy, a sense of internal strength and confidence to face life. It involves the right to determine choices in life. It requires the ability to influence the social processes that affect our lives and to influence the direction of social change." (p. 329)

Empowerment then, essentially involves community centre users re-structuring their realities so that they have more control over their everyday lives. This philosophy or culture of empowerment in itself is located within the action perspective, viewing individuals and groups as pro-active human beings. This corresponds with the 'shared reality' view of organisational culture, which like empowerment, is essentially a collective phenomenon.

Because culture is all-pervasive within an organisation Morgan suggests that:

"In order to come to grips with an organization's culture, it is necessary to uncover the mundane as well as the more vivid aspects of the reality-construction process. And sometimes these are so subtle and all-pervasive that they are very difficult to identify." (p. 131)

He continues by suggesting that many aspects of an organisation's culture are embedded in the routine aspects of everyday practice. Included in these aspects are the shared understandings that might accompany company slogans, myths or rituals about ways of working, and activities that may seem purely

structural, such as meetings. Having user representatives on community centre management committees, for example, is a symbol of the empowerment culture. Autonomous committees of users and slogans such as 'user control' also fit into this pattern.

In adopting this approach to the study of organisational culture, some caution is required. Not all individuals or groups within an organisation have the same resources and therefore some will have more input than others in influencing the process of culture. Although all individuals and groups can interpret the cultural process, adapting or changing the dominant view of an organisation's culture is not accessible to all. Morgan notes this drawback and comments in the following way:

" In studies of organizational culture, enactment is usually seen as been a voluntary process under the direct influence of the actors involved. This view can be important in empowering people to take greater responsibility for their world by recognising that they play an important part in the construction of their realities. But it can be misleading to the extent that it ignores the stage on which enactment occurs. We all construct or enact our realities, but not necessarily under circumstances of our own choosing. There is an important power dimension underlying the enactment process that the culture metaphor does not always highlight to the degree possible." (p. 140)

The consideration of culture as an organisational process will be useful in understanding how community organisations adapt to the changes that occur as a result of the introduction of a computing project into those organisations. Taking a 'reality construction' view of organisational culture as a process, fits neatly in with the type of organisations to be studied: community organisations.

So far this review has covered aspects that are internal to organisations such as structure and culture. In order to gain a fuller understanding of the processes by which organisations develop, some consideration must be

given to the external environment within which organisations operate. This is the focus of the next section.

2.3(iii) ORGANISATIONS IN THEIR ENVIRONMENTS

In a consideration of how organisations work, it is important to examine the external environment within which they operate. To understand fully an organisation's structure and culture, there needs to be some analysis of how that organisation responds to features of the external environment. A number of theorists and researchers have produced typologies of environmental dimensions (eg: Emery and Trist, 1965; Thompson, 1967; Lawrence and Lorsch, 1969; Pennings, 1975). Miles (1980) suggests that any typology needs to detail those dimensions regarded as important bases on which organisational environments differ. Additionally a typology needs to relate the extent to which those dimensions explain uncertainty within the organisational environment.

Aldrich (1979) suggests that there are six dimensions that the various investigators have identified as being important. These are: Environment capacity (rich/lean); Environmental homogeneity-heterogeneity; Environmental stability-instability; Environmental concentration/dispersion; Environmental turbulence; and Domain consensus/dissensus. Each of these features will now be considered in regard to community organisations.

With regard to environmental capacity, the relative level of resources available to an organisation within its environment is clearly important. When discussing community organisations, as the majority of them are providing services rather than selling products, external resourcing is crucial. The funding of community organisations has changed considerably

during the 1980's. The abolition of the Metropolitan Counties has had adverse effects on voluntary sector funding. The demise of the Greater London Council (G.L.C.) for example, has led to increased competition between community organisations in London, some of which are no longer funded. Additionally constraints on local government finance, such as the rate-capping legislation, have meant that local authorities now have reduced funding for community groups. Therefore, such organisations are now existing in comparatively lean environments. Aldrich suggests that there are two alternatives open to organisations in lean environments: move to a richer environment, or develop a more efficient structure. Clearly, the first option is not available to community organisations. Aldrich continues by suggesting that

" the latter alternative can be accomplished by improving operating practices, merging with other organizations, becoming more aggressive vis-a-vis other organizations, or moving to a protected sub-environment through specialization" (p.63).

In practice, unlike business organisations, this alternative is not as appropriate for organisations in the voluntary sector. Although some community groups have taken these options, others have argued that in the provision of services, a community group cannot be competitive. Despite this view, existing within a lean environment has meant that community groups are now competing with each other for funding, more than ever before.

Environmental homogeneity-heterogeneity refers to the degree of similarity or differentiation between the elements of the population (individuals, groups, or organisations) that an organisation deals with. Hasenfeld (1972) suggests that homogeneity simplifies organisational activities because one

method of operating may be useful for a large population. Heterogeneity on the other hand, brings problems in that more specialized services, products, or ways of working have to be developed. Within community organisations this dimension of the environment will very much depend on the client group that they serve. Some organisations are set up to support the needs of one particular group, such as ethnic groups, whereas others aim to service the needs of a whole number of populations. Those organisations that serve to co-ordinate the efforts of voluntary groups will clearly have a heterogeneous population.

Environmental stability/instability refers to the degree in turnover in elements of the environment. For community organisations, instability could occur from the movement of residential populations through new housing developments etc.

Environmental concentration-dispersion is the degree to which resources within the organisation's environment are evenly distributed within the environment or concentrated in particular locations. Aldrich suggests that if resources are concentrated in identifiable units then strategies for exploiting the organisation's position can be designed. With reference to the voluntary sector, there are a variety of funding bodies that can provide resources to community groups, though some are more clearly identifiable as units than others, for example local authorities. The location of an organisation is also an important element here in the extent to which the population served are dispersed or concentrated within a given area.

Environmental turbulence refers to the extent to which environments are being disturbed by increased environmental interconnections. These include links with other organisations. Aldrich suggests that:

" Turbulence refers, not to chaos in the environment, but to an increasing causal interconnection that renders environments obscure to local observers. The causal laws connecting external events become incomprehensible to persons having no first-hand knowledge of the distant forces at work." (p. 69)

Improved communication facilities and an increasing number of voluntary organisations have increased the number of links that can be made within the voluntary sector. For example, if there were two-way links between every voluntary organisation in Birmingham, there would be over 9 million possible links! (Newton, 1975).

The final dimension: domain consensus-dissensus is the degree to which an organisation's claim to a specific domain is disputed or recognised by other organisations. Thompson (1967) suggested using the term 'domain' to refer to an organisation's range of operation, that is the range of products or services it provides, and the population it serves. Aldrich suggests that within the social services sector, domain conflict arises over alleged duplication of services and efforts by new organisations to encroach on the services already provided by others.

An examination of the environment within which an organisation works is crucial to an understanding of the organisation's performance. Therefore when evaluating the work of community groups later in the thesis, environmental factors will be highlighted.

So far this review has examined internal and external aspects of organisations. The next section has a more specific focus: that of

examining the impact that the introduction of technology has on organisations.

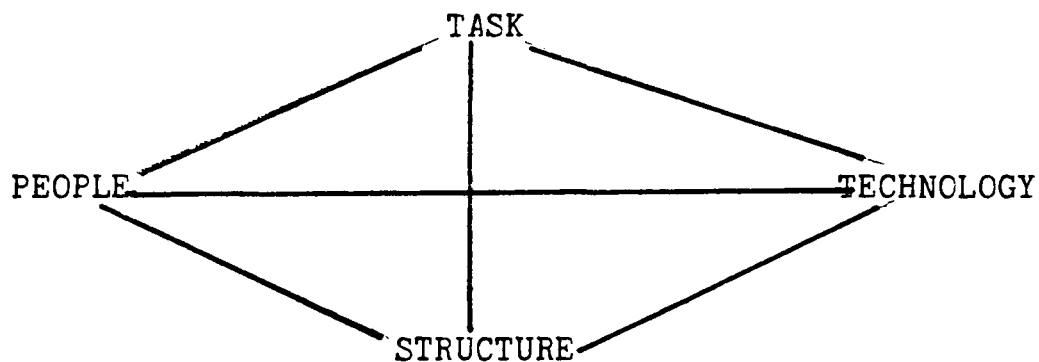
2.3(iv) TECHNOLOGY AND CHANGE

Organisations are dynamic environments, they are always in some state of change. Understanding the process of change within organisations is crucial when considering the implications of introducing new technology.

Change within organisations can be studied on a number of levels. Leavitt (1965) conceptualised organisations as being composed of four major variables, all of which interact:

Figure 2.1

Leavitt's model of organisational change



Leavitt suggests that change can be directed to any one of these variables or 'entry points'. As they all interact, change in any one variable will have a direct consequence for the other four variables. Therefore if managers within an organisation are planning a particular change they have a choice of strategies: modifying the task, modifying the structure,

modifying the technology or modifying the people. All will have an impact on the organisation as a whole and on the other structural dimensions. Therefore, change to one variable within the organisation will in time produce changes in other variables. The research within this thesis focuses on technology as a trigger for change.

The reactions that individuals within organisations have to technological change can be quite varied. Often there can be resistance, as change threatens the familiar social structures and relationships that have developed within an organisation. There are numerous reasons why individuals can be resistant to change. Bedeian (1980) suggests that there are four common causes of resistance to change within organisations. The first is parochial self-interest where individuals seek to protect the status quo that provides them with access to particular resources, status or security. Resistance also arises from secondly, misunderstanding or lack of trust, this is particularly pertinent to the way in which change is introduced. When members of an organisation are not given full information about the nature of the change uncertainty can be created. The third cause of resistance to change is contradictory assessments. Within every organisation there will be different interest groups who may all perceive the likely consequences of change in different ways. Bedeian suggests that in this context, contradictory analyses of change can lead to constructive criticism and improved proposals. Therefore resistance to change is not always a negative phenomenon. The fourth cause of resistance to change is low tolerance. This cause is based on the acknowledgement that some individuals are more able to cope with change than others.

This explanation of why people are resistant to change reflects a 'unitarist' approach (Fox, 1973) to organisations. Resistance to change is viewed as a result of lack of information and almost a personal problem for the individuals and groups concerned, rather than being based on a realistic appraisal of an individual's or groups interests. Terms such as 'parochial self-interest' reinforce this view. This unitarist approach has often been taken by psychologists in their study of organisations (Hartley, 1984). Hartley and Kelly (1986) suggest that:

" according to the unitarist approach, industrial conflict is dysfunctional and should be eradicated through better management practice or more concern for workers' individual (as opposed to collective) needs." (p. 163)

The unitarist influence on shared concerns between management and workers will therefore see resistance to change as something misguided. Alternative perspectives (pluralist and radical) allow for a variety of interests to co-exist. Resistance to change within these perspectives is rational, in that it is based on an understanding of one's own interests.

The responses that individuals exhibit when resisting change are numerous. People may feel anxiety, dissatisfaction, insecurity or frustration at the outcomes that they perceive to be likely. The organisational literature presents a number of alternatives designed to decrease resistance to change among individuals and groups within organisations (eg: Coch and French, 1948; Kotter and Schlesinger, 1979). Central to these recommendations is the notion of participation within the change programme and the dissemination of accurate information regarding the change proposals to those within the organisation who will be affected. When considering change within a community centre, bearing in mind the differences with business

organisations, there may be a more positive approach to participation within the change process. However resistance to any unbalancing of the status quo may still be evident.

A change in technology can have many implications for an organisation. As the capabilities of technology increase rapidly with the development of microprocessors there has been considerable debate about the impact that technological change can have, and has had, on organisations. Some writers have argued from a Marxist perspective that new technology generally will de-skill workers and enable more 'Tayloristic' styles of management to develop (eg: Braverman, 1974). Others have recognised that there are choices available about the way work is organised around the technology, but the political impetus behind particular choices is limited. For example, Cooley (1984) suggests:

" It is possible to so design systems to enhance human beings rather than to diminish them and subordinate them to the machine... It is my view that systems of this kind, however desirable they may be, will not be developed and widely applied since they challenge the power structure in society. Those who have the power ... are concerned with extending their power and gaining control over human beings rather than with liberating them. (p. 204)

An alternative view is that the introduction of new information technologies will enable workers to be liberated from the more routine and boring aspects of their work (eg: Morgall, 1982).

It is generally agreed by writers that it is not the technology itself that determines its consequences. Rather, the choices that it presents, together with the nature of its development and mode of control, promote the particular ways of organising work (Child, 1984). Case studies have shown that different forms of work organisation and levels of control can be

found around the same technology (Burnes and Fitter, 1987). For example, Clegg, Kemp and Wall (1984) when discussing Computer Numerically Controlled (C.N.C.) machines note that:

" There is clearly no single homogeneous effect of new technology on operators and their jobs. ... In one instance the use of C.N.C. machine tools may, for shop floor workers, promote commitment, the development and exercise of complex skills, and high levels of well-being, whilst in another, the opposite may be the case. (p. 234)

Most of the studies that have evaluated the impact of new technology on organisations have been concentrated in the traditional field of study :the business organisation. Writers have described the implications that technology has had on job characteristics and job numbers (eg: Huws, 1982; Softley, 1984; Wall et. al., 1987)

Recently studies are beginning to emerge that consider the impact of new technology on non-commercial organisations. (Gerver, 1986; Marsh and Jarrett, 1985). These studies have a different focus from the ones described above. Firstly, they are not reported from an 'academic' perspective in that their audience is viewed as being practitioners working in, or with, community groups. Secondly, such reports seek to make recommendations about the best ways to go about computerisation and the pitfalls to avoid.

An example is the case studies provided by Ryan and Sheridan (1987). They evaluate the experience of introducing computers into ten organisations: five advice centres and charities; three trades union offices; and two local political parties. They state their aims as:

" To provide examples of the ways in which computers have proved to be generally useful to non-profit making organisations - and the

ways in which they have not; to describe how problems with hardware and software, which are likely to recur again and again, have been solved; to explore the impact of computerisation, for good or ill, on working patterns and relationships within these organisations; and finally to consider how the potential of computers, both for increasing efficiency and for improving the quality of working life, could be further exploited". (p. 1-2)

The general recommendations of such reports are that computers can be useful, but introduction must be a carefully planned process. When discussing the charities in their sample for example, Ryan and Sheridan suggest that the first lesson learnt is that the computing needs of a particular organisation have to be realistically assessed before they buy the system. Therefore expert advice and a professional back-up service are crucial. Finding time for appropriate training is also important, indeed many non-profit making groups under-estimate the amount of time that it takes to implement a computer system. As a War on Want worker suggested:

" People tend to view computers as cost-savers, which is not our experience. They offer more information, better information. There's a myth that computers can do a lot for you and you don't have to put much into them, its not like that at all." (p. 41)

Such experiences will be useful to other similar organisations, as well as business organisations who are considering computerisation. However studies that examine computerisation in the voluntary sector are limited in the extent to which they cover the long-term organisational impact of introducing new systems. This is primarily because investigating the impact of computerisation thoroughly within any organisation is a labour-intensive task that requires resources not usually available to the small organisations which are the focus of this type of research.

However, from existing studies it appears that there are a number of similarities between the voluntary sector and other areas where new

technology is introduced. Fitter and Garber (1988) in a study of the use of computers in General Practice, for example, found that computers did not save costs or decrease the amount of time spent in administrative work, but rather provided a higher standard of information management. These findings are in line with those of the case studies described above.

In considering the different principles that underlie the introduction of systems within the voluntary sector and the business sector, it is useful to examine implementation strategies. Bjorn-Anderson (1986) describes four implementation strategies that occur when introducing office systems. He suggests that implementation strategies are contingent upon two aspects: the degree of participation allowed for, and the extent to which analysis precedes design. In traditional design strategy very extensive analysis is carried out before any part of the system is implemented. With the radical approach, on the other hand, there is little or no analysis before elements of the system, or the whole system itself, is implemented into the office environment. The four implementation strategies are shown in Figure 2.2:

Figure 2.2 Strategies for implementation of office systems

Bjorn-Anderson (1986)

HOW	TRADITIONAL	RADICAL
WHO		
EXPERT-DRIVEN	Life-cycle	Sower
PARTICIPATIVE	Socio-technical	Grass root

Whereas the traditional strategies are the most common in business organisations, the limited number of case studies about the introduction of systems into voluntary organisations suggest that two strategies are used in particular: the 'sower' and 'grass-root' strategies. Taking the 'sower' approach first, Bjorn-Anderson suggests that this implementation strategy can be:

" characterized by the expert who after a brief diagnosis of the needs is "dropping" hardware and software solutions in the organization". (p. 6)

The term 'sower' comes from the parable in the bible where Jesus describes the sower who sowed his corn in a number of different areas, some where it grew successfully, and some where it did not. Bjorn-Anderson suggests that this parable indicates some of the problems with an expert-driven approach in that it succeeds sometimes and doesn't at others.

Although there are case studies about the implementation of systems within voluntary organisations, there are no case studies of the use of systems within community centres. The grass root strategy is the one that is most

in line with the empowerment philosophy of community centres.

Bjorn-Anderson explains that this is a strategy where:

" the endusers themselves only looking to their own individual or perhaps group interests have the responsibility to analyse their own needs and acquire the type of technology and software that they find most appropriate to their particular situation.... It has the benefits in the fact that irrespective of whether the users make the 'optimal rational choice' or not they are in all probability going to be satisfied and work enthusiastically with the technology. The chance of implementation success will be very high. But one has to realize that this may easily be sub-optimal to the whole organisation." (p. 6)

The categorization of different implementation strategies is useful in that it helps to differentiate between organisations in the business and the voluntary sector. As suggested at the beginning of this review, the aims and methods of operation of voluntary sector organisations are different from those of business organisations. Therefore one would expect different implementation strategies to result.

In conclusion it is evident that a large amount of research has been conducted in business organisations to investigate the impact of computerisation. Studies are also emerging that consider the impact of computerisation within the voluntary sector. The results of such research will be useful in describing and analysing the process of the introduction of computers into community centres.

An additional level of analysis within the organisational literature looks at the roles of groups within organisations. Community organisations are often comprised of a number of different groups with a variety of aims. The next section of this review examines the nature of community groups.

2.3(v) COMMUNITY GROUPS

Politser and Pattison (1980) in reviewing the historical literature on community groups conclude that such groups arise to help people adapt to changing social conditions and have provided support and information in many different contexts. In the 1980s' such groups continue to help people cope with social change and often receive funding from voluntary and statutory organisations whose aim is to provide support services for individuals and groups within a local area. For example within Sheffield over 50 centres are listed within the City Council's Employment Department brochure: "Sheffield unemployed and drop-in centres: a guide to centres for unemployed people in Sheffield" (1987). The centres are usually managed by independent management committees where representatives from both user groups and interested professionals meet regularly to consider issues that concern the centre ranging from day to day operation to future funding.

A number of activities are available to the groups that use these centres, ranging from educational classes to welfare benefits advice sessions and campaigning work. Consequently, a community centre will have a number of different user groups, with different aims and concerns that reflect their membership. The emphasis of many of these centres is that of empowering users, as was described in section 2.3(ii).

Politser and Pattison (1980) describe four major dimensions upon which community groups can be categorised: group structure; group function; member characteristics; and formulation. By analysing 41 community groups along these dimensions they produce a taxonomy of community group types:

1. Self-interest groups: These are described as "fraternal groups organised to advocate a cause or promote the interests of a defined population". Such groups emphasize social support and mutual help and are usually political in nature, defending their interests against what is perceived as a hostile outside world. An example here could be a Single Parents Group or a group specifically for people with disabilities.

2. Self-help groups: The focus of these groups is on changing specific behaviours that are considered to be anti-social. Examples are groups for overeaters, dieters, alcoholics, smokers and gamblers. Such groups generally have very strict codes of behaviour but actively encourage reliance on the group at the exclusion of outside contacts. They therefore provide considerable support for people who want to change some aspect of their behaviour.

3. Social communion groups: The main aim of these groups is to provide the setting where individuals can meet and interact in a supportive fashion. Examples from Politser and Pattison's research include prayer groups and social groups for the aged.

4. Civic development groups: These groups are aimed primarily at developing the social skills of their members through education or experience. Examples are public-speaking or assertiveness training. The groups are not aimed as much at social support but more at social development.

5. Recreational groups: This is where members take part in a group to

engage in some game or activity, for example playing chess, football, fishing or climbing.

Politzer and Pattison argue that by developing a taxonomy of community groups the differences between such groups can be identified and conceptualised. From this analysis it is clear that the label 'community group' can refer to a variety of groups with a variety of interests. Like groups within business organisations community groups can be either formal or informal in structure. Membership of groups can be an important aspect of an individual's social identity. Tajfel (1972) defines social identity as:

" the individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of the group membership." (p. 31)

Therefore an individual's conception of who they are, that is: their identity, is linked to the social groups to which they belong. As Hogg and Abrams (1988) point out:

" This belongingness is psychological, it is not merely knowledge of a group's attributes. Identification with a social group is a psychological state very different from merely being designated as falling into one social category or another. It is phenomenologically real and has important self-evaluative consequences." (p. 7)

Membership of a community group can therefore have important significance for an individual. By joining one of the different types of groups mentioned above, an individual implicitly or explicitly makes some comment on how they see themselves or where they see their interests to lie. These interests may be quite different from those of other community groups that are part of the same community organisation. This is important in understanding the role of groups within organisations as individuals

clearly have psychological investment in group membership.

2.2(vi) CONCLUSIONS

This section of the literature review has examined aspects of the organisational behaviour literature which are relevant to an understanding of how the introduction of computers may affect the organisational dynamics of community centres. The literature on organisational structure, culture, environment, technology and change, and community groups will be used in the case studies as a basis for analysing the impact that the introduction of a community computing project has on a community organisation.

2.4 EVALUATION

This section focuses on the methodological tradition within which the research is set. The thesis describes and analyses the evaluation of a community computing project. The methodological framework for the evaluation is action research. This section of the literature review provides a brief background to evaluation research as a prelude to a discussion of action research.

2.4(i) EVALUATION RESEARCH

Evaluation research is a phrase that has come into common usage over the last thirty years. Generally, the phrase has been used to refer to the systematic evaluation of social programmes. Weilenmann (1980) describes what the evaluation of social programmes implies:

" The concept of evaluation implies the matching of, or comparison between, values and goal images on the one hand and actual or anticipated outcomes on the other. Thus in addition to being able to describe, monitor, and anticipate the course of events initiated by a project activity.... evaluation involves also the identification and specification of criteria with which effects can be matched and compared." (p. 12)

The development of evaluation research as an academic and professional discipline can be viewed in the context of the development in the United States of "scientific" social science in the 1950's and 60's. During this period the positivistic approach to social science and the corresponding rigorous forms of methodology were developing. Research methods aimed for the crucial criteria of reliability and validity, and the necessary tools, by which such criteria could be measured, were being designed.

Weilenmann (1980) notes that during this period the United States government was involved in many social welfare programmes, a high number of them being viewed as experimental. As a condition of funding, some form of evaluation was often required after an experimental programme was completed. Evaluation was also seen as encouraging the adherence to further recommendations. The time was ripe for the development of evaluation research as a body of knowledge, a literature, a form of professional practice, and a science.

The importance placed on the scientific method in social science led to an exaggeration in the demand for quality within evaluation research, quality being defined primarily in terms of reliability and validity. Evaluations of social programmes concentrated on measuring goal-directed effects, thereby creating the notion of unambiguous goals that could be measured unproblematically (Weilenmann, 1980). The essence of the goal-directed models of evaluation is that programmes are developed to meet specific goals. At some later date programmes are then evaluated in terms of how successfully these goals have been achieved.

There are however problems with this approach namely that in the kind of areas where evaluation research is conducted, such as in education, the health services, and the community at large, unambiguous, clearly defined goals are unlikely. Warren (1973) suggests that there is an unhappy marriage between the controlled experiment as the preferred method of evaluation research, and the operation of social agencies. This leads to limited interventions that are not necessarily that useful. As he suggests:

" for various reasons of practice and practicality they confine themselves to a very limited, relatively identifiable type of

intervention, while other things in the life situation of the target population are ... left unaltered." (p. 9)

Weiss (1975) points out the difficulties of this approach:

" If there is anything we should have learned from the history of social reform, it is that fragmented program approaches make very little headway in solving serious social problems. An hour of counselling a week, or the introduction of paraprofessional aides, or citizen representation on the Board of Directors - efforts like these cannot possibly have significant consequences in alleviating major ills." (p. 20)

Therefore by limiting studies to experimental variables, within a positivistic framework, problems within evaluation research have emerged. These problems are relevant to the use of evaluation research within community settings. Brookfield (1983) points out some of the problems that have arisen in using controlled experiments to examine the effectiveness of adult education within the community. He argues that as a result:

" The response of adult education researchers interested in adult learning in the community is often to abandon the elegance, precision and clarity afforded by established 'scientific' modes of enquiry in favour of qualitative or participatory research methods. This can, however, place a promising academic career in jeopardy, place a researcher in isolation, and require a measure of professional courage." (p. 7)

The problems with the experimental tradition have led to contemporary evaluation research methodology, as Weilenham (1980) suggests, becoming more aware of the complexity of the social world, and thus questioning the classical assumptions on which it is based. Developments away from the classical scientific models have led to a broadening of the philosophical base of evaluation research. For example, there has been a move towards process evaluation, which focuses on a programme's processes, as well as its' achievement of the stated goals (Rossi, 1972). The objective of process evaluation is to provide information to be fed back into a

programme at various stages of its' development. Such feedback can guide a project in various ways, for example, new and emerging goals can be fed back to the project management, thereby enabling any necessary modifications in the programmes' implementation strategy or schedule to be made. Process evaluation also seeks to explain why developments in a project happen in a certain way rather than merely concentrating on the eventual outcomes. Outcome evaluation rarely gives an insight into why things have happened or the processes at work. Therefore, process evaluation can be more effective in explaining and understanding the project as a whole. An important aim is to improve the ongoing project, rather than waiting to pass judgement on the completed version. In doing this, some understanding and interpretation of the processes that operate during social change can be gained.

Weiss (1972) suggests that scientific rigour and strict adherence to the principles of experimental design are considered to be unachievable in process evaluation, if only because of political and practical obstacles. For example within a field setting it may be difficult to split people up into randomized experimental and control groups. Therefore, an evaluator seeking an appropriate design may not have all the options open to her/him that would be necessary for a research design based on classical scientific principles.

Weilenmann however, suggests that alternative forms of testing are available within process evaluation:

" The ideal of process evaluation is to make repeated evaluations and measurements during a programme's operating life. On the other hand, the ideal of the classical impact model is to assess conditions before and after the programme's life span. But there is

no a priori reason to believe that programme impacts cease with the termination of a programme. Generally speaking, the effects of social and technological innovations diffuse slowly throughout society, sometimes lasting for years or even decades." (p. 26)

Legge (1984) suggests that the design and methodology of evaluation research should be determined by the functions that the evaluation wishes to serve. These functions however are not as straightforward as they might first appear. Clearly within any evaluation programme there will a variety of interest groups. The next section considers a framework that examines the different interest groups within an evaluation programme.

2.4(ii) A STAKEHOLDER PERSPECTIVE

Mitroff (1983) introduces the concept of stakeholders as a means of understanding organisational behaviour. He explains what a stakeholder is in the following way:

" We use the term stakeholder to connote all those individual actors and parties, organized groups and professions, and institutions that have a bearing on the behaviour of the organisation as revealed in its policies and actions on the environment. In short, a stakeholder is any party that both affects, and is affected by an organisation and its policies." (p. 22)

All of these stakeholder groups have an interest in particular programmes and their effects. Fitter (1987) in evaluating responses to computer systems in health care, suggests that within any programme there are likely to be different groups of concerned stakeholders (service organisations; service providers; I.T. providers; and clients). Each group may view the programme, and its' evaluation, as having different overt or covert functions. Each will also have their own goals and priorities which may or may not be compatible with those of the other stakeholder groups. The

stakeholder approach is useful in understanding the political implications of the evaluation process. When social change programmes are being evaluated a number of groups will have interests in those results and may also expect the evaluation to perform certain functions.

It is therefore difficult to select an evaluation design that will produce findings that all interested groups will perceive as in their interests. Such issues raise the question of the politics that are rife in evaluation research. Notwithstanding attempts to make evaluation research objective, the process takes place in a political context. Weiss (1973) suggests three ways in which political considerations can intrude into evaluation.

Firstly, the programmes that are being evaluated are the results of political decisions and are therefore likely to reflect the priorities of the decision makers. If one is evaluating the success of the Youth Training Scheme for example, the role of that scheme needs to be seen in the context of the policies of the current British government. Secondly, one of the functions of conducting an evaluation is to provide information on which future decisions can be made. As information is fed back to the decision making bodies it immediately enters the political arena. Finally, and perhaps the least recognised, evaluation is continually making statements about such important issues as the legitimacy and relevance of the goals of particular social programmes. Therefore evaluation plays an important part in the political process. Important decisions such as the direction of funds may be made as the result of recommendations based on evaluation findings.

One could question whether it is accurate to view political considerations as "intruding" into evaluation research when the functions that evaluation performs are political, especially in terms of making recommendations about the distribution of scarce resources. Evaluation research appears to be, from beginning to end, an inherently political process, rather than neutral, objective, and apolitical. Evaluators need to recognise the political processes that are operating and attempt to describe and explain them as part of the evaluation.

Inevitably there are motives behind the way evaluation findings are utilised. Weiss suggests that findings tend to be heeded when they confirm what decision makers already believe or are prepared to accept. They are unlikely to act upon information that disconfirms their present beliefs, unless the evidence is presented in a compelling way. Rossi (1969) points out how devastating evidence of programme failure has left some policies unscathed, whilst positive evidence has not prevented the demise of others.

It appears that a lot of evaluation research doesn't have much impact on the policy makers. Patton (1978) suggests that the consensus in the evaluation literature is that research findings are ignored in programme decision making. Legge (1984) argues that utilization has become a crisis within evaluation research, a crisis reflecting deeper dilemmas of methods, functions and values of evaluation. Various explanations have been put forward to explain why evaluation findings have not been utilised. (Wurzburg, 1979; Rich, 1979; Patton, 1980). The findings may not be seen as sufficiently relevant to the decisions that are being made. Managers and practitioners sometimes feel that the results are presented too

academically or merely reinforce what they already know about the organisation, or the social programme involved. Researchers complain that their results are not seen by the "right people" (Legge, 1984), typically the one "enlightened" manager who leaves, therefore leaving the research abandoned.

Legge (1984) suggests that behind these overt reasons for evaluation research not being utilised there are the covert positions that actually impede the utilization of findings. The desire of an evaluator to conform to the "scientific" paradigm that will enable her/him to publish more papers may influence a design more than the needs of an administrator for a useful evaluation. Administrators may not even be particularly interested in the evaluation of the programme, and therefore be reluctant participants, constrained by the conditions attached to their funding. The crisis in utilization is seen to stem from the actual functions that an evaluation can fulfil, the crucial concept again being evaluation for whom?

The evaluation design of this research needs to monitor the processes involved in the introduction of I.T. into community centres, and regularly feed back information relevant to the implementation process. For this reason the action research paradigm is viewed to be the most appropriate framework in which to set the evaluation. The next section considers the methodology of action research.

2.4(iii) ACTION RESEARCH

French and Bell (1984) suggest that the origins of action research can be

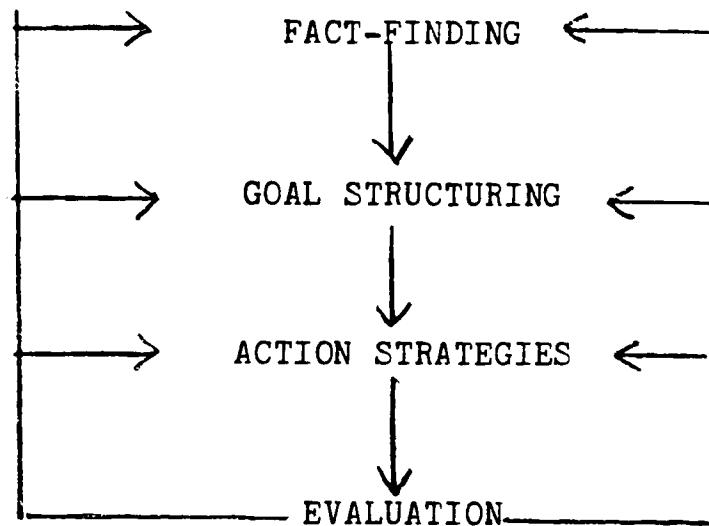
traced to two independent sources. The first was a practitioner: John Collier, Commissioner for Indian Affairs from 1933 to 1945. Part of his job was to diagnose problems and organise action for the improvement of race relations. He found that attempting changes in ethnic relations was a difficult task which to be successful required joint effort on the part of the scientist (researcher), the administrator (practitioner), and the layperson (client). Collier referred to this form of research as action research.

The second founder of action research was a social psychologist: Kurt Lewin, who was interested in applying social science knowledge to social problems. Action research therefore arose as a response to the division between theory and practice generally evident in research where rather than the two having a symbiotic relationship, they are often seen as being independent. Lewin (1951) recommended how the synthesis of practice and theory could be achieved:

"Close co-operation between theoretical and applied psychology can be accomplished if the theorist does not look towards applied problems with highbrow aversion or with a fear of social problems, and if the applied psychologist realises that there is nothing so practical as a good theory." (p. 169)

Ketterer et al (1980) suggest that the most important aspect of Lewin's (1947) model of action research is that it involves a cyclical process of fact-finding, action and evaluation. The fact-finding stage leads to the establishment of structured goals which are then converted into action strategies to pursue. Finally the process is evaluated and the information gained can lead to the formation of further goals.

Figure 2.3 Lewin's model of action research



Action Research, based on Lewin's model, is now regularly used in the areas where organisational psychologists work. Marrow (1969) suggests that Lewin's greatest contribution was the idea of studying things through changing them and then seeing the effects of those changes. He points out that to some people this may seem like common sense but to Lewin, involvement with practical problems was a continual source of theoretical ideas and knowledge about fundamental social-psychological relationships. Lewin's model was designed initially for the evaluation of social programmes. Action research is now widely applied in the area of organisational development (O.D.) (French and Bell, 1984) and a number of other models of action research have emerged from that literature. These models focus on action research as a problem-solving activity, designed to help in the process of planned organisational change. French (1969) for example, presents a model of the process of action research as it relates to O.D. The important aspects of his model are diagnosis, data-gathering, feedback to the client group, action planning and action. He suggests that the sequence is cyclical, with a focus on new or advanced problems as the

client group learns to work together.

French and Bell (1984) suggest that there are two different ways in which action research can be seen as a process. These aspects are common to all models of action research. As they suggest:

" Action research is a process in two different ways: it is a sequence of events and activities within each iteration (data collection, feedback and working the data, and taking action based on the data); and it is a cycle of iterations of these activities sometimes treating the same problem through several cycles and sometimes moving to different problems in each cycle. Both aspects point up the ongoing nature of action research." (p. 109)

The characteristics of action research make it different from other perspectives. One way it differs from traditional research is that it is concerned to a greater or lesser extent with bringing about change, as well as attempting to evaluate it. Ketterer et. al. (1980) also suggest that within a community setting action research seeks out social problems and issues that can serve as the context for continuing research and evaluation activities. Therefore, maintaining a problem focus is seen to be a strategy for testing and developing theory, as well as for solving practical problems. As French and Bell (1984) suggest:

" The payoff from a good action research project is high: practical problems get solved, a contribution is made to theory and to practice in behavioural science, and greater understanding grows amongst scientist, practitioner, and layperson. (p. 118)

The major generic characteristic of Action Research is its' emphasis on feedback. This is crucial in order that action can be prescribed, or goals modified. Feedback ensures that evaluation is a continuous process, as in Lewin's cyclical model. Feedback channels can use formal organisational structures, such as management committee meetings, or be informal, for instance through word of mouth.

Action Research also stresses the actual utilization and dissemination of the research products. This is furthered by building utilisation strategies into the overall design. Ketterer et. al. (1980) suggest that there are various ways of doing this. One is to foster a broad rather than a narrow definition of utilization therefore ensuring that researchers remain open to new ways that data can be used. Another is to ensure that findings are presented in such a manner that they are accessible to the people involved in the organisation being researched.

Another important characteristic associated with action research is that of achieving the twin goals of problem solving and generating new scientific knowledge. Ketter et. al. (1980) review the literature and suggest that there are at least five types of knowledge of potential use to both scientific and practitioner communities. Firstly, action research allows for the application of concepts to enable researchers and practitioners to make sense of seemingly diverse activities or to link related but unrecognised aspects of social reality. Such concepts can be generated through observation or applied from the literature. They also provide the basis for the development of classificatory schemes, and consequently the development of theory.

The second type of knowledge generated is descriptive information. The authors suggest that such knowledge is often viewed as having little scientific value, though it may be crucial to the practitioner. Descriptive information about the usage of a programme and the clients it attracts, for example, can have an important role in the development and future planning

of that programme. This type of data is analogous to Lewins' 'fact-finding' stage within an action research framework.

Action research can also offer knowledge about the factors that affect the delivery of services and the processes that affect the way those services are developed. From this third form of knowledge a fourth can be generated: prescriptive guidelines for practitioners. These can be generated through observation and through the experience of monitoring interventions into a given project. Through this process the results of research are directly applicable in field settings. The final form of knowledge that the authors refer to is the development of applied research methods that can be disseminated to both practitioners and scientists. An example provided is the case where action research interventions yield innovative evaluation methods or problem-solving techniques.

An analysis of the different forms of knowledge generated through action research is useful in that it clarifies precisely what the action researcher can contribute to the development of a programme and to the development of science generally. Within the practice of action research there are a number of different approaches. For example Chein, Cook and Harding (1948) describe four varieties of action research. Diagnostic action research is where the social scientist enters a situation to diagnose a problem and make recommendations as to how the problem can be solved. The second form, participative action research is where the people who are involved in the action take part in the research process from the beginning. Empirical action research is where the actor and the change agent are the same person. In this case they keep a systematic record of

the interventions they make and the effects of those interventions. The fourth approach is experimental action research where the researcher evaluates various action techniques through controlled research. Although the authors suggest that experimental action research may make the greatest contribution to the development of scientific knowledge, there are clearly difficulties in conducting this type of research in real-life settings where variables are not always that easy to control. French and Bell (1984) who provide a fuller discussion on these varieties of action research suggest that O.D. practitioners typically use participant action research and occasionally, experimental action research. Within the field of action research then, there are clearly a number of distinct approaches. There are also two distinct foci, that of change within organisations and secondly, change within social programmes.

Action research is not without its critics. Generally two specific criticisms are levelled at action research. Firstly it is often criticised on the grounds that it isn't objective enough. This criticism emerges from the fact that the researcher is involved in the planning and implementation of the action as well as the evaluation. Critics suggest that an evaluator will be continually struggling to be objective with the aim of providing an unbiased evaluation. This is only a problem if one subscribes to the view that pure and objective evaluation is possible. One could argue that as all action research studies are operating in a political environment where knowledge is socially constructed, no study can be truly objective. It is only reasonable to speak of degree and direction of bias. The advantages of having an evaluator who is closely concerned with the project yet is trained to be able to stand back, can far outweigh the disadvantages

associated with this common criticism. Indeed, close involvement of a research worker with the action side of the project may greatly help in the choice of appropriate and sensitive methods of evaluation. A so-called "independent" and "objective" evaluator may not be as perceptive to the complexities of the situation.

Another criticism levelled against action research concerns the general applicability of findings. It is often suggested that findings from action research studies are too specific and are therefore not useful for generalisation. To an extent this criticism misunderstands why action research studies are conducted. Rather than producing a set of cut and dried definitive solutions to problems that can be generalised, action research seeks to recognise the complexity of the social world and therefore produce recommendations that may be relevant to similar situations. Generalisability is therefore not achieved by some statistical analysis but rather by understanding processes, their effects, and the extent of their applicability.

Some authors have addressed the more practical problems that action researchers have to deal with. Clark (1972) suggests that one of these problems arises from the stakeholder groups that the action researcher is expected to serve:

" Action research has three task masters: the sponsor, the behavioural science practitioner, and the scientific community. The fact that these dissimilar groups are related for the duration of a project imposes many strains, and it must be observed that one of the major problems facing the action researcher is the devising of appropriate administrative mechanisms for simultaneously linking and separating these groups." (p. 22)

Clearly within any action research programme such considerations need to be

addressed.

Some authors have considered the status of action research within psychology as a whole to be problematic. Sanford (1976) for example, suggests that 'voices of the establishment' within the field of psychology have strongly advocated the separation of science and practice. In his article "Whatever happened to action research?" he refers to various Presidential addresses to the American Psychological Association where renowned psychologists have recommended such a separation. He argues that there are a number of negative consequences of this separation including a threat to the credibility of academic research, and the de-humanization of research subjects. For the action researcher, the lack of status that has been ascribed to applied research means that their research is undervalued and underfunded. Sanford argues that although action research programmes are not hard to find within the literature, most of the work lies outside the mainstream of social psychology, or social science generally. He locates these problems within the field of American social science generally arguing that if the advantages of action research are to be realised there needs to be a radical re-appraisal of the way research is organised and funded:

" Like other industries, social science has been polluting its environment, not only by treating its research subjects as means rather than ends and disseminating a monstrous image of researchable man, but also by creating an enormous amount of waste in the form of useless information.... The funding of project research ought to be abandoned. It has spoiled the academic community, damaged undergraduate education almost beyond repair, given status to trivia, created an expensive bureaucracy, and corrupted thousands of investigators." (p. 179, 1981)

Although to some people this view may seem a little extreme, the issues that Sandford raises about the institutionalized division between theory

and practice are nevertheless crucial in understanding the development of action research, and the criticisms that are made of the action research approach to evaluation.

2.4(iv) CONCLUSIONS

The action research tradition is viewed as the most relevant methodological approach in which to set this evaluation. Its emphasis on processes of change and the importance of feedback fit in with the expressed functions of the evaluation which are described in detail in the next chapter.

CHAPTER 3

SPRITE AND THE EVALUATION FRAMEWORK

3.1. INTRODUCTION

The aim of this chapter is to present the background to the project that is the focus of the research. This chapter will first examine the philosophy behind the project and then describe the initial pilot work which laid the ground for putting the philosophy into practice. The structure of the project and its mode of operation will then be described. Finally this chapter describes the evaluation framework of the project and the research questions that will be addressed within the thesis.

3.2. THE PILOT WORK

In Chapter 1.2 it was suggested that the lack of access that unwaged people have to IT will encourage the development of a society that is divided into the 'information rich' and the 'information poor'. This research focuses on one of the potential 'information poor' groups: the unwaged. An increasing number of the population are unwaged, that is, adults outside of formal employment. The category 'unwaged' includes such groups as housewives, senior citizens, the registered unemployed, and people with disabilities. Calculations from the 1981 census and subsequent unemployment figures have suggested that over half the population of Sheffield (16 and over) fall into this category (Darwin et. al., 1985). Access to technology for this population is restricted: they rarely have the buying power to purchase computers for use within the home and they

don't come into contact with IT at the workplace. Consequently the nature of computer developments fails to recognise their interests or meet their needs, for example computer software is in the main developed for the business market.

In an attempt to see whether this gap between the information rich and the information poor could be narrowed by unwaged people themselves with City Council support, a pilot project was undertaken by Mike Fitter, David Fryer and Leigh Smith from the Social and Applied Psychology Unit in Sheffield, in conjunction with John Darwin from Sheffield City Council's Department of Employment and Economic Development (DEED). They were interested in how unwaged people in Sheffield thought they could use I.T. resources for their own ends. The pilot work involved non-directive discussions with three community groups. These groups were chosen as examples of different autonomous collectives of unwaged people: the first a group of senior citizens, the second a group of unwaged people who had had some computing experience, and the third a group of young unemployed people. Discussions were held with each of these groups about new technology and its' relevance to unwaged people. When the discussions were content analysed a number of common themes emerged:

1. All user groups demonstrated a qualified acceptance of new technology and a belief that it could, under the appropriate circumstances, be beneficial to unwaged people.
2. All groups agreed that a broadly based form of "computer literacy" was important.
3. All groups believed that knowledge of the social and political effects and ramifications of information technology was an essential part of any computer education.

In order to assimilate the information that had been collected the authors

suggested that there were three levels at which the technology could be applied: applications by individuals; applications which will be of benefit to a particular group; and applications which facilitate communication outside of the group. Examples of proposed applications are shown in the table below (from Darwin et. al. 1985) :

Table 3.1 Proposed applications of technology
from the pilot work

ORGANISATIONAL LEVEL	PROPOSED PROBLEM/NEED	PROPOSED APPLICATION (EXAMPLES)
Individual	Boredom	Computer games
Individual training	Lack of appropriate skills	Computer based /education
Intra-group	Ineffective Administration	Office Systems
Intra-group software/ products/	Lack of funds	Development of Marketing of services
Extra-group	Lack of inter-group communication	Computer network
Extra-group	Lack of information on welfare benefits/ jobs/ housing etc.	Computer link to Information Providers

The authors note that the suggestions in Table 3.1 differ in terms of their feasibility and cost. As a result of the research the authors produced a list of six 'enabling conditions' that they perceived as pre-requisites for the viability of a community computing project aimed at enabling the suggested applications. These enabling conditions were:

1. Access: if computers are to be accessible to unwaged people they need to be sited within their locality. Particular groups of the unwaged would also need specific provision, for example those

with physical disabilities, or women with young children.

2. Skills: Introductory training would be necessary so that centre users would have the skills and motivation to use the equipment.

3. Congruence with centre users' needs and objectives: Courses developed would have to be sensitive to the needs and objectives of unwaged people.

4. Tutor support: The tutors would need to be familiar with the problems of wageless people and the ways in which community centres work.

5. Financial support: The provision of computer facilities should not be a burden on centre users.

6. Organisational issues: Within this enabling condition the authors note that locating a computer in a community centre will lead to organisational changes. Therefore a negotiated agreement with clear responsibilities and powers in terms of deciding priorities of usage, finance, and maintenance must be made before any system is located within a community centre.

The authors concluded their pilot work by suggesting that there was a demand within Sheffield for computing facilities for unwaged people. They recommended that any scheme implemented would need evaluation as an integral part of the project.

As a result of the above study (Darwin et. al., 1985) Sheffield City Council made an application to the European Social Fund for funds to support a community project with the dual aims of addressing the I.T. needs of the unwaged, and developing I.T. resources within the community. The result of this successful application was the SPRITE (Sheffield Peoples' Resource for Information TEchnology) Project. The enabling conditions above were taken into account in the design of the project and are reviewed in the light of this research in chapter 8.

3.3 THE SPRITE PROJECT

The SPRITE project was initially established as a pilot project for three years, jointly funded by Sheffield City Council Department of Employment and Economic Development (DEED) and the European Social Fund (ESF). It was administered by the Workers Educational Association who employed two full-time Project Officers. Their role was to implement and co-ordinate the project, providing training within community centres. A part-time clerical/administrative worker was also employed. The project began on 1st November 1985, with an annual budget of £50,000.

The aim of SPRITE was to narrow the gap between the waged and the unwaged in access to I.T. by providing computers and back up support within a community setting. Therefore the project was sited in a number of local centres within Sheffield, that were used by community groups. The philosophy behind the project acknowledged that the unwaged are not a homogeneous group of people but instead often come together around particular interests that they share. An unemployed centre, for example, may have a number of independent user groups: ethnic minorities, unemployed workers, or people with disabilities. Additionally the philosophy and aims of the project acknowledged the existing power relationships within society which lead to certain groups within the unwaged facing specific forms of discrimination. The project therefore had particular target groups of women, ethnic minorities, the disabled, and senior citizens within its brief. In order that the interests of these groups be promoted it was understood that such groups should collectively decide appropriate ways to use or benefit from I.T., the project serving to facilitate their ideas and

aims. SPRITE therefore enshrouded two basic philosophies: firstly that of equitable distribution of resources, and secondly, collective autonomy as the organising principle in the distribution of such resources.

The original SPRITE proposal written by officers from DEED proposed that the training of users in local community centres should be divided into four phases:

Phase 1: Recruitment and introduction to computers; initiated by an exhibition and open day publicized in the local centre and the surrounding community, and followed up by introductory sessions at the centre (once a week for six weeks).

Phase 2: Basic computing course, providing training in basic aspects including applications such as word processing. These to be provided from established city resources external to the centres over a ten week period.

Phase 3: A development course, providing training in the use of software packages, software design, programming, product development and marketing, and the passing on of computer skills to other members of the community. The third phase to be spread over 30 weeks.

Phase 4: Applications: ie: the development of software applications relevant to the needs of the groups and their communities. The Project Officers would provide a facilitating role in this and enlist specialist advice where necessary.

One of the first tasks of the project team was to establish a management committee made up of representatives from local interested organisations and community centres users. The purpose of the management committee was to make executive decisions and to provide advice on policy issues. This role is discussed in more detail in chapter 5, the SPRITE case study.

3.4 THE EVALUATION FRAMEWORK

As there were many interesting issues within SPRITE that could potentially be evaluated, an evaluation framework was devised to limit the risk of information overload by providing a structured base from which to conduct the research. The framework consisted of three levels of analysis:

1. The individual level (eg: the impact that being involved with the project had on individuals);
2. The organisational level (eg: the impact that SPRITE had on the community centres where it was sited);
3. The wider implications (eg: the impact that SPRITE had on the provision of information within the community).

Associated with each level of analysis was a series of questions that needed to be addressed. These questions are the research questions that formed the basis of the whole evaluation. Attached to each of the six questions are a number of supplementary questions. The research questions are shown below:

1. What effects does the implementation of SPRITE have on the organisational dynamics of a community centre?

What benefits does SPRITE have for a centre?

What problems does SPRITE create within a centre?

2. What effects does a centre's 'organisation have on the implementation and outcomes of the project?

How do the characteristics of a particular centre affect the implementation of the SPRITE project?

How do the existing resources and facilities within a centre affect the way the project operates?

How do the characteristics of the centre user groups affect the implementation of the SPRITE project?

What factors support and impede the development of SPRITE at a particular centre?

3. How does having access to the project and its resources influence individuals?

To what extent does the project develop user skills?

What specific skills are developed?

What psychological benefits, if any, do the users gain from being involved with the project?

4. How can, and to what extent do, individuals have an influence on the project?

What impact do users have on the decision-making processes of the project?

Do users influence the development of SPRITE in, and out, of their centre?

5. To what extent is SPRITE successful in achieving its' aims and objectives?

What are the factors that support or inhibit SPRITE in the achievement of its' aims and objectives?

How do these factors differ from the 'enabling conditions' derived from the

pilot work?

What recommendations can be provided for other community organisations interested in the introduction of computer systems?

6. What are the wider implications of the establishment of the project?

Does the project help to provide/ reinforce a network of community centres?

What organisations are required within the community to support the development of community computing?

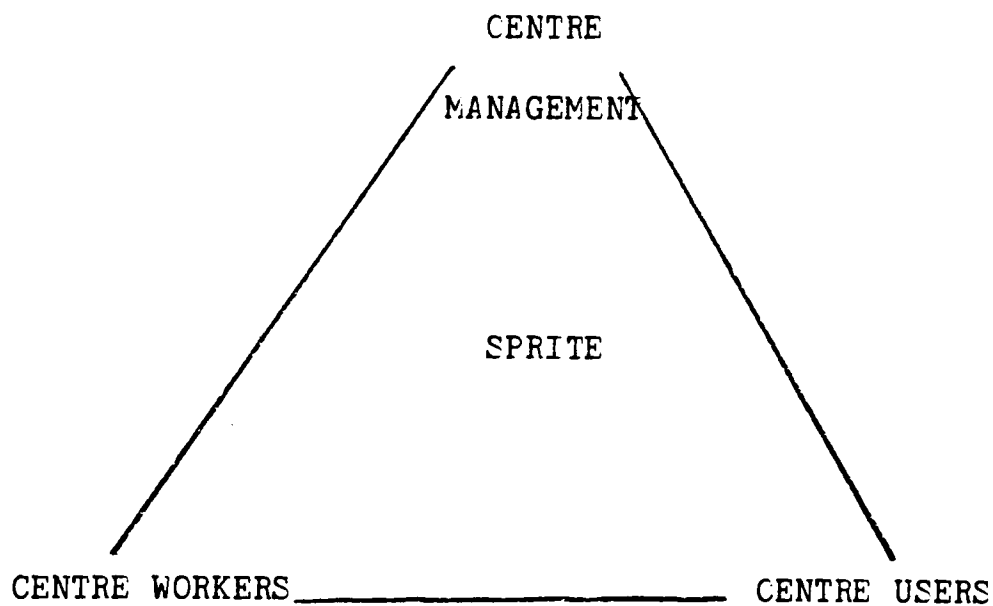
Does it transmit the skills and foster the motivation and innovation necessary to encourage product development?

What kind of products, if any are developed?

These questions are addressed in the following chapters within the thesis. Chapters 5,6 and 7 will address questions 1 to 4. Chapter 8 will answer question 5 whilst chapter 10 addresses the final question.

Within this evaluation framework the overall process of the project within community centres can be analysed in terms of the triangular relationship between service providers, service organisations and their clients as outlined in chapter 2.3(ii). For the SPRITE project, in each centre the stakeholders can be identified as follows:

Figure 3.2 The stakeholder groups within a SPRITE centre.



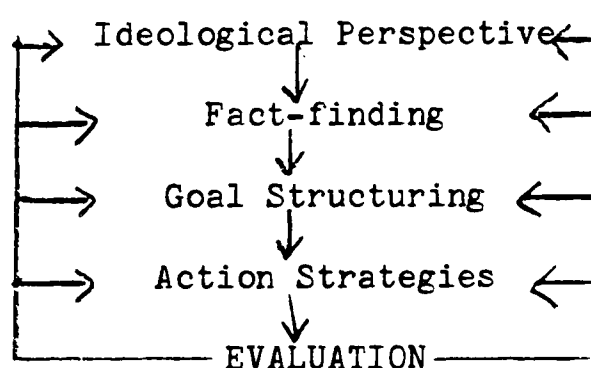
SPRITE's aim was to promote IT in a way that was sensitive and responsive to centre users' needs. In this way the project may have been different from conventional IT providers. However SPRITE could have had an influence on the "balance of forces" within a centre, therefore affecting the groups of stakeholders and their interrelationships. For example, if a group of centre users become very enthusiastic about using the computing equipment, then this may affect the roles of the centre workers in a number of ways. Users may begin to do some of the centres administration work on the computers for example, taking away an aspect of the centre worker's job. The impact of SPRITE can therefore be examined in terms of how the dynamics of these relationships change. Therefore the framework of three levels of analysis and their associated questions identifies the important issues, whilst the stakeholder triangle enables a structured analysis of those issues.

Within the stakeholder framework, centre users were identified as the major stakeholder group which the evaluation was intended to serve. One of the aims of the evaluation was to advocate their needs in the development of the project. Therefore the project was also evaluated against the criteria of success as defined by the SPRITE users in the different centres. The results of this part of the evaluation are described in the case studies in chapter 6.

3.5 FEEDBACK STRUCTURES AND PROCESSES

Within an action research perspective, feedback is an important part of the evaluation process. That is, the evaluator 'acts on' the results of the evaluation by feeding them back into the project. Within the SPRITE project, feedback from the evaluation was a continual ongoing process. The action research framework has been adapted from that of Lewin (see figure 2.4) and is shown below:

Figure 3.3 The action research framework
(Based on Lewin (1951))



Within this framework an additional element has been included: ideological perspective. This arises from the recognition that the process, and the results, of research have to be seen in the appropriate ideological

perspective within which the research takes place. Within the SPRITE project this perspective is that of making I.T. resources accessible to unwaged people, and also encouraging centre users to determine the nature of the project within their own particular centre. The evaluation therefore reflects this ideology and is located within the same perspective.

The process of feedback is crucial to action research. Within SPRITE formal and informal mechanisms for feedback were developed. Formally, an Evaluation Advisory group was set up to monitor the evaluation process and provide advice where necessary. This group fed back information to the project management committee. Informal channels included regular discussions with the project officers and users in the centres. Feedback processes are described more fully in chapter 9 which focuses on the action research process.

As well as the research questions about the implementation of the project, as a result of this research insights can be gained into the utility and validity of the action research process. These are considered later in the thesis (chapter 9). Therefore although the primary aim of the research is to provide a comprehensive evaluation of a community computing project, a by-product of that is to make some general comments about action research.

The next chapter examines the techniques of data collection used within the research.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The aim of this chapter is to consider the methodologies used within the research. The chapter will firstly describe the methods used in evaluation research generally as a means of placing the selected methods in context. Specific techniques used within the evaluation of the SPRITE project are then detailed. The chapter then describes how the data collected was analysed so that it could be presented in the form of case studies.

4.2 METHODOLOGY IN EVALUATION RESEARCH.

Within the field of evaluation research a number of different methods are used to measure the success of a given programme. Reichardt and Cook (1978) suggest that:

"considerable disagreement exists over the appropriateness of various methods and methodological stances for conducting evaluation research". (p. 7)

In particular they highlight the distinction between qualitative and quantitative methods. They illustrate the distinction between the two approaches by listing the techniques associated with each:

"By quantitative methods, researchers have come to mean the techniques of randomized experiments, quasi experiments, paper and pencil "objective tests", multi-variate statistical analyses, sample surveys, and the like. In contrast, qualitative methods include ethnography, case studies, in-depth interviews and participant observation." (p. 7)

The distinction between the two approaches is not solely about methods and

techniques, but rather a clash of paradigms. Both approaches possess the same ultimate aim: the description and understanding of behaviour. However they originate from diametrically opposed philosophies: quantitative methodology from positivism, and qualitative methodology from humanism. Therefore their underlying assumptions about social life and behaviour vary considerably. Sjoberg and Nett (1966) describe three assumptions of the positivist paradigm. The first concerns objectivity. Positivists assume that objective knowledge of both the social and natural worlds can be attained, indeed that secondly, the natural and social sciences share a basic methodology and employ the same logic of enquiry and research procedures. They also both view the physical and social order as mechanistic and static. This view contradicts dramatically with the qualitative paradigm. Filstead (1978) describes this paradigm:

" The qualitative paradigm has the decidedly humanistic cast to understanding social reality of the idealist position which stresses an evolving, negotiated view of the social order. The qualitative paradigm perceives social life as the shared creativity of individuals. It is this sharedness which produces a reality perceived to be objective, extant, and knowable to all participants in social interaction. Furthermore, the social world is not fixed or static but shifting, changing, dynamic." (p. 35)

The starting point of the qualitative paradigm is the development of theories and concepts that are grounded in data. Glaser and Strauss (1967) suggest that theory can be discovered from the data obtained from social research. Therefore the key to generating theory is the process of research. This contradicts considerably with the positivist approach where theory is generated from the process of hypothesis testing of a priori assumptions.

It is understandable then, that the two different paradigms will produce quite different methods within evaluation research. Quantitative methods focus on the precise measurement of behaviour, for example through experimentation where behaviour is measured in the controlled conditions of a laboratory setting. Another example is that of quasi-experimental designs (Campbell and Stanley, 1966) where the analysis of controlled behaviour takes place in field settings. Surveys are also a popular method, where the participants in a programme will fill in a questionnaire based on a number of scales that aim to assess their reactions. The analysis of quantitative methods relies on the use of sophisticated statistical techniques. These techniques enable information collected from a large population to be summarised easily and control for chance variation by using levels of significance and error.

Qualitative methods can generally be split into two main types, those where the researcher becomes actively involved in the research context, eg: participant observation, and those collectively called unobtrusive measures where the researcher tries to minimise their interference, for example in group discussions where the researcher keeps a low profile, or through the use of video. Other methods are account gathering (Harre and Secord, 1972), where an individual recalls their personal account of a significant event, and the analysis of public documents, which can produce the social representations (Moscovici, 1981) of a programme or social phenomena. A favoured technique within qualitative research is the use of interviews. These can range from the very structured to the semi-structured or unstructured. Qualitative methods generally produce very detailed information which is recorded through taking field notes or transcriptions

of tape recordings. Techniques of analysis concentrate on the content of the information provided by informants rather than on the use of statistical inference from pre-established variables.

Patton, writing in the 1970s (Utilization-Focussed Evaluation, 1978) suggested that evaluation research is dominated largely by the natural science paradigm where quantitative measurement is assumed. His concern is with ensuring that the findings of evaluation studies are effectively utilised and consequently he expresses concern about the dominance of this paradigm. He argues that dominance of the hypothetic-deductive paradigm has meant that the label 'research' has come to mean the equivalent of employing the scientific paradigm. Filstead (1978) suggests that this blanket acceptance of the positivistic paradigm is now changing, one reason being a growing belief amongst practitioners that these types of quantitative evaluations do not really capture the 'experience' or the 'essence' of a particular project relying more on outcome measures. He therefore argues that the increasing interest in qualitative methods in evaluation research stems from a dissatisfaction with the style of quantitative evaluations and a reconceptualization of the appropriateness of the approach within the evaluation of programmes.

Researchers are now putting more emphasis on choosing methods that suit particular research questions rather than focusing their research within one particular paradigm. As Patton (1987) suggests:

" A consensus has gradually emerged that the important challenge is to match appropriate methods to evaluation questions and issues, not to advocate universally any single methodological approach for all evaluation studies" (p. 169)

Such a view is accompanied by the argument that qualitative and

quantitative methods can be usefully used together, for example through triangulation (Denzin, 1970) which involves collecting data from a variety of possible perspectives. He suggests that the advantages of this are:

" Each method implies a different line of action towards reality - and hence each will reveal different aspects of it, much as a kaleidoscope, depending on the angle at which it is held, will reveal different colours and configurations of objects to the viewer." (p. 298)

Ianni and Orr (1979) review evaluation studies that have used both qualitative and quantitative methods and conclude that more qualitative techniques need to be developed theoretically and practically. These techniques can then be integrated with quantitative approaches so that one unique approach is no longer taken to evaluation research.

Within this research the emphasis has been upon choosing the most appropriate method to investigate each research question. In practice the majority of methods used were qualitative. There were two major reasons why qualitative methods were considered the most appropriate:

1. The evaluation was essentially concerned with the processes by which the project developed rather than summative findings. Therefore methods such as participant observation which are continuous, could provide an ongoing view of the project, rather than using quantitative methods at specific time intervals;
2. A concern within the research was that all the methods be sensitive to the characteristics of the respondents. Additionally, an aim was that all methods be interactive, so that respondents

could guide the issues being discussed, that is the issues that they thought were important in the evaluation of SPRITE.

Qualitative methods were viewed as the most appropriate in the light of these concerns.

The next section describes the various methods that were used within the evaluation.

4.3 THE METHODOLOGY OF THE SPRITE EVALUATION

This section provides a background to the schedule of the evaluation and describes the research methods. Table 4.1 shows the various stages during the implementation of the project where specific techniques were used.

Within the table the following key is used for different forms of data collection:

1. Participant observation within the SPRITE project
2. Participant observation within community centres
3. Interviews with Project Officers
4. Interviews with centre users
5. Questionnaire no. 1 for SPRITE users
6. Questionnaire no. 2 for SPRITE users
7. Group discussions with centre users
8. Participant observation during Northern College weekends
9. Collection of relevant documents

TABLE 4.1
USE OF DATA COLLECTION TECHNIQUES

November 1985	1							9
December 1985	1		3					9
January 1986	1	2						9
February 1986	1	2						9
March 1986	1	2						9
April 1986	1	2						9
May 1986	1	2			5			9
June 1986	1	2			5	7	8	9
July 1986	1	2						9
August 1986	1	2						9
September 1986	1	2						9
October 1986	1	2						9
November 1986	1	2		4				9
December 1986	1	2	3	4				9
January 1987	1	2						9
February 1987	1	2				7	8	9
March 1987	1	2						9
April 1987	1	2						9
May 1987	1	2						9
June 1987	1	2						9
July 1987	1	2		4	6	7	8	9
August 1987	1	2		4	6	7		9

The methods that were used throughout the project produced a wealth of information. By using multiple sources of information, different data sources could be cross-checked and validated. Data from each of the methods has been analysed and integrated into case studies to facilitate in-depth study of the community centres where SPRITE has been implemented.

The SPRITE project officially began on November 1st 1985. It was implemented in the first three centres: Open Door, SADACCA and the Space in May 1986. Two other centres followed in February 1987: Woodthorpe 2000 and the Forum of People with Disabilities, and the final three in June 1987: Printaid, Darnall Music Factory and Standhouse School. The evaluation concentrates on the first three centres which are described in the case studies in chapter 6. The other six centres are described briefly within that chapter. As this research was funded for two years only, data collection ended in September 1987.

Each method of data collection is now described in more detail.

4.3(i) OBSERVATION

Observation is a technique within the social sciences that is concerned with the description of a particular social setting, the events that take place within that setting, the people involved, and the meaning of those events to those people. Patton (1980) suggests that there are a number of advantages in using observational data in the evaluation of a programme. For example, the evaluator, by directly observing the programme, will have a clear understanding of the context in which it takes place. S/he may also have the opportunity to see things within the project that participants may

not report, for example tension within particular relationships. Therefore the evaluator can move beyond the selective perception of the participants to take in a wealth of information. As Becker and Geer (1970) suggest, the evaluator:

" Because he sees and hears the people he studies in many situations of the kind that normally occur for them, rather than just an isolated and formal interview, he builds an ever-growing fund of impressions, many of them at the subliminal level, which give him an extensive base for the interpretation and analytic use of any particular datum." (p. 32)

There are a variety of forms of observational strategies, each suitable to particular stages of an evaluation programme. Patton (1980) highlights five dimensions of variation in approaches to observations (see Table 4.2). The role of observation within the evaluation of SPRITE will now be considered on these five dimensions.

TABLE 4.2
FIVE DIMENSIONS OF VARIATIONS IN APPROACHES TO OBSERVATIONS
Patton, 1980, (p. 138)

1. Role of the Evaluator-Observer

Full Participant Observation	Partial Observation	Onlooker Observation as an outsider
------------------------------	---------------------	-------------------------------------

2. Portrayal of the Evaluator role to others

Overt Program staff and participants know observations are being made <u>and</u> who the observer is	Observer role known by some, not by others	Covert Program staff and participants do not know that observations are being made or that there is an observer
---------------------------------------------------------------------------------------------------------	--------------------------------------------	--------------------------------------------------------------------------------------------------------------------

3. Portrayal of the Purpose of the Evaluation to others

Full Explanation of real purpose to everyone	Partial Explanations	Covert Evaluations: No explanation to either staff or participants	False Explanations: deceived staff and/ or participants
----------------------------------------------	----------------------	--------------------------------------------------------------------	---------------------------------------------------------

4. Duration of Evaluation Observations

Single Observation Limited duration (eg., one hour)	Long term multiple Observations (eg., months, years)
--------------------------------------------------------	------------------------------------------------------

5. Focus of the Observations

Narrow Focus: Single element or component in the program observed	Broad Focus: holistic view of the entire program and all of its elements is sought
----------------------------------------------------------------------	---------------------------------------------------------------------------------------

The first dimension considers the role of the evaluator/observer in the observation process. (The other four dimensions are referred to later in this section.) The continuum ranges from full participant observation to the evaluator observing from an outside position. Within the evaluation of SPRITE the emphasis was on participant observation. Patton (1980) describes the aims of participant observation as follows:

" In participant observation the evaluator shares, as intimately as possible in the life and activities of the programme under study. The purpose of such participation is to develop an 'insiders' view of what is happening. This means that the evaluator not only sees what is happening but FEELS what it is like to be part of the programme." (p. 127)

The quote above illustrates the function of participant observation as a technique. The evaluator not only studies the project but takes an active part in the process. This clearly fits in with an action research perspective where the evaluator acts upon the information s/he receives. Within SPRITE there was continuous participant observation of the project from November 1985 to August 1987. This involved a number of activities such as taking part in discussions with workers about the development of the project whilst taking notes; taking part in training days that the project ran; and observing the work of various committees within the project. The information within the case studies that follow relies considerably upon notes taken during participant observation. Most of the participant observation took place at a day to day level within the first three centres. This process is described in the next section.

4.3(ii) PARTICIPANT OBSERVATION WITHIN CENTRES.

Participant observation took place continually in Open Door, the Space, and SADACCA community centres. This process involved visiting community centres

with the SPRITE project workers, sitting in on training sessions and talking to users. During and after each session detailed field notes were made which were then written up in a structured diary form. These notes included details of actual events, my interpretations of those events, and comments about what might happen next. Six headings were used to categorise the data collected. These related to the issues within the evaluation framework. After each episode of participant observation, field notes would be classified into the categories below. Excerpts from the diary show the types of information included:

SITE:

DATE:

1. SESSION: Here a description would be given of the activities that took place within the session, for example: "workshop on Dbase 2" or "meeting with users about the publishing project".

2. RESOURCES: This section would include information relevant to a number of resourcing issues, for example training: how people were reacting to particular forms of training techniques; equipment: responses to particular machines or what equipment users felt they needed within the centre; what forms of applications people spent time on etc. For example:

"The members from the Single Parents Group used this session to do their own work. Two of them were compiling a list of their members on the Commodore, whilst Joan was writing letters for the group on the Amstrad"

3. SPRITE WITHIN THE CENTRE: A number of pieces of information were put into this category which related to the organisational questions within the

evaluation framework. Examples are contacts that the SPRITE group had with other user groups within the centre, the role that SPRITE was playing within the centre as a whole; decisions taken at centre management committees that might affect the implementation of SPRITE etc. For example:

"It seems that SPRITE still has a problem with the workers at Open Door which is effectively preventing the project from taking a more active role in the centre."

4. INDIVIDUALS: This category included information relating to the individual level of analysis within the evaluation framework. Issues such as the roles that particular individuals were playing within the SPRITE group, or any tensions that emerged in relationships between individuals were included under this heading. For example:

"Denise is going into hospital soon and won't be around for a while. This may have an impact on the group as she encourages the others to remain involved"

5. DEVELOPMENT OF THE PROJECT: Here there was an assessment of how SPRITE was developing within a particular centre focusing on factors that were supporting or impeding that development. For example:

" I think that the whole project is ticking over nicely, although there is still no real support from the workers. The day schools that are being planned at the moment should be helpful in bringing in users from other groups within the centre. "

6. EVALUATION IMPLICATIONS: This section highlighted particular pieces of information that needed to be fed back into the project so that information gathered by the evaluation could be acted upon in line with the action research framework. For example:

" We need to talk about how the whole project at this centre is developing, as the users seem to feel a bit dis-illusioned, like the sense of direction has been lost."

Each of the first three centres within SPRITE were visited at least once a fortnight for either a morning or afternoon session between May 1986 and July 1987. All incidences of participant observation were recorded within this structured framework. This enabled an initial analysis of the data during the data collection period. Miles and Huberman (1984) describe the advantages of using this approach:

" Analysis during data collection lets the fieldworker cycle back and forth between thinking about the existing data and generating strategies for collecting new - often better quality data; it can be a healthy corrective for built-in blind spots; and it makes an analysis an ongoing, lively enterprise that is linked to the energising effects of fieldwork." (p. 49)

Therefore the role of the evaluator-observer within the evaluation of SPRITE was that of a participant observer in line with the action research perspective. Returning to Patton's (1980) dimensions of observation (Table 4.2), the second considers the portrayal of the evaluator's role to others. This dimension ranges from the situation where the observer's role is overt so that all involved with a programme know who the observer is and why observations are being made, to the situation where the observer has a covert role and no-one is aware that observations are being made. In this evaluation, the role of the evaluator was made clear to all participants within the project. For example, on a number of occasions observations that had been made in particular centres were written up into progress documents for the SPRITE project management committee. In each of these instances, prior to wider distribution, representatives from those centres were asked to comment on the documents in relation to their content and suggest any changes that they felt were necessary. In practice the content was rarely

challenged. This point, however, illustrates how the evaluator's role was clearly overt. Similarly with the third dimension within the scheme, there was full explanation of the purpose of the evaluation to all parties and individuals involved with the SPRITE project.

The fourth dimension in Patton's framework considers the duration of observations. Within the evaluation of SPRITE it is appropriate to conceive of the observation as consisting of multiple observations over a long period of time. The observations, as can be seen from the field notes, also had a broad focus with the aim of seeking a holistic view of the project and all its elements.

As well as the day to day observation of the project, observation took place at the four residential weekends that SPRITE had at Northern College. These weekends were important sources of data collection and will now be described in more detail.

4.3(iii) PARTICIPANT OBSERVATION AT NORTHERN COLLEGE

During the course of the project SPRITE held four residential weekends at Northern College, an Adult Education College in the Yorkshire countryside (June 1986, February 1987, July 1987 and June 1988.) The aim of these weekends was to provide users with the opportunity to gain hands-on computer experience and to discuss the progress of the project away from the community centres where the project operated. The programmes for the weekends were devised by the project workers and the evaluator with some input from centre users. These programmes are included in appendix i.

During each of the first three weekends time was set aside for an evaluation session. Within this session users from each centre would discuss how SPRITE was operating in their centre, any problems that they were encountering, and new directions that they would like the project to move in. Most of these discussions were tape-recorded and the tapes transcribed and analysed. They therefore provide a summary of how the project was operating at a particular period of time.

In each of the discussion groups the topic would be introduced by a facilitator. The role of the facilitator was similar to that outlined by Darwin, Fitter, Fryer and Smith (1985) who were involved in a series of discussion groups about new technology in community centres:

" The participants were asked to comment on the project and any issues that they felt were germane. The researcher adopted a neutral low-profile role, making as little comment as possible and only asking questions in order to stimulate more discussion. The role of the researcher was deliberately non-directive." (p. 7)

As these sessions covered the same issues each time with the same style of participant observation, data from the transcripts of these sessions were used to follow through the progress of SPRITE in each centre.

As well as formal evaluation sessions, observation of the weekend's activities as a whole provided a wealth of data about various issues within the project. For example, during these residential weekends social links between centres were forged which had important implications for the development of the project as a whole. At the end of each weekend a plenary session was held where users commented on how they felt the weekend had worked. This session was also tape-recorded for evaluation purposes. Therefore participant observation during these weekends provided a vital

source of data for the case studies.

The use of participant observation clearly played an important role within the evaluation of SPRITE. It provided a continuous view of the project and formed the basis from which to develop case study analysis. The next section looks at the use of interviews within the evaluation.

4.3(iv) THE INTERVIEWS

The research interview has been a well-used method of data collection within the social sciences and evaluation research. As early as 1942, Allport suggested that if you wanted to know something about people's activities the best way of finding out was to ask them. Since then a number of distinct types of interviews have emerged, some very structured such as the repertory grid technique devised by Kelly (1955), and some unstructured such as the collection of 'accounts' based on the work of Harre and Secord (1972). A distinctive characteristic of all interviews is that they are interactive. Both parties within the interview explore the meanings of the questions. Therefore within the interview situation there is an explicit or implicit negotiation of understanding that may not be present in other research techniques.

Interviews can be part of both qualitative and quantitative evaluation research designs. For example interviews that take place as part of a survey can aim to provide evidence for particular hypotheses. The survey interview is characterised by its focus on a pre-determined, structured, question-asking procedure by which the interviewer seeks to obtain certain information on specific questions. Interviews within a qualitative framework on the other hand are more concerned with asking open-ended questions which can then be followed up with relevant questions. It is with these qualitative interviews that the research is concerned.

Patton (1987) suggests that there are three different approaches to qualitative interviewing within evaluation research: the informal

conversation interview; the general interview guide approach; and the standardized open-ended interview. He suggests that the main difference between these approaches is the extent to which questions are determined and standardized BEFORE the interview occurs. The informal conversation interview relies upon the spontaneous flow of questions that typically emerge within an interaction. This means that the interviewer can be highly responsive to the issues that the interviewee feels are the most important to be talked about. This can be advantageous to the extent that what are perceived to be the most important issues are covered, however problems may emerge when attempting to code or analyse information from a number of interviews where there are no standardised questions. Different questions will produce different responses and the task of the interviewer of sifting through responses looking for general patterns will be extremely difficult.

The interview guide technique is a list of questions or issues that are to be covered in each interview. Here the interviewer can talk informally with the interviewee but ensures that all the relevant points have been covered. Patton suggests that this guide exists to ensure that the same information is provided from each interview although the interviewer or interviewee can still concentrate on particular issues if they so wish. Therefore the problems of the lack of standardised information can be offset whilst the quality of responses is maintained.

The third form of interview described by Patton is the standardized open-ended interview. This consists of a list of questions carefully worded and arranged so that each interviewee can progress through the questions in order. Within the evaluation of a project Patton suggests that this

technique is particularly useful when participants are interviewed before they begin within the project and again after a given period of time. This form of interviewing has the advantage of providing systematic information from all interviewees whilst its format is still open-ended, so the respondent uses their own words and can dwell on particular experiences that they feel are important.

Patton suggests that the common characteristic of all these approaches is that the interviewee responds with their own words to describe their own personal perspective. He points out that:

" The purpose of qualitative interviewing within evaluation is to understand how people within a programme view the programme, to learn their terminology and judgements, and to capture the complexities of their individual perceptions and experiences. This is what distinguishes qualitative interviewing from the closed interview, questionnaire or test typically used in research. Such closed instruments force respondents to fit their knowledge, experiences and feelings into the evaluator's categories. The fundamental principle of qualitative interviewing is to provide a framework within which respondents can express their own understandings in their own terms." (p. 107)

Within the evaluation of SPRITE the interviews conducted were of the 'standardized open-ended' type within Patton's classification. This particular method was chosen so that the information generated in each interview covered similar issues. This would enable comparisons to be made across centres at a certain point in time. It also ensured that responses by particular individuals could be compared over time. Respondents were encouraged to say as much as they felt was necessary in response to a particular question, each comment being re-inforced or reflected upon by the interviewer. If an interviewee found a particular question difficult then a list of prompts were given to help facilitate their answering.

Interviews were conducted with both project workers and centre users. The three project workers were interviewed twice: December 1985 and December 1986. The schedule consisted of questions based on issues from the evaluation framework such as: What developments would you like to see in the project over the next six months? and What do you see to be the biggest constraints on the projects development? A full list of questions can be found in appendix ii.

The interviews with project users took place in November - December 1986 (16 regular users) and July - August 1987 (12 regular users). Within the literature on the role of human factors in the design of computer systems, a number of definitions of system users have emerged (Moran, 1981; Shneiderman, 1980). Users are defined on a range of criteria, for example type of knowledge and frequency of use (Vassiliou and Matthias, 1984). It was difficult to apply these classifications to SPRITE users as a project user was not defined as such by technology use alone. Rather, other factors were important, such as their identification and involvement with the project as a whole. Therefore, for evaluation purposes, a regular user was defined as someone who had used the project continually for three months and was clearly going to continue with that involvement in the near future. They were also perceived generally by the other members of the user group and the project workers as being a part of the SPRITE project. This definition of 'regular user' was therefore negotiated with the project workers and excluded the people whose use of the project was intermittent. At both times users were asked the same set of questions devised from the evaluation framework. These covered a number of issues including how they felt SPRITE fitted into their centre, whether they had gained anything

personally by being involved with the project, what impact they perceived they as individual users had in the project, and also their aspirations for the future. The full interview schedule can be found in appendix iii.

Each of these interviews lasted between 25 - 55 minutes and took place either in the SPRITE office or at the individual's local centre. Each was tape-recorded and transcribed verbatim in preparation for analysis.

Data from the interviews provided an important source of information reflecting the attitudes, beliefs, behaviour and experiences of individuals involved in the project. This information is used within the case studies that follow. The next section describes how questionnaires were used within the evaluation.

4.3(v) QUESTIONNAIRES

The use of questionnaires is a popular technique within evaluation research for eliciting participants' attitudes to a particular change programme. As a crucial method of surveying attitudes and beliefs, questionnaires are usually used within a quantitative methodological framework. Sieber (1973) suggests that the use of questionnaires can contribute to the design of field work by verifying field interpretations or casting new light on observations, that is, as a method of data triangulation. A number of texts have been written about the design of questionnaires within social science research. Oppenheim (1983) suggests that the subject of questionnaire design is intimately related to the general plan of a survey or evaluation programme:

" A questionnaire is not just a list of questions or a form to be filled out. It is essentially a scientific instrument for

measurement and for collection of particular kinds of data. Like all such instruments, it has to be specially designed according to particular specifications and with specific aims in mind, and the data it yields are subject to error." (p. 2)

It is clear that some issues are more appropriately investigated by questionnaire than others. Fink and Kosecoff (1985) suggest that the crucial distinctive feature of a questionnaire is that it is limited to written responses to pre-set questions. Typically, issues that can be easily quantified along specific dimensions are the most appropriate for this form of methodology. This was borne in mind when designing the two questionnaires that were used during the SPRITE project.

Within the SPRITE project, two questionnaires were administered to centre users within the project. The first questionnaire was distributed on the first day that SPRITE went into a particular centre, that is May 1986 in Open Door and SADACCA, June 1986 in the Space, and March 1987 in Woodthorpe. The total number of respondents was 37.

The questionnaire included two sections of questions. Section One asked users about their previous experience of computing and whether they had a computer at home. Section two asked a series of open-ended questions about the community centres that users were involved with, for example; "What benefits do you think SPRITE will have for your centre?", "What do you feel you will gain from being involved with SPRITE?" Finally there were a number of demographic questions: age, sex and employment status.

Before the questionnaire was administered at the first four centres, the representatives from those centres on the project management committee at that time were asked to comment on its content and style. As a result of

this feedback some of the questions were altered slightly. The user representatives also requested that the questionnaires be anonymous. This was agreed. The questionnaires can be found in appendix iv. This questionnaire was used to provide descriptive information about the type of people involved with SPRITE.

The second questionnaire was distributed to users in all eight SPRITE centres between August and December 1987, (N=56). Previous to this period there had been a lot of discussion within the project about strategies for obtaining funding when the project grant ran out in October 1988. These discussions had encouraged considerable debate about what individuals and groups actually gained from being involved with SPRITE. In order to clarify this issue for the project management committee and workers, a section was put in the questionnaire that asked users what they felt was important about being involved with the project. Users were asked to mark on a scale from 1 - 5 how important a number of outcomes were, for example: gaining skills in computer use; meeting new or different people; getting a paid job using computers. Users were also asked how long they had been involved with SPRITE and how often they visited their local centres and the central office of the project on the weekly open day. Descriptive statistics were produced from this questionnaire and are shown in chapters 5 and 6..

4.3(vi) DOCUMENT COLLECTION

Throughout the research I collected a number of documents that were produced about SPRITE for the purpose of analysing the development of the project. These included minutes of the regular meetings that I had with the

project workers; minutes from meetings of the SPRITE management committee; advisory committee; evaluation advisory committee; and user committee; and various reports that I had written on the project for the management committee. These documents provided a useful source of information about the project and the descriptive information within the documents is used as a basis for the SPRITE case study in chapter 5.

4.4 CASE STUDY ANALYSIS

This section describes how the case studies were analysed. Most of the information presented came from observing the day to day operation of SPRITE within the centres. As illustrated in section 4.3(ii), detailed notes were taken after each visit to a centre and were recorded in diary format. The data was then analysed through the use of time-ordered matrices. These allow the display of data through chronological ordering (Miles and Huberman, 1984). A matrix was produced for each centre. An example of one of the matrices is shown in Table 4.3. (An example of a full matrix is shown in Appendix vii). The matrix in the table covers three months when SPRITE was working at the Space and shows some of the data from participant observation during that time period. Each column of the matrix represents a month during which the SPRITE project was operational at the centre. The rows within each matrix represent a category of descriptive data or specific research issues based on the research questions and the structured diary format. Each matrix has 6 rows, labelled:

1. Training: content of SPRITE sessions.
2. Individuals.
3. Factors supporting project development.
4. Factors impeding project development.
5. Links with other centres.
6. Miscellaneous.

The data entered into the matrices came from the observation diaries.

Table 4.3 An example of a time-ordered matrix
From the Space centre. January to March 1987

	JANUARY 1987	FEBRUARY 1987	MARCH 1987
1. CONTENT OF SPRITE SESSIONS	Discussion on how to develop publicity	Skill-sharing begins on Monday mornings	Skill-sharing continues
	Women's sessions begin	Women's sessions in the afternoon	Women's sessions end
	Testing of Forum database	Discussions about new projects in the afternoon. Start on Low Edges project	Work on Writeback begins
2. INDIVIDUALS	Rob becoming a scapegoat for group	Rob angry with group due to work distribution. Begins to write Locoscript manual	Settlement made with Rob
	Tommy and Stan hostile to women's group		
	Mike starts work at the college		
3. FACTORS SUPPORTING DEVELOPMENT	Women's classes start well	Northern College weekend, women's group get on well with user group	Tension about women's classes has disappeared
	Libraries approach Space about training in word processing for library staff.	Women start coming to Monday morning sessions	
	Approached by Low Edge's Tenant's Association - want a database	Idea of a co-op emerges from key group	Work on Low Edges project going well - everyone excited

Table 4.3 (cont.)

4. FACTORS IMPEDING DEVELOPMENT	Waiting for software for printing project	No creche- makes integration of women difficult	Equipment stolen
	Hostility to women's classes from the user group		No creche facilities
5.LINKS WITH OTHER CENTRES	Training sessions laid on at Forum	Space organise a meeting about a newsletter for the project	Visit to Low Edges
		New friends made at Northern College	
6. MISC. ISSUES	Decide to invite speaker from Co-op development group	Need to discuss any rel. between a co-op, SPRITE, and the centre	

The first stage of the analysis involved clarifying the content of the data with data from other research methods. This was done for two reasons. Firstly, this stage of analysis allowed the perspectives of different stakeholder groups, in particular the project officers and the centre users, to be taken into account at this stage. Data from discussion meetings with the project officers, transcripts from interviews with centre users, and transcripts of discussion meetings with the user groups, were coded so that they could be transcribed on the matrices. Secondly, this stage of analysis enabled the reliability of observations to be cross-checked with other data sources. In most cases, original data from the diary represented adequately the views of the different stakeholder groups, however where omissions emerged these could be complemented by the other data sources. Generally there was no disagreements about the 'facts' between different stakeholder groups, but rather about the interpretation of those 'facts'. Differing interpretations of these facts could be found in the interviews and in the discussions with centre users and project officers.

For example, in the matrix for the Space, data from the diary suggested that there were problems at the centre in January to March 1987 regarding the women's classes. Hostility to these classes was seen as a factor impeding development in January 1987. To allow a careful interpretation of the processes that were creating hostility, other data sources needed to be considered besides observation. All stakeholder groups agreed with the 'fact' that hostility had emerged. However, by referring to other sources of data it was clear that the project workers, the project users, and the women's group, all had different views as to why it had emerged. These

sources of data therefore helped to clarify different interpretation of events, and to understand what lay behind the observations. This cross-checking of the data within the matrices was the first stage of the analysis. It enabled an agreement of 'facts' and an understanding of different interpretations of those facts.

After entering and cross-checking the data, the next stage involved examining each category to see how the data changed over time. For example, by looking at Row 1 which describes the training within a particular centre, it is possible to see how the training programme developed during implementation. By examining row 3 which isolates the factors supporting development it is possible to gain a chronological view of these factors which can be seen as building blocks to understanding the overall process of implementation. It was also possible to isolate recurring themes and critical incidents at this stage. For example in row 4, (factors impeding development), problems with the workers at the centre is a recurring theme within the Open Door matrix. By analysing the data in this way it is possible also to isolate certain events where these problems become exaggerated. So as well as having an overall view of the process, critical incidents can be focused on within that process.

Once the columns have been analysed and themes developed, the next stage is to look generally at all the rows of the matrix to see what links emerge. For example, if particular factors are seen to impede development, such as boredom within a particular user group, by looking at row 1 it is possible to see whether the content of the SPRITE sessions altered as a result of this. Did the project officers introduce any new equipment to the centre,

for example? This stage of analysis leads to a more holistic view of the data.

Therefore these matrices were used for two main purposes. Firstly to highlight how SPRITE developed in a particular centre, and secondly to develop an understanding of the processes by which it developed. This meant that possible explanations of events could be generated which were then cross-checked with other sources of data. This analysis is presented in the case studies that follow.

4.5 SUMMARY

This chapter has described the general debate within evaluation research about the methodological frameworks that are used in programme evaluation. The methods of data collection that were used within the evaluation of SPRITE have been described as has the rationale behind these methods. This rationale is based on the argument that the major consideration when choosing a method of data collection is not the general methodological framework within which the research is set, but rather the most appropriate technique for the issues that are being investigated. Therefore although the data collection techniques described within this chapter are useful for providing insights into all the research questions, some are aimed specifically at one or two research questions. Research questions 1 and 2, which focus on the organisational aspects of the evaluation framework, are addressed using the data from case study analysis which relies mainly on observation. Questions 3 and 4 (about the individual aspects of the evaluation framework) use the interview data as their primary source.

Question 5 (about how successful the project was in achieving its' aims and objectives) focuses primarily on the analysis of documents, and question 6 draws from all data sources. Questionnaire data provides back-up descriptive statistics for each of the questions, where necessary. Therefore the various techniques used were those that were considered the most appropriate for each research question.

CHAPTER 5

THE IMPLEMENTATION OF SPRITE

5.1. INTRODUCTION

The aim of this chapter is to present the data collected about the development of SPRITE over the two year period during which the fieldwork took place (October 1st 1985 to September 30th 1987). The analysis of this data will be presented in Chapter 8 which addresses research question 5: To what extent was SPRITE successful in achieving its' aims and objectives? The data in this chapter is descriptive and comes mainly from an analysis of the documents collected during the two year period of fieldwork. However results from the second questionnaire distributed to SPRITE users, and from the interviews with regular users, are included towards the end of the chapter. The documents used are:

1. Evaluation Reports: During the implementation of the project I wrote a number of reports for the project management committee and the evaluation advisory group about how the project was progressing. These summarised evaluation findings and were used as a way of providing the project with feedback from the evaluation. Additionally, I presented two 'project reviews' to the SPRITE management committee (October 1986 and May 1987). These reports can be treated as 'secondary data' in that they summarize data drawn from the various techniques used. A list of the documents provided to the SPRITE management committee is provided in Appendix viii.

2. Minutes of SPRITE management and advisory committee meetings: These meetings were held every 6 weeks within the project and the minutes were

taken by the project's clerical/admin. worker. They focus on the pertinent issues within SPRITE at particular times and on the various decisions that were made during the implementation of the project.

3. Minutes of SPRITE strategy group meetings: These were the fortnightly meetings that I had with the project officers where we discussed how we felt the project was working in the various centres and more general issues about its' day-to-day implementation. These minutes were taken by myself and reflected our views on how the project was progressing. They detailed decisions that we made and our recommendations for further action.

4. Log of users: During the fieldwork I kept a list of how many users were involved at each centre. This was updated monthly.

The information from the above documents was transcribed onto a time-ordered matrix (see Miles and Huberman, 1984), to allow the data to be examined in chronological order. The analysis of these matrices was described earlier in chapter 4.4. For this chapter information was taken from the matrix and consequently the description of the development of SPRITE focuses on the relevant information from the above documents.

Note that each paragraph within this chapter is numbered so that the discussion of the data in chapter 8 can refer back to specific points. A summary of the most important points in the development of the project is provided in Table 5.8 at the end of the chapter.

5.2. A CASE STUDY OF THE SPRITE PROJECT

(1) The SPRITE project began officially on 1st November 1985. At this stage the SPRITE workers (2 Project Officers and 1 part-time clerical/admin worker) had two briefs to work with. The first had been written by officers from the City Council's Department of Employment and Economic Development (DEED) and was called 'Information technology and the wageless: a guide to the project'. This covered the background and aims of the project, the results of the pilot work, the operation of the project, and the evaluation. The second document was the application that had been made for funding to the European Social Fund. Within these briefs it was proposed that the project would provide 'pre-vocational' training to 96 people within Sheffield: 48 men and 48 women of whom 48 would be under 25 years old and 48 over 25 years old. 'Pre-vocational' training was a term coined to suggest that the project would not directly train people for jobs but, instead, would familiarise individuals and groups within community centres with applications of technology which they could then use as they wished, further training in computing being an option. The project would eventually work in 6 centres in Sheffield but would initially choose 3 in which to begin implementation. The project office was situated on the 'Tritec' site in Sheffield town centre where two other I.T. projects: Womens Technology Training Workshop (W.T.T.W.) and Sheffield Information Technology Centre (I.T.E.C.) have their base.

5.2 (i) The committee structure

(2) The first advisory committee meeting of the project was held on 28th

November 1985. Officers from DEED had circulated a document about the composition of the advisory committee. Figure 5.1 shows the composition of this committee.

(3) The committee potentially had 22 members. It was decided that the above committee would become an advisory committee to the project, meeting 3-4 times a year. The role of the members of this committee was described by a representative from DEED as:

" People are chosen for the advisory committee because they will give value to the project: help, resources, contacts. They should have informal contacts with the project workers outside of meetings. Everyone has a creative role to play in the development of the project."

The first task of the advisory committee was to elect a management committee who would have the responsibility for making executive decisions throughout the project. The management committee would meet once every 6 weeks. The composition of this committee is shown in Figure 5.2. Within this group there were experts in training, computing, adult education, and evaluation. Additionally the project workers and myself would be part of the management committee. At a later date it was envisaged that the committee would be widened to include a number of user representatives from the centres that SPRITE was to be implemented in.

(4) The management committee also set up an Evaluation Advisory Group that was to be chaired by Dr. Mike Fitter, the University representative on the advisory committee who had been involved with the pilot work for the project. This composition of this committee is shown in Figure 5.3. All the members of the committee shared an interest in research and evaluation. The role of this committee was to guide and monitor the evaluation of the

project and give advice where necessary. Therefore throughout the evaluation of SPRITE I provided regular reports to this committee about the progress of the evaluation.

(5)The SPRITE project now had a committee structure with a number of professionals whose role was to advise the project workers and help resource the project in terms of their expertise. The general response towards SPRITE from the people who attended this first meeting was very positive. SPRITE was an innovative project that attracted the imagination of a wide range of people.

FIGURE 5.1

COMPOSITION OF THE SPRITE ADVISORY COMMITTEE

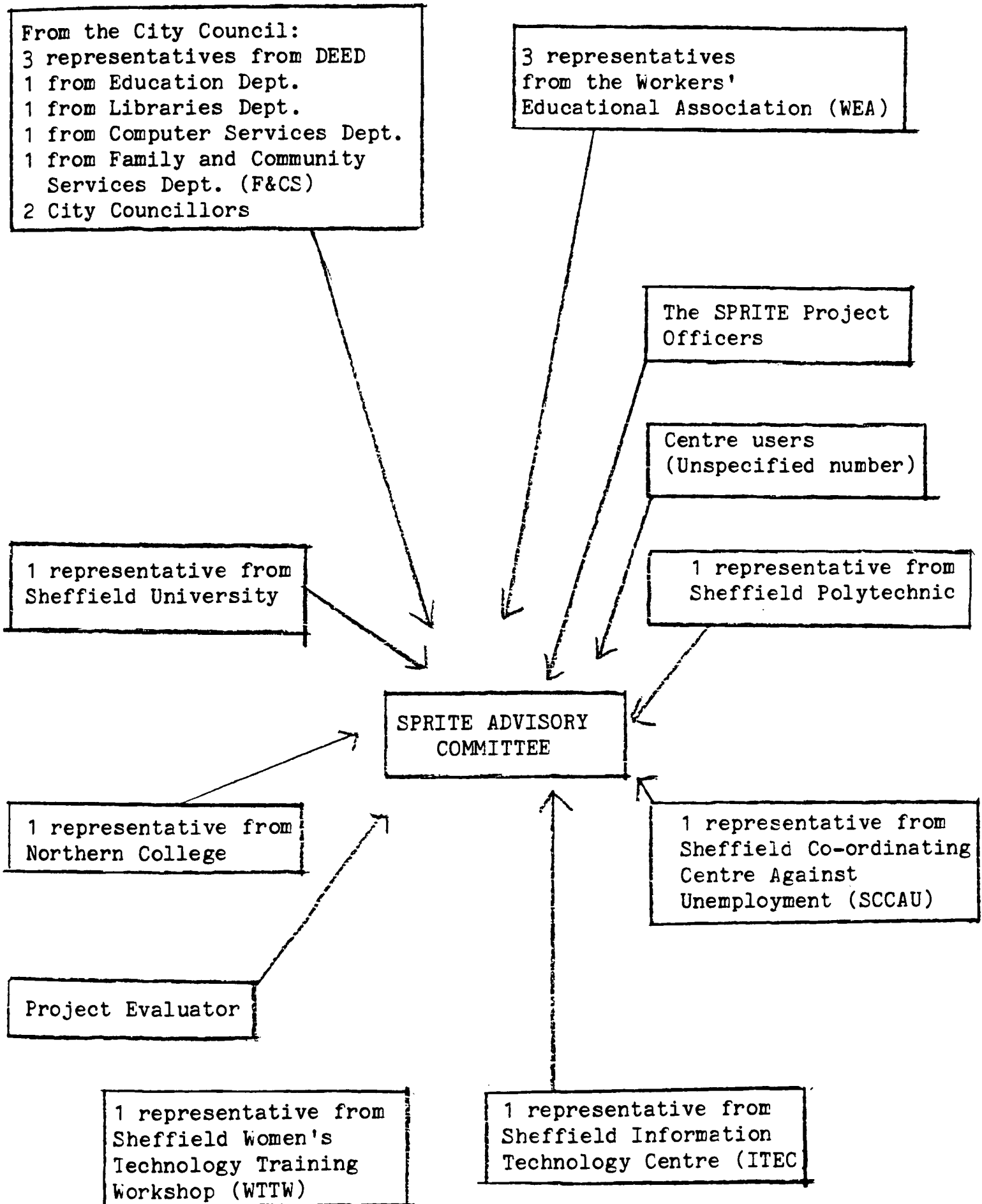


FIGURE 5.2

COMPOSITION OF THE SPRITE MANAGEMENT COMMITTEE

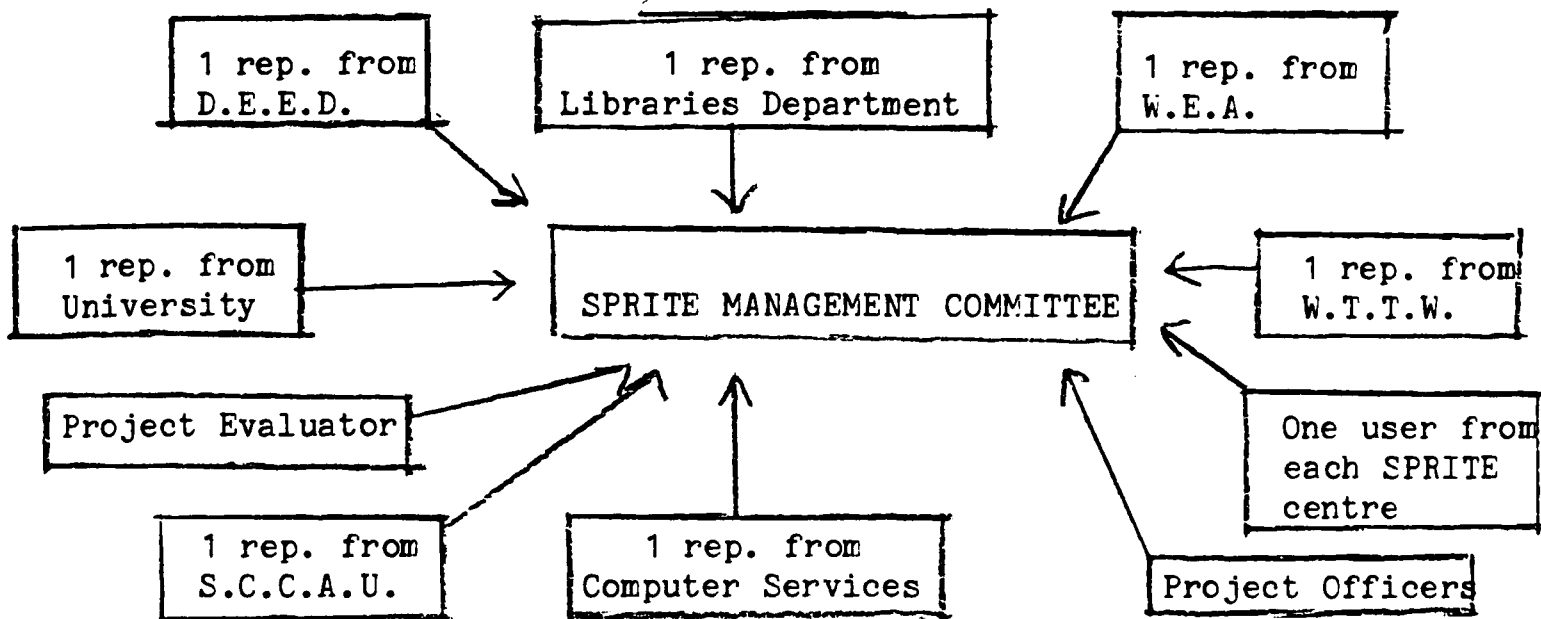
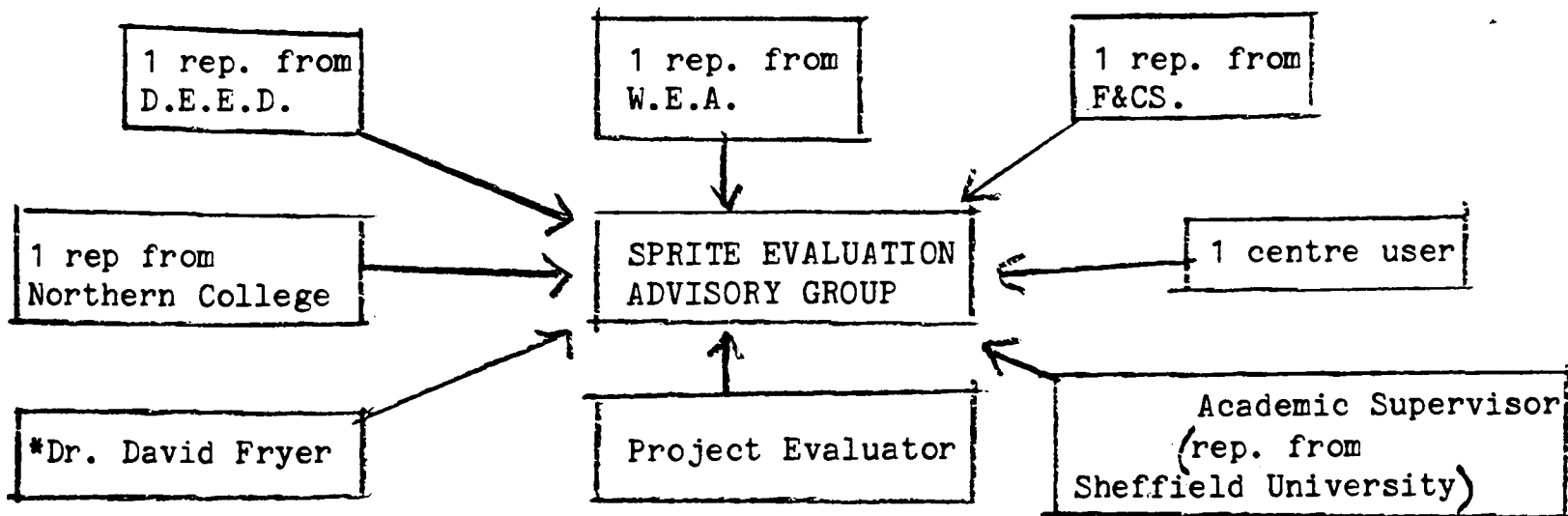


FIGURE 5.3

COMPOSITION OF THE SPRITE EVALUATION ADVISORY GROUP



* Dr. David Fryer was invited onto the committee and did not represent any organisation.

5.2(ii) Selection of centres

(6) Over the next few months the SPRITE workers and myself visited many community centres to seek centre users' and workers' opinions about how computers could be used within their local community. Another aim of these visits was to see whether they would be interested in SPRITE being located within their centre. We also visited a number of community computing projects in other parts of the country to see how they worked. At the second management committee meeting a paper had been accepted which presented a number of criteria on which the centres should be selected. This was written by the Chair of the Evaluation Group and myself and therefore represented an intervention from the evaluation based on the data I had collected from the early visits to centres. The paper devised a set of criteria that corresponded to the basic principles that underlied the project. An excerpt from that paper is shown below:

"By examining the project's aims and target groups the following criteria have been derived:

1. The centre has appropriate user groups, i.e. unwaged and particularly those who are generally discriminated against in terms of I.T. resources, i.e.: women, disabled people, ethnic minorities and older people.
2. The centre has the necessary resources. These include:
 - (a) space for sessions and practice;
 - (b) secure storage space for equipment;
 - (c) access to equipment is possible when the project officers are elsewhere;
 - (d) facilities that enable the target groups to attend the sessions and to practice, i.e. childcare facilities, disabled access.
3. The centre has a 'community' focus and an active group/s of people who could potentially benefit from I.T. Therefore at least some of the trainees will be familiar with the centre, rather than being new recruits, and will preferably have shown some interest in the project. (p. 2)

(7) It was recognised that finding a community group that satisfied all

these criteria would prove difficult. One of the implications of these criteria was that for a group to be selected as part of SPRITE they would already have a considerable amount of resources, for example good facilities within their community centre. In effect, SPRITE would be giving more resources to those centres that already had them. This was raised as an issue, however it was generally felt by the management committee that for a centre to be able to make the most of computer resources there would need to be some kind of supportive structure already existant within the centre, for example a keen and active user group. The underlying theme behind the criteria was to resource centres that would be able to make the most out of the computer facilities. One could argue that by resourcing in this way SPRITE was only going to work in community centres where they knew the project was going to be successful. The alternative argument however was that there was no point putting computers into centres where there was no back-up support to encourage their use. These debates were held at the time, the result being that the above criteria were accepted as appropriate ones for the project to use for the selection of the first three centres.

(8) Other issues emerged during our initial visits to community centres. One concerned the equal opportunities brief within the project. As both the project officers were male, it became apparent that it would be difficult for them to teach particular groups. This was highlighted when we visited a centre that was trying to set up a project to teach computing skills to Asian women. The workers at the centre argued that these women would have to be taught by a female tutor, preferably Asian, in line with their language and cultural requirements. Therefore as SPRITE could not provide such a resource they saw it as a 'racist' project. It became apparent that

SPRITE would need to pursue funding to employ outside tutors to run computer sessions in centres where users had particular tutor requirements. DEED representatives on the management committee, when faced with this issue, argued that there had been no choice about employing men or women as project officers as no women had applied for the posts. Therefore it was too late to address this issue. However, the fact that SPRITE had two male workers had an impact on the project and also an effect on my role as action researcher. As part of my role was to develop and support the user group, I spent a lot of time working with women in different community centres, therefore compensating for the fact that the SPRITE workers could not work in women only settings. These points will be expanded upon in chapters 8 and 9 where the success of the equal opportunities brief of the project, and my role of action researcher, will be addressed.

(9) During this initial period the SPRITE workers were also working on an equipment and training policy through discussions with members of the advisory committee and users in the centres visited. The form of training and equipment was finalised when the project eventually started within the centres.

(10) By March 1986 three centres had been selected, in consultation with the management committee, that would be the appropriate locations for SPRITE to operate. In practice the project workers had a lot of say in which centres were chosen in that they had the most information about the various alternatives to choose from. The management committee accepted that their decision was appropriate. The three centres chosen were: Open Door, an unemployed centre; SADACCA (Sheffield and District Afro-Caribbean

Community Association), a centre for the Afro-Caribbean community; and The Space, a new community centre on the first floor of a public library. All three met some of the criteria for selection. Open Door was already an active unemployed centre with pre-established groups and was well-used by women. The Space was located within a deprived area of the city and had a user group that were already familiar with computers, as they were members of a small computer club. They were also very keen to become involved with the project. SADACCA, although new, had all the necessary resources to take on a computer facility. They were all relatively secure buildings.

5.5(iii) Statement of aims and objectives

(11) The aims and objectives of the project were detailed in March 1988 in a paper that I wrote for the project management committee as a result of initial fieldwork with the stakeholder groups of the project. This included interviewing members of the management committee and holding discussion groups with centre users. Generally, it was felt that the criteria written into the ESF document (48 men and 48 women) were not really appropriate for a project of this kind - one that did not intend to train people for jobs. Rather, the aims of the project were viewed as follows:

1. To provide a resource generally in the community in terms of personnel, training and equipment;
2. To create awareness of I.T. and its impact on everyday life;
3. To promote computer literacy and encourage access to I.T. by particular targeted groups;
4. To develop software suitable to the needs of the community;
5. To ensure that centre users determine the direction of the project in their own particular centre.

The corresponding objectives were:

1. To facilitate community projects in each centre which have specific goals linked to the community;
2. To use the collective skills of the advisory committee to resource the project where necessary and appropriate, providing expertise that the community can draw upon;
3. To facilitate eventually the development of a community network, electronic or otherwise in order to enable effective communication between community groups. (p. 1-2)

5.3(iv) New developments

(12) During the meeting of the Advisory Committee in April 1986, there was some discussion about which groups within the unwaged should be targeted for the project. One of the representatives from DEED suggested that SPRITE should ensure that the areas that it was working in were the areas of high unemployment within the city. It was agreed that once SPRITE had been implemented in the first 3 centres, the next 3 would be in those areas of high unemployment.

(13) During April the SPRITE project moved offices to another building within the town centre. This building, the Enterprise Workshops, was subsidised by DEED as it housed a number of small businesses that were being given city council support. The reason for moving was that as SPRITE was purchasing more equipment, a more secure office was required. This was particularly important as the project workers were now spending long periods away from the office in the centres.

(14) At the management committee meeting in April 1986 the first three user representatives from the Space, SADACCA and Open Door were elected onto the management committee. Their role was to represent the interests of their

centres. A user was also elected onto the evaluation advisory group. As the project workers were now making regular visits to these centres, either providing training, or discussing the implementation, there was less time available to visit other prospective centres. At the same management committee the SPRITE workers presented what was to become their equipment policy to the committee. Their purchasing policy was based on the idea that there should be some standardisation between the centres. Each centre would have:

(a) 1 Atari 520 ST computer with single disc drive and colour monitor. This would serve as the 'development' machine within the centres, with particular emphasis on its graphics potential.

(b) 1 Amstrad 8256 computer. This would serve as the 'administration' machine. Software would consist of word processor, spreadsheet, database and accounts package.

(c) 2 BBC model 'B' 32k computers. These would be used for more general training.

(d) 2 Commodore 64 computers. These were to be used with disk drives and colour monitors for the same purposes as the BBC machines, namely educational and recreational purposes.

(15) By June 1986 the project was working regularly in all three centres. Each had been provided with the above set of equipment. Introductory training sessions were taking place within the centres and after that period of computer familiarisation the aim was for the users to begin working on community computing projects.

(16) In June 1986 SPRITE held its' first weekend at Northern College with users from all 3 centres. Before the weekend, nobody knew what to expect. The weekend was a great success. During the weekend there were computer sessions where the users learnt new applications of the machines and also evaluation sessions where the users discussed how the project was

progressing within their centres. The programme of the weekend can be found in appendix (i). The greatest success of the weekend was the social impact that it had through bringing the users from different centres together. The weather was really good and after an evening in the bar, most of the users (and workers) stayed up till around 4am, going for long walks in the gardens and consuming vast quantities of tea and toast. This weekend brought the users from the three centres together as an identifiable group of 'SPRITE users' and afterwards arrangements were made for future collaboration between the different groups.

(17) During June 1986 it became apparent that SPRITE had spent all its' budget for the first year in resourcing its own office and the first three centres. A (successful) application was made by officers from DEED for £20,000 Urban Programme funding. This was to be used for purchasing equipment only. In July the W.E.A. agreed that they would fund a number of teaching sessions within the centres to be taken by outside tutors. These are described more fully in the relevant case studies that follow. Extra teaching support meant that the project workers could now spend less time teaching introductory computing sessions and instead begin to do more research into which centres to select for the next stage of the project. They could also begin to respond to the increasing number of demands for help that were coming from other community groups within the city who were beginning to use computers. The workers continued to visit the 3 centres regularly and work on community projects was beginning. These are described in detail within the case studies that follow.

5.2(v) The first project review

(18) At the management committee of 1st October 1986 I presented a review of the project to the SPRITE management committee. The review pointed out that the first phase of the training courses had gone well within all three of the centres:

"Reactions to these sessions have been very positive particularly because of the informal nature in which the sessions have been run. A lot of project users have pointed out that formal training, on a college course for example, can be quite intimidating. The SPRITE training on the other hand seems to have been sensitive to these reservations and has provoked discussion as an integral part of learning. As one user said:

" I've done quite a bit of computing in the past that's been very formal and very structured so I think its good the way this has been done, particularly looking at things like word-processing and database work. I really have learnt quite a lot from that. I never thought about those things before." (p. 1)

(19) The review went on to discuss what was happening in the three centres and the collaboration that was taking place between centres. It also pointed to an important development within SPRITE under the heading of 'A community computing forum':

" Over the last 10 months the SPRITE project has made rapid progress within the 3 initial centres. There have also been other developments that may not seem as obvious. SPRITE has become the major forum for the development of community computing within Sheffield. This has been encouraged through the liason with community groups who use computers but are not involved with SPRITE, and also through the connections that SPRITE has with various council departments. As well as operating in community centres SPRITE is now providing a service to many community and voluntary sector groups who have queries about computers. Its' tentacles are expanding in many directions." (p. 10)

(20) Therefore the project review had identified a new, important aspect of the project's activities in that it was servicing the computer needs of a number of other community groups.

5.2(vi) Selection of further centres

(21) In the Autumn of 1986 there was considerable discussion within SPRITE about the criteria that should be used to select the next three centres within which SPRITE should operate. The six criteria that had been devised at a meeting of the evaluation advisory group were agreed by the management committee in December 1986. These selection criteria arose from the aims of the project and also from the results of the evaluation of SPRITE's first year. The criteria represented an intervention into the project designed to aid the decision-making process. They were:

1. A strong user base in the centre and a community orientation;
2. Geographic areas of high unemployment. The location within such an area to be guided by the views of the groups active in the area;
3. Positive action towards women, ethnic minorities, older people and people with disabilities;
4. A contrast between centres is desirable to broaden the perspective of the evaluation;
5. The premises must be sufficiently secure (very good record so far);
6. Where possible identify local needs and focus on appropriate I.T. applications (i.e. moving away from a technology led approach).

The fourth criterion arose from the view that as the evaluation was to provide recommendations for future projects, a contrast between centres would be able to broaden its' focus. This was agreed by the management committee. The final selection criterion arose from a recognition that in some cases SPRITE may be able to service the needs of a community group by just providing one computer. If a group wanted to computerise their administration for example, there was no need to resource the centre with six machines.

(22) In December 1986 the project had an open day at SADACCA to which all the city councillors and various city council officers were invited. The aim was to provide the project with a higher profile in the eyes of those decision-makers who may make future decisions about the funding of SPRITE. All of the centres connected with SPRITE provided computer displays and demonstrations for the open day. The day performed the function of furthering the links between the centre users who had worked quite hard to ensure its' success. Unfortunately however, none of the city councillors attended, therefore the day was not successful in publicizing the project to the relevant decision makers. After the open day one of the users wrote to the chair of the council's employment committee to complain about their non-attendance. A response to that letter suggested that SPRITE was owed an apology. Unfortunately the timing of the open day clashed with an important council meeting.

(23) In January 1987 two more centres were officially selected by the management committee: the Forum of People with Disabilities and Woodthorpe 2000. The Forum of People with Disabilities was a co-ordinating and campaigning group for people with disabilities in Sheffield. The Woodthorpe 2000 group were a group of women who used community rooms within their local school. A further two communities in Sheffield within which to work: the Manor area and the Firth Park area, were agreed by the committee in March 1987. The Manor area houses one of the largest council estates in Sheffield and has one of the highest unemployment rates within the city. The Firth Park area is in the north of the city, where as yet, SPRITE had had no input. Negotiations began with local community workers and community groups within these areas about the most appropriate sites for the location

of computer facilities. Although a lot of organisations were approaching SPRITE for help at this time, most of them were dealt with on a day-to-day level, for example, the project workers would provide various groups with advice, or perhaps loan them a machine to get started on. Discussions only took place within the management committee when a centre was under consideration as a 'SPRITE centre' and therefore there were large equipment purchases involved, and/or other significant project input. In practice the workers were extremely busy during this period and were finding it difficult to deal with all the community groups who contacted SPRITE.

5.2(vii) Emergent issues and further expansion

(24) A number of important issues emerged at the beginning of 1987. One concerned training. During the 1st period of 1987 the W.E.A. were giving SPRITE considerable support at the centre level funding six sessions in total at the three different centres (see chapter 6). In some cases this training was provided by SPRITE users. In these cases, SPRITE users who had developed their skills sufficiently took on the role of training other people within their centre, or other centres. SPRITE was therefore beginning to provide short-term employment for some of its' own users. It became clear however that the project would benefit considerably from the development of a number of training units that could be left in centres so that when the project workers weren't there, any new users who were interested in the computers could work through the training units by themselves. This was particularly important now that the project workers were responsible for the development of the project in five centres. A curriculum group was formed of users from the various centres who were

interested in working together on the production of training material.

(25) During this period a number of unemployed individuals who weren't attached to any centre had contacted SPRITE to find out how they could become involved with the project. It was agreed that SPRITE would have a weekly open day when any individual or centre user could drop in to the SPRITE office for information or advice on computer applications. The curriculum group would also meet on the open day. A considerable interest in desk-top publishing was also emerging throughout the project. Therefore a group of users interested in desk-top publishing and the production of a newsletter also began to meet regularly. This led to the "SPRITE ROUNDER", examples of which can be found in appendix vi.

(26) In February 1987 SPRITE held its second weekend at Northern College. Discussions during the weekend focused on how SPRITE could secure future funding after October 1988 when the funding from the ESF and DEED was due to end. In one session a number of representatives from local authority departments gave presentations about what role their department had to play in community computing, and what funding they had available. Another session was devoted to the development of the user group and how they could campaign for the future of SPRITE. Therefore the issues surrounding the future of the project were first aired during this weekend. When asked for feedback about the weekend, the users who attended said that they had enjoyed meeting the users from other centres and the weekend as a whole, but generally they felt that there was not enough computing and too much talking.

(27) After the weekend was over, the next few months saw collaboration between the centres increasing as users from all the centres were meeting each other regularly. SPRITE began discussions about working in two more centres: Standhouse School in the Manor area, and Firth Park library. The project also gave a computer each to Darnall Music Factory and Printaid with the aim of these groups developing computer applications that were useful to music and printing. This expertise could then be fed back into other areas of the project. Therefore by May 1987 SPRITE was actively working in seven centres and in collaboration with another two.

5.2(viii) The second project review

In May 1987 I presented another project review to the SPRITE management committee reviewing developments since September 1986. This commented on what was happening within the centres and also presented an assessment of developments within the project, therefore feeding back information from the research. For example the following comments were made about training:

" In order to develop the SPRITE training programme it is important that there are effective links with other training units within the city, in particular for users who would prefer a more formal training structure which is available outside of SPRITE. The project so far has effective links with Adult Education, however greater liason with the Education Department would be helpful. For example, SPRITE could have a role in the development of community access to computers in the new Tertiary Colleges, or the colleges could have an input into training for the SPRITE users." (p. 6)

(28) The report also described changes that were happening in the SPRITE equipment policy:

" The equipment that SPRITE provides within the centres was chosen to support the training as originally envisaged. However with the extension into new centres, this policy has now been revised to a more appropriate and selective resourcing. Rather than supplying a new centre with six computers, equipment will now be distributed according to what it is anticipated the centre will need. For

example at the Forum office where they are keen to use computers for more effective administration, SPRITE has provided them with 2 Amstrads." (p. 6)

(29) Comments were also made about general resourcing of the centres:

" Now that SPRITE is operating in more centres, there are more demands on the project officer's time. New centres will not receive the same input that the original centres had, however there is the additional resource of the SPRITE users helping out with training through skill-sharing." (p. 6)

Skill-sharing was a process of training that was developing in a number of SPRITE centres where skilled users were helping new users to come to grips with aspects of computing. This is discussed more fully in the centre case studies that follow. The review also commented on the links that SPRITE was making with other organisations and local authority departments, through the Nothern College weekends for example.

(30) In May 1987 a group of users from the different centres came together with the view to forming a SPRITE user group. The focus of that meeting was on how they could work together to ensure that SPRITE had a future, and what they would want a future SPRITE project to look like. They also discussed their representation on the management committee and proposed that from now on each of the nine centres would send a representative to the management and advisory committees. This was agreed by the next management committee meeting.

5.2(ix) A profile of SPRITE users

In June 1987 I presented a paper to the SPRITE management committee that was based on an analysis of the first set of interviews with 16 regular

SPRITE users. The aim of the paper was to present a profile of SPRITE users, describing what they personally felt they had gained from their involvement with SPRITE. Figure 5.4 shows what this particular user group thought were the personal consequences of their involvement with the project. The figures suggest that for this user group the most important aspects of SPRITE were the opportunities it provided for meeting new people and for the development of new skills. Eight of the group also suggested that their confidence had increased from their involvement in the project. Eight people suggested that they now had more positive attitudes to technology, as a result of learning about the potential of I.T. and having access to I.T. facilities. Involvement with SPRITE also gave people a chance to do something during the day and to structure their free time (8 responses). The negative aspects of involvement with SPRITE mentioned by 5 of the users related to the amount of time that they spent taking part in the project. In particular, some of the users' partners would complain that they had become too involved with the project. This point was particularly pertinent to the female users of the project and is discussed within the Open Door case study (chapter 6).

Figure 5.5 shows the characteristics of SPRITE that the users interviewed suggested had produced the positive personal outcomes.

FIGURE 5.4

PERSONAL CONSEQUENCES OF INVOLVEMENT WITH SPRITE

(16 regular users)

Number of responses

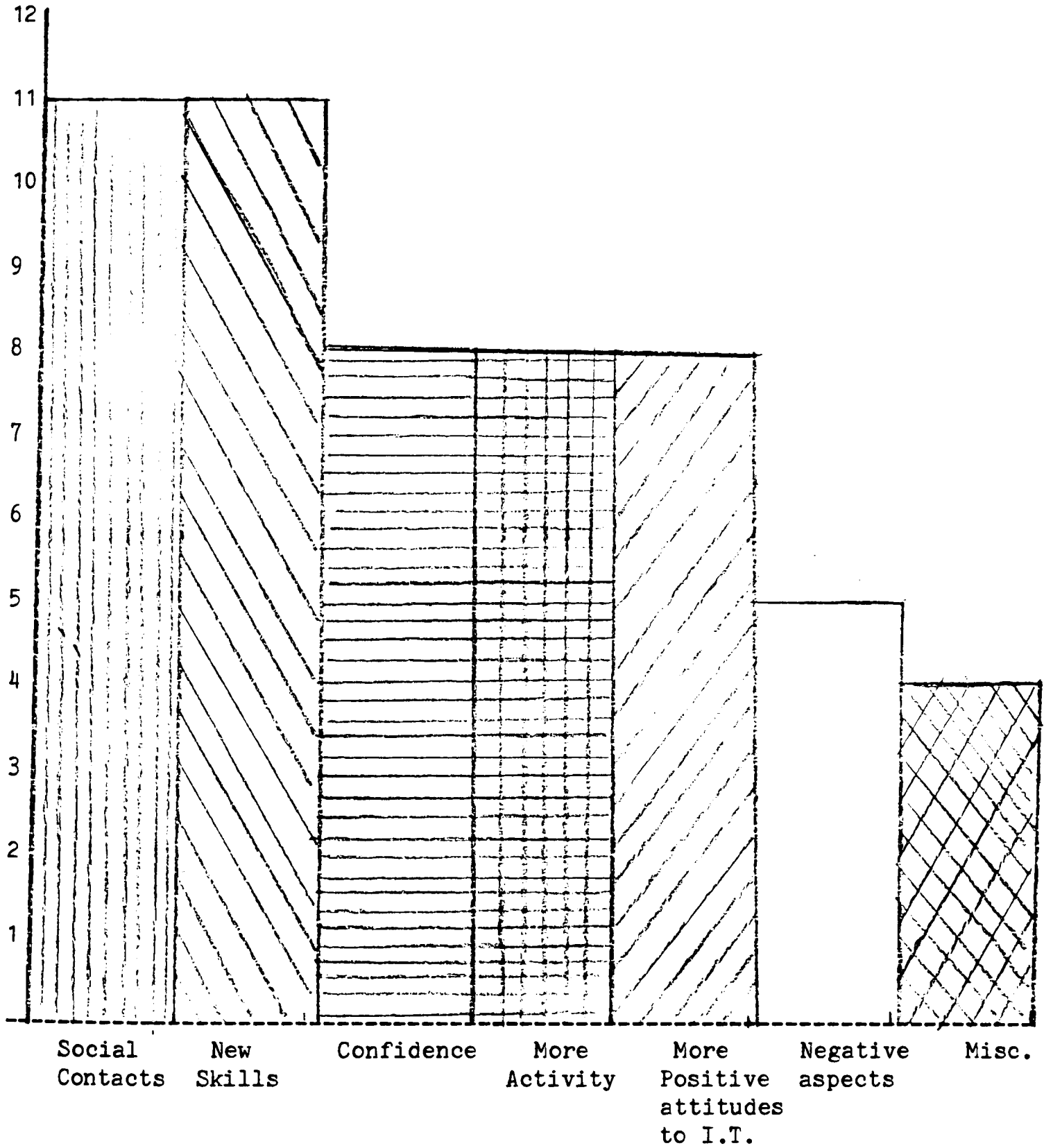
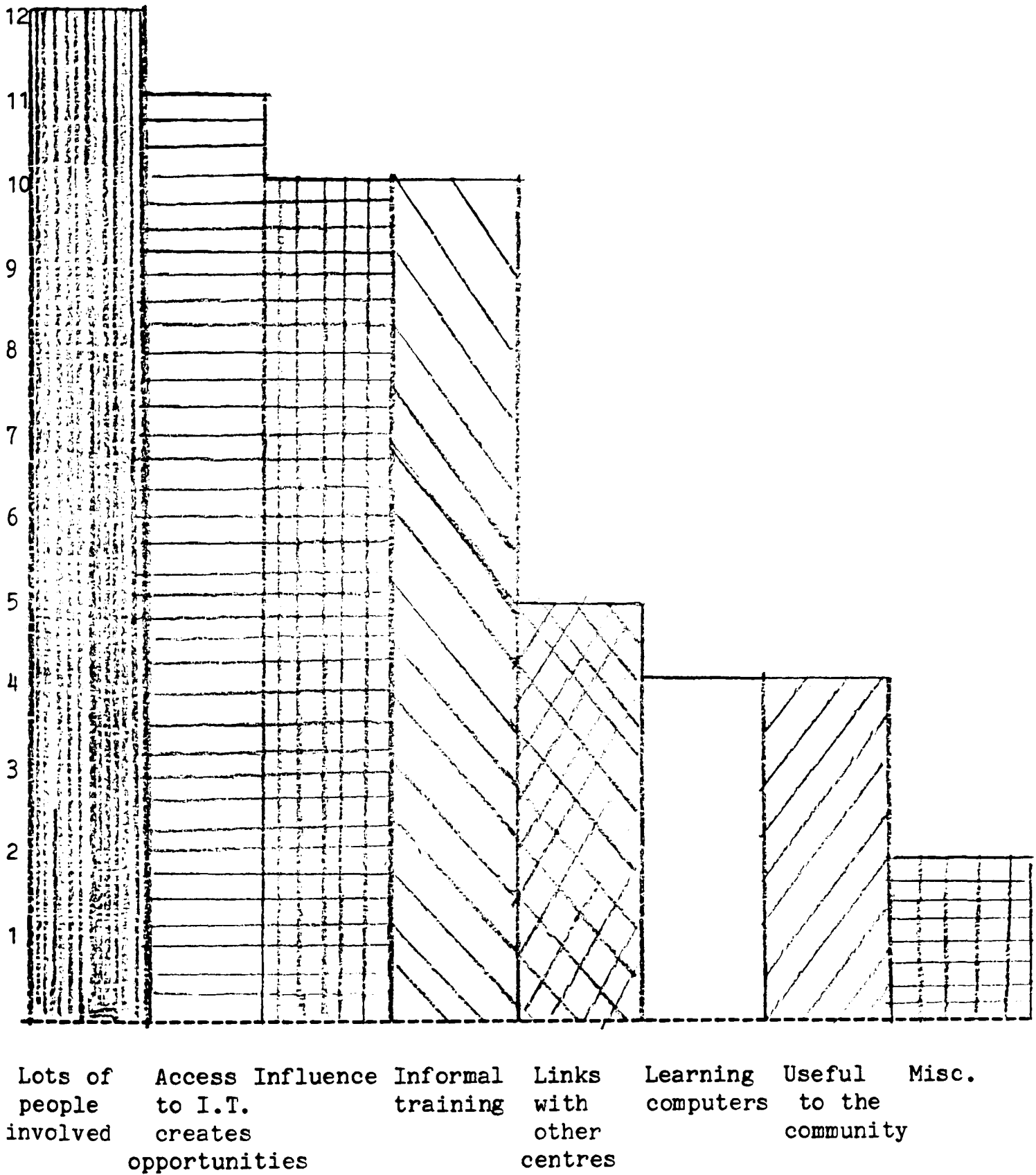


FIGURE 5.5

CHARACTERISTICS OF SPRITE THAT PRODUCE POSITIVE PERSONAL OUTCOMES
(16 regular users)



(32) The results in Figure 5.5 suggest that the most important characteristics of SPRITE for this user group are the number of different people involved, and the increased opportunities that users felt they had as a result of gaining access to I.T. resources. Two aspects of SPRITE training are also important: firstly, the view that users can influence the direction of the project, and that their views are listened to; and secondly, the informal nature of the training. Links with other centres was viewed as important to five of the group, and the fact that SPRITE is a computing project was mentioned by four interviewees. Additionally four respondents mentioned that they thought SPRITE provided positive personal outcomes because users were involved in something that was useful to their local community.

(33) Results from this first set of interviews suggested that SPRITE was something more than a computing project to the people involved. For these regular users, a range of psychological benefits, such as an increase in confidence, also resulted from involvement with the project. These results are discussed in more detail in chapter 6 which looks specifically at the views of users in the context of the implementation of SPRITE within their local community centre.

5.2(x) Discussions about the future of the project

(34) By July 1987 the dominant issue within the project was the future of SPRITE. This issue had arisen because as cuts in local government funding were increasing, the future of the SPRITE project after October 1988 looked uncertain. It was felt by many within the project that new sources of

funding needed to be investigated. Various groups of people were coming together to discuss how they wanted a future SPRITE project to look. At the management committee on the 15th of July, three groups presented papers about what they felt was important about the project. The first paper was one that represented the viewpoint of the SPRITE users. It arose from a group discussion that I ran about the future of SPRITE which representatives from all the centres attended. They suggested that a future SPRITE needed to be committed to:

1. Developing links between the centres currently involved with SPRITE and other centres that may become involved;
2. Providing introductory training in computing and associated skills (for example those necessary for project work);
3. Promoting awareness about how computers affect people in their everyday lives (for example through regular contacts with the housing department etc.).

The group also suggested that they were prepared to campaign for the future of SPRITE in the following ways:

1. Starting a publicity drive so that potential funding bodies will be aware of what SPRITE does. This will operate locally (e.g: through open days) and will also attempt to publicise SPRITE nationally;
2. Forging the links between existing SPRITE centres and other future centres in order that a united user group can work together to campaign for the future of the project.

(35) During the discussions about the future of the project, officers from DEED had suggested that if SPRITE went more in the direction of product development, it may have a chance of further funding from the E.S.F. The user group were concerned however that if SPRITE took on product development as its' major role, the project would lose its' appeal to those users whose computing skills weren't that advanced, or to new users who had concerns about using computers for the first time. They were keen that SPRITE should continue to provide training on an informal basis. Therefore their aims as expressed above were based on what they thought attracted

people into the SPRITE project.

(36) Another document put to the management committee had been written by myself and the chair of the evaluation group in conjunction with the SPRITE workers. It was therefore primarily based on the results of the evaluation to date. This document focused on what we saw to be the successes of SPRITE and how we thought it could most appropriately develop in the future. A future SPRITE was seen to perform the following functions:

1. Training: SPRITE to maintain and broaden its community base by developing skills in existing centres and expanding to new centres;
2. Consultancy: Provide a consultancy service for community groups centred around micro-computers and related issues. This service will encourage the development of a federation of local community groups where computer related information can be exchanged and skills shared;
3. Information Technology policy development: Co-operate with local authority departments in defining their information needs and involve members of community groups in the process;
4. Product and Service development: Co-ordinate the development of products and services arising from the requirements of the above. This will be done primarily through project work in SPRITE centres;
5. Research and evaluation: Continue with the action research element of the project. This has proved an important aspect of SPRITE facilitating the responsiveness to user need and providing a focus for strategic planning.

This paper went on to argue that SPRITE would need extra staff and that the organisation would need to remain autonomous from any local authority department in order to fulfil these roles.

(37) The final paper to the management committee came from an officer from DEED. It suggested that SPRITE should try two approaches in attempting to gain further funding. The first was to attempt to gain grants from different local authority departments with whom SPRITE had had previous involvement, for example the libraries, or computer services. This approach was based on the premise that DEED would still be able to provide its 50%

of the SPRITE funding from October 1988. The second approach was to make another application to the E.S.F. for a 3 year innovatory training project around community I.T. product development focusing on some of the projects that were developing in the centres. An action plan was also attached with ideas about how more publicity could be sought for the project.

(38) All of these papers were discussed at the management committee meeting. It was agreed that the committee would work together to explore avenues through which future funding could be secured. During the third SPRITE weekend at Northern College in July 1987, discussions continued about how the users could work together to ensure that the SPRITE project acquired extra funding. Eight of the SPRITE centres were represented on that weekend and links between the 'old' and 'new' centres were made. This weekend returned to the format of the first weekend with an emphasis on the development of new computing skills as well as discussion sessions. The users felt that a balance between the two had been achieved and as usual the weekend was enjoyed by all.

5.2(xi) Further expansion

(39) In July 1987 the SPRITE project moved premises back to the Tritec site. It was envisaged that this would enable greater co-operation between SPRITE and the other projects on the site. This would be particularly useful for providing the SPRITE users with more formal training. There would also be more room for SPRITE to develop its own workshop and security within the building had been considerably improved. The regular weekly open day at the SPRITE office was so well-attended that the organisation had

effectively outgrown its premises at the Enterprise Workshops. The large workshop at the Tritec site provided access for people with disabilities and also provided more room. Computers were located within the workshop which meant that various community groups not involved with the project could come and use them for computer sessions at various times during the week. The project had expanded considerably in terms of users. Table 5.6 shows the number of users who had attended the project sessions regularly and also those who had been through specific sets of classes (eg: the women's classes at the Space and Open Door). This latter group are referred to as 'sessional users'.

TABLE 5.6

NUMBER OF USERS BY SEPTEMBER 1987

<u>CENTRE</u>	<u>REGULAR USERS</u>			<u>SESSIONAL USERS</u>			<u>TOTAL</u>
	M	F	T	M	F	T	
Open Door	8	8	16	4	30	34	50
The Space	10	4	14	0	6	6	20
SADACCA	4	9	13	3	2	5	18
The Forum	7	5	12	0	0	0	12
Woodthorpe	0	10	10	0	0	0	10
Firth Park	3	4	7	0	0	0	7
Standhouse School	0	0	0	4	2	6	6
TOTAL	32	40	72	11	40	51	123

Key: M = male, F = female, T = total.

The total number of users who had used SPRITE on a regular basis by September 1987 was 72. The number of centre users who had been through the SPRITE sessions was 51 giving an overall total of 123. The other two centres: Darnall Music Factory and Printaid are not included here because SPRITE did not provide any regular training at those centres. Rather individual bands used the computer when recording at Darnall, and various local groups used the computer in conjunction with other printing facilities at Printaid. The figures at Standhouse School represent people who dropped in to use the facility that SPRITE provided there as there was no regular user group at this centre when the fieldwork ended.

(40) Of the 123 users who had been through the project 80 were women and 43 men. However 74% of the men were involved with the project on a regular basis compared to 50% of the women. Apart from one Black user at the Space, all the other Black users of SPRITE used the project at SADACCA, therefore out of the total number of users, 15% of this sample were Black. People with disabilities were also concentrated in one centre: The Forum of People with disabilities. There were also two disabled users at Open Door. Therefore in total 14 of the sample had disabilities, or 17%. The specific age groups of the sample are referred to in the case studies that take a look at the user groups within each centre, however of the regular users 67% of the above sample were over 25.

5.2(xii) The end of the fieldwork

(41) Between August and October 1987, after the fieldwork had been completed, a questionnaire was distributed to 56 users of the project from all the centres, except Standhouse School. This number represents the different users available within the centres over the three month period. The aim of the questionnaire was to determine what SPRITE users felt were the most important aspects of SPRITE. For example was gaining formal training more important than learning about community applications of computers? Table 5.7 shows the extent to which different aspects of SPRITE were important to this sample of SPRITE users.

TABLE 5.7

USERS ATTITUDES TO THEIR INVOLVEMENT IN SPRITE

(% response to is very important to me)

Being aware of what a computer can do	83
Passing on skills about computers	81
Developing new computer applications for the community	81
Gaining skills in computer use	80
Using a computer for the benefit of the community	77
Gaining formal qualifications in computing	61
Meeting new or different people	60
Getting a paid job not with computers	55
Getting a paid job with computers	53
Gaining organisational skills	45
Developing applications to make money	43
Using a computer to make money	34

Table 5.7 shows the priorities of the SPRITE users at that time. Computer awareness is the most important theme, but SPRITE users were also keen that their knowledge was located and used within a community setting. However a high percentage (61%) felt that formal educational qualifications were important to them. This was reflected in discussions about the future of the SPRITE project that were taking place at this time. A proposal emerged to integrate SPRITE, the Women's Technology Training Workshop and I.T.E.C. into 'Tritec' where there would be more co-ordination between the three projects and demands for formal training for SPRITE users could be met from the other two projects.

(42) The fieldwork finished in September 1987. During the two year period I was considerably involved with developments within SPRITE and had seen it grow from an idea into a flourishing project. At the time when I left a number of important developments were happening. The user group were beginning to meet regularly and developing their strength. They were beginning collectively to make demands of the project workers and the SPRITE management committee. Discussions about the future of the project were developing into a lengthy process of negotiation with the city council which was finally completed in April 1989.

(43) However the most important aspects of the SPRITE project happened within the community centres in which it was based. These are covered in the following chapter where each centre is considered in more detail. The aim of this chapter has been to describe the major issues and events that emerged during the development of SPRITE in order to set the case studies

of the centres in perspective. Figure 5.8 presents a summary table of these major events. The data presented in this chapter will be returned to in Chapter 8 which assesses the extent to which the project achieved its' aims and objectives.

TABLE 5.8

SUMMARY OF THE MAIN EVENTS IN THE DEVELOPMENT OF THE SPRITE PROJECT

November 1985	Project begins First meeting of the SPRITE Advisory Committee Initial visits to centres begin
December 1985	Criteria for selection of centres agreed
January 1986	Visits to centres
February 1986	Visits to centres
March 1986	Statement of aims and objectives agreed Selection of the first three centres: Open Door, SADACCA, and the Space
April 1986	Equipment policy agreed SPRITE office moves to Enterprise Workshops Three centre representatives join SPRITE management committee
May 1986	
June 1986	First Northern College weekend £20,000 funding granted from Urban Programme W.E.A. agrees to fund sessional workers
July 1986	
August 1986	
September 1986	
October 1986	First project review
November 1986	Discussions begin about the selection of new centres
December 1986	Selection criteria for new centres agreed SPRITE open day at SADACCA
January 1987	Woodthorpe 2000 and the Forum of People with Disabilities selected as the next two SPRITE centres
February 1987	Second Northern College weekend Skill-sharing begins within centres Weekly open day at the SPRITE office begins
March 1987	Discussions begin about working in new centres Increased number of local groups request information from SPRITE about computer-use
April 1987	Standhouse School and Firth Park Library selected as the next two SPRITE centres Computers given to Darnall Music Factory and Printaid
May 1987	Second project review Formation of the SPRITE user committee
June 1987	Discussions about future funding begin
July 1987	Third Northern College weekend SPRITE office moves back to Tritec
August 1987	
September 1987	Fieldwork ends

CHAPTER 6

THE CENTRE CASE STUDIES

6.1 INTRODUCTION

This chapter consists of case studies of the first three centres in which SPRITE was implemented: namely, Open Door, the Space, and SADACCA. The implementation of SPRITE is described and analysed, and conclusions are drawn. The majority of the fieldwork was conducted within these three centres, although SPRITE additionally installed computers into another six community centres. The final part of this chapter considers briefly how SPRITE worked within those centres.

Each of the community centre cases is presented in the following way:

1. THE CENTRE: A brief description is provided of the community centre.
2. THE SPRITE GROUP: This section describes the group that SPRITE initially became involved with in the particular centre.
3. SPRITE WITHIN THE CENTRE: This section focuses on how SPRITE was implemented within the centre. The processes by which the project developed are described chronologically.
4. RESEARCH QUESTIONS: In this section the research questions that were outlined in chapter three are addressed with reference to the data presented. This chapter addresses questions 1,2,3 and 4 which refer to the

impact that SPRITE had on the organisation and on the individuals' concerned, and vice-versa.

5. EVALUATION OF AIMS: In this section SPRITE at the centre is evaluated against the criteria expressed by the users.

6. EVALUATION OF INTERVENTIONS: In this section the nature and effects of a specific intervention within a centre is discussed.

7. SUMMARY OF OUTCOMES AND CONCLUSIONS: This section reviews the overall consequences of SPRITE being involved in a centre.

Each case study will follow the same format and comparisons will be made between processes and outcomes in chapter 7.

6.2 THE SPACE: THE CENTRE

(1) The Space is a community centre that was opened in July 1985 on the first floor of Park Library, a public library in an inner city area of Sheffield with high unemployment. It was envisaged that the centre would provide a community resource for the local area which includes the large housing estates of Hyde Park, Park Hill Flats and Wybourn. The first floor of Park Library was handed over to the local community by the City Libraries department for community use. This is in line with the policy of Sheffield Libraries Department who are committed to the idea of libraries being active in responding to local community needs. In order to decide how this new community space could be most usefully used, individuals from

local community groups and local community workers formed a steering group for the centre which later became an elected management committee. The first task of this group was to make a successful application to the Urban Programme for funding of £20,000. This money was used for the refurbishment of the building which eventually began in November 1987.

(2) The Space is used by a number of different groups ranging from Adult Education who run a variety of classes, to a theatre workshop and a local history club. There are no workers based in the centre as such, although considerable support is given to the project by local community workers, adult education workers, and library staff. Most of the users live in the local area, and use the centre for specific activities, rather than as a drop-in facility. Users are all ages and special classes have been arranged to encourage more women and people from ethnic minorities to use the Space. Disabled access to the building is difficult and consequently few people with disabilities use the centre.

(3) As with any community centre, its' aims will be interpreted differently by the stakeholder groups involved. However SPRITE users from the Space have described their centre and its function in the following ways:

" Its somewhere for people to go, the other community centres aren't very good, that one near where I live on the Wybourn, Monday night bingo, Thursday night bingo etc, so its not very useful. There's more things at the Space, there's actually things happening, you can be in different groups..... "

" It gives the unemployed and other people somewhere to go really, during the day."

" Its just helpful for the community, its a place for people to go and it just depends on the individual what they want to get out of it."

" Well there's various different groups who want it for various

different reasons, it comes in handy, on Thursday there's a sewing class for any women that want to do it, that sort of thing."

(4) These comments indicate that the Space is seen to be a general resource for the local community and many different types of users make use of the facilities. A number of local people have been involved with the organisation of the centre which has given its' initial development particular impetus. The Space temporarily shut down in November 1987 for re-furbishment to take place. During this period the SPRITE user group from the centre were to meet in the SPRITE central office.

6.3 THE COMPUTER CLUB

(5) The Space had a small but active computer club since the centre first opened. Previously the club had used another community centre in the annexe of a local school, and had moved on from there to the Space in what, by report, were difficult circumstances. One member described their arrival at the Space in the following way:

" We split off from the other place, not for bad reasons, but where we was it was all women, it's a woman that runs it and they weren't interested. No, they wanted an all women group. We said "here, we've got a computer group, a computer group". So we left. When we got to the Space it was really good cos we could spend all day there free of charge. Also it doesn't all close down during school holidays plus it's only five minutes from the city."

This initial experience of "being chucked out by the women" as it was described, had a lasting effect on the computer club which will be explained in more detail later in the case study.

(6) The Libraries Department provided the Space with some computer equipment: 3 BBC machines and 2 Sinclair Spectrums. This was used by the

computer club and by Adult Education who ran an introductory computing class at the Space one morning a week. The initial computer club that SPRITE became involved with in May 1986 were all male. They had considerable computing experience in terms of playing games. Out of the group of nine who attended the first SPRITE session and filled in the first questionnaire, seven had a home computer, usually a Commodore 64. The group were based around competitive game playing and software swapping. Three of them had had some form of computing instruction before: two had been on short college courses and one had been to an Adult Education 'Introduction to Computing' class. The club had around 15 members aged between 18 and 50. Within this group there was a hard core of five people committed to running the computer club efficiently. The club operated at the Space one day a week, had a membership fee and a constitution, and various executive officers: chairperson, secretary and treasurer. As a whole this small group had a strong 'male' identity re-inforced by regular humorous banter about different members of the club. The next section looks at the progress of SPRITE at the Space.

6.4 SPRITE AT THE SPACE

(7) The SPRITE project made contact with the Space around November 1985. Initial discussions suggested that the centre would be a good place for SPRITE to operate in line with the criteria for selection of centres that were established by the project management committee. A meeting was held with the computer club (in February 1986) where members of the club appeared to be very enthusiastic about getting involved with SPRITE. Their major interest was with using computers to facilitate communication between the user groups within the Space. The group were also keen to attract more members, and become more involved with the other groups within the centre. They believed that computers could help in this process. They especially wanted to gain software to enable the publication of a newsletter that could be distributed to local people and other user groups at the Space. This newsletter would not only publicize the computer group, but also advertise the centre as a whole.

(8) The SPRITE workers, together with the computer club and library staff, planned a computer Open Day at the Space with the objective of introducing SPRITE and the computer club to the various other groups that used the Space, as well as members of the community as a whole. This event took place on 23rd May 1986 and was attended by many local people, many of whom took an interest, though sometimes hesitant, in the computer display. The day also included a community lunch and a childrens' 'Draw a robot' competition where prizes were given to the best entrants by a local M.P. During the day people who expressed an interest in attending computer sessions had their names taken and the plan was to write to these people

once SPRITE sessions started at the Space.

(9) In June 1986, three members of the computer club attended the SPRITE residential weekend at Northern College. The Space were limited to three places on the weekend as the original aim had been for all the places to be taken up by the Open Door centre. At the last minute, however, it was decided to invite all the centres that were involved with SPRITE at this time. During the weekend, the aims of the users in working with SPRITE were more clearly expressed. The group wanted to become involved with more constructive uses of computers, rather than just using the machines for game-playing. SPRITE was viewed as the organisation that could help facilitate this process. The problems with the group at this time as described by themselves, were lack of direction; lack of sufficient hardware and software; lack of access to teaching; and being an all-male group. Through being involved with SPRITE they felt that these problems would be alleviated, if not solved.

(10) SPRITE began training sessions at the Space on 28th July 1986. Those people who had expressed an interest on the open day were written to and invited to attend the sessions. Two new people came. From 28th July sessions ran every Monday morning and afternoon. The first few sessions concentrated on discussing appropriate directions for SPRITE at the Space, and introducing the users to applications of the new machines: the Amstrad 8256 and the Atari ST. It became apparent from these initial sessions that there were a number of problems with the computer club and its role in the centre that had not been previously recognised. As previously stated, the aim of the group in becoming involved with SPRITE was to increase their

membership, however there were several barriers to this process. Firstly, the users were clearly a tightly-knit group of people with established norms and ways of behaviour which may have been intimidating to new users. For example, they had particular names for each other and a number of 'in-jokes'. As experienced computer users they were, on the whole, at ease with computer jargon which they used frequently. Working with an experienced group also presented problems for the teaching methods that the SPRITE workers used, in that new users needed to start off at the very basic level, whereas most Space users had some computer skills and consequently found the introductory sessions boring. Other factors that caused problems were related to the environment rather than the user group. For example, there were no creche facilities at the Space which meant that there was no provision for women with young children.

(11) Some of these problems were addressed fairly early on in the projects' development. In August 1986 a discussion was held with the group about how to integrate new people into the SPRITE sessions. There it was decided that only one group would run but that the more skilled users would help the learners on a one-to-one basis, therefore encouraging learners and experienced users to become more involved with the project. This strategy worked very well over the next few months as new members became integrated into the existing group. Other issues however were not tackled as successfully. The relationship between the SPRITE users and some of the other user groups within the centre was problematic. The computer club had always been viewed as a powerful force within the centre and their involvement with SPRITE seemed to enhance this power. The SPRITE users were quite aware of this, for example, one user described the attitudes of the

members of another Space user group in the following way:

" They can be a bit resentful, just to the fact that they think that we're taking everything over and we've got computers up there three times a week now and they just see us and say 'oh they're taking over everything'."

This problem manifested itself when a member of one of the other user groups within the Space complained about the computer club during a management committee meeting. He suggested that during a computer club session, the users had been playing games that contained sexually explicit graphics that would be offensive to women and children using the centre. The representative from the computer group on the management committee apologised for this and said that he would ensure that such an incident was not repeated. Over the next few months the computer club took a strong position against anyone who behaved in a way that they felt would damage the good name of their club. Severe sanctions were used, for example one computer club member boasted that he had programmed a computer in Boots department store in town to flash up abusive messages at regular intervals. This member was banned from the club for three months for this activity.

(12) Despite these initial problems, by September 1986 the SPRITE group at the Space had consolidated and developed their computing skills sufficiently to begin to consider the types of community projects that they could become involved with. During this month the sessions became more focused, mornings were spent looking at how to develop the administration of a community group, and the afternoon sessions devoted to developing the publicity angle. These projects were aided by the developing contacts that the Space had with the other two SPRITE centres at this time: Open Door and SADACCA. Friendships formed with users from those centres on the first

Northern College weekend were followed up by the Space users visiting those centres and vice-versa. Users from the other two centres, recognising that the Space users were the most advanced in computing terms would visit the Space to ask for help and advice on particular computer applications.

(13) The group of users at the Space were developing into a cohesive force within the SPRITE project, they were clearly committed to the project and were very proud of their facility. In September 1986 I visited the centre with some Danish academics who wanted to find out more about SPRITE. The users described their project to the visitors relishing in the experience of being able to publicise themselves. Afterwards one of the visitors made the comment that the group could have been Hells Angels, but instead they were community computing users. This seemed an appropriate comment in that it described the tight-knit image that the group provided to the outside world.

(14) In October 1986 SPRITE were approached by a representative from the Forum of People with Disabilities, a co-ordinating group for people with disabilities in Sheffield. They expressed an interest in learning how to use a computer to improve their administration procedures. Through the SPRITE sessions the Space users had developed the relevant skills to advise Forum members on computer applications. A representative from the Forum visited the Space and during this session Space users demonstrated a number of database packages. Forum representatives in turn provided an analysis of the specific problems that people with disabilities face when using computers, and also described exactly what they would want from a database. Their specification focused on a mailing list that they could use for

contacting their members covering the fields of name; address; type of disability; advocate; creche and transport needs.

(15) The SPRITE users became very enthusiastic about this project. They felt it would be a big job but that it would be very worthwhile to do. Some felt that it may also provide the Space group with a marketable product, that is: a database designed specifically for use by community groups. Over the next couple of months activity was focused on the development of this database. Individuals from the City Council Computer Services Department provided expert advice on technical issues and the links with the Forum developed strongly. As well as the development of computer skills this exercise required the Space users to think about other issues such as the meaning of disability, and the difficulties involved with labelling people as 'disabled'. Users also learnt some of the skills of relating to clients and working to the specifications of those clients. As one user commented:

" Well I'd like to see more people coming forward and asking for these databases to be set up. It keeps me occupied.... Before what I knew about databases you could have wrote on a postage stamp. So now I'm learning a lot, plus I'm learning a lot of things at other times, getting on with other people and their organisations, that kind of thing. I feel like I'm actually helping somebody for the first time ... I've never had any opportunity to do so through like databasing, I never knew there was the sort of thing as Forum of people with disabilities before. But some of the discussions we've had with them have been really great."

(16) Representatives from the Forum also enjoyed working with the group at the Space and recognised their own crucial role in the development of the database, despite their lack of computing skills:

" I still get a bit frightened in front of a computer, but at least they've sort of made it so its become a tool and not something that's got a load of mystique to it. In other words you

have control of what goes in and out of it and there's nothing to be afraid of in it. I found that working with this lot has been a joy. You see the whole idea with the thing with the Forum is for it to be usable and there's not much point in having a piece of equipment that costs umpteen hundreds if you can't bring it to a level so everyone can use it. This has been my input, to keep it at a level without it going too technical."

This project clearly provided the Space group with a focus from which to develop into 'useful' community computing. By the end of 1986 the group were beginning to achieve their aim of translating their computer skills into community skills.

(17) Throughout the first six months of the project at the Space, discussion had taken place about how to involve more women in the Space group, however by Christmas 1986 there were still no women involved. Discussions between myself, as a representative of SPRITE, and local community workers who worked with women in the area led to the suggestion that SPRITE put on a 10 week course for women only at the Space. The aim was that those women would then be able to integrate themselves within the SPRITE group more comfortably, once they had the sufficient computing skills and confidence. These classes were broadly supported by the Space user group who agreed that they would leave the centre on a Monday afternoon for the women's sessions to take place. Adult education agreed to pay for a creche to be run on Monday afternoons.

(18) When the classes first started considerable hostility emerged from some of the user group. This hostility was specifically aimed at the workers who had organised the classes. The roots of this hostility lay in the early experience that the computer club had had before they moved to

the Space. However, a few weeks later, at the second SPRITE weekend at Northern College, reservations about the classes from the male users were brought out into the open in a discussion with women who attended the special classes. This seemed to diffuse the hostility that had arisen that was based on the computer club being frightened of history repeating itself. An extract from that discussion is shown below:

Stan: Well the Adult Education tutor started a computer class which we joined and there was a women's class, then it got to be reported about swearing and abuse from the men's class when there was computers so, ...

Alison: We were worse than you.

Stan: But no-one came out and interviewed us about how's your group doing on the computer, they just said "I think it'd be better if you weren't here, this is us what got this annexe going" so we said "oh", then we heard something about this new centre on top of the library....

Tommy: I mean we were told it would be a women's only annexe, we said "well we'll find somewhere else to go, if its going to be women only", we didn't mind, well we did at first, but once we found out we'd got a better place...

Jane: But the women's group's only one day ...

Stan: Yes but people think it's all week.

Tommy: So that's why we were in two minds when these women's classes started 'cos they're women only and we hate separatists. It's a computer project, it should be for everybody...

Jane: Well thats what we're saying, we won't be women only forever.

Tommy: Well you've got to start as a women's group for the simple reason that you'll feel more confident, but once you get confident...

This discussion and the links made between the two groups during the weekend smoothed over the resentment that had emerged towards the women's group, indeed the three women who attended Northern College began to attend the mixed SPRITE sessions at the Space on the Monday mornings which also helped to calm the situation.

(19) In January 1987, the local neighbourhood centre was undergoing building work and moved into the Space temporarily. This meant that their users began to use the Space as a drop-in facility when they were visiting the number of community workers and adult education workers who were now based there. Therefore the Space became a more crowded centre and the computing sessions had a higher profile.

(20) During January and February 1987 the Space became involved in a number of other community computing projects. The database at the Forum was completed and some of the users ran training sessions at the Forum in how to use the administration system. These were very successful and brought a new user group at the Forum into the SPRITE project. Some of the Space users also began work on a database for the use of a Tenant's Group. This system developed along similar lines to the Forum database, with the representatives from the Tenants' Association acting as clients to the Space users as consultants. The printing project never developed to the same extent during this period. The major problem was in attaining the appropriate desk-top publishing software for the Atari. Therefore this project was held in abeyance.

(21) Perhaps the most significant development over this couple of months was the idea that some of the Space users could form a co-operative to work on computer projects for community groups. This could potentially generate income for the co-op members. The users who were interested in this idea were those who had originally been identified as the core group within the computer club. (Mike, Tommy, Stan, Rob, Kenny). The chance to earn some money was very attractive, as the users felt that they were putting a lot

of work into the SPRITE project at this time without any financial gain. This group therefore arranged for the Co-operative Development Worker from the City Council to come and talk to them about the possibility of the formation of a co-op.

(22) The opportunity to work on a specific task arose for the co-op in January 1987. The Space users were approached by a local librarian about a new scheme the libraries were launching called 'Writeback'. This scheme aimed to put Amstrad machines into four local libraries so that members of the public could have open access to word processors for creative writing or poetry etc. The libraries needed somebody to train librarians in the basic skills of using the machines, so that they could then pass on those skills to members of the public. The co-op agreed to take this job on board, together with the idea of writing a manual for Locoscript: the word processing package.

(23) However it became clear that there were personality clashes within the co-op group. At the beginning of the year two members of the group, Tommy and Stan, had been employed via SPRITE to run one session a week development work at another centre: Open Door. Another member of the group, Rob, began to feel particularly resentful that he hadn't received any work through the SPRITE project, and responded to this by writing the manual for Locoscript by himself, without informing any other members of the co-op group. The rest of the group felt that this behaviour was unreasonable and Tommy and Stan felt particularly attacked by this move. This made the whole group re-consider their position as to whether they could work successfully with each other, the end result being the disbandment of the co-op.

(24) The training sessions for Writeback lasted a lot longer than expected, this led to a certain amount of dis-illusionment within the core group. Stan, being interviewed in August 1987, described their experience with Writeback in the following way:

" The last thing we did were that Writeback for the libraries, we're still waiting for them to contact us. They paid the W.E.A. and they got a cheque sent to us. They first said to us that we'd got to get it done by March, the end of our tax year, it's August now and it's still not finished, not because of our fault, because of the libraries not knowing what they want us to do, I think its just them wanting their moneys' worth, we were waiting for him to contact us, last time we went to the library, he forgot to contact us, he contacted somebody to tell someone else, to tell us that he were on holiday so it were cancelled. That was a wasted morning there. And on all the leaflets, on all the publicity, there's no mention of us, saying that we've helped in it, not anywhere. But it's like the first proper job we've done. We've give them all these little leaflets that we've done that should make it easy and they've brought out leaflets of their own and when you read these leaflets, they're all bits of ours that they've changed and called it their own leaflet and no credit, there's no mention. And everytime, like that open day, we weren't mentioned in all the interviews with Radio Hallam and something like that. It makes you think. "

Cath: "So how has it made you think about other projects?"

" Well, if we do owt like that again, we'll make sure we get mentioned in it, like we only want a little piece at the bottom: thanks to them at the Space."

The dis-illusionment about Writeback clearly had an impact on the user group as a whole, making them wary about taking on ambitious projects where the rewards were not sufficient.

(25) During this time the SPRITE sessions were still continuing on a Monday morning, and, once the women's classes finished at Easter, on a Monday afternoon. More users were drifting into the Space group and by March there was a regular turnout of 10-12 people at the sessions. The Monday morning

sessions focused on the idea of skill-sharing which was to become an important theme at the Space and within the project as a whole. The aim of skill-sharing was that users with particular skills would teach others users how to use the computers. This worked according to plan and the afternoon sessions were spent using the new desk-top publishing software. The computer club still met on a Friday for their weekly games day.

(26) A turning point for the Space came on the 5th March 1987. On that day there had been a women's activity day organised by local community workers as part of the annual celebration of International Women's Day. I had been present on that day demonstrating the computers to some of the women that dropped in for the special activities. When the SPRITE group turned up the next day they discovered that an amount of computer equipment that belonged to SPRITE and the libraries had been stolen. Their first reaction was to blame the women's group for this, however later when the police became involved, it was clear that the equipment had disappeared a number of hours after the community workers had locked the centre. The libraries responded to the burglarly by withdrawing all their computer equipment. The SPRITE project workers consulted with the Space users about what to do about the SPRITE machines and the group urged them to remove all equipment from the centre until it was securely alarmed. They were concerned that more equipment might disappear. As the alarm system was not put in until June, the Space were without any permanent computer equipment for three months. This meant that the project officers had to bring the machines to the centre every Monday and then take them back to the office again. This caused problems in that only one SPRITE worker had a car so he had to go to all the Space sessions. When he couldn't attend those sessions the Space

was without equipment.

(27) This lack of regular access to equipment presented the group with other problems. Because the equipment was only available on Mondays, members of the computer club who weren't part of SPRITE were turning up to use the equipment for games, much to the annoyance of the SPRITE group who wanted to use the equipment more constructively. At a meeting of the group in May it was agreed that people could use the computers for games, but only if no-one else wanted to use the machines for anything else. In theory this was an appropriate answer to the problem but in practice it was often difficult for an individual to tell another individual to get off the computer.

(28) During this period the membership of the SPRITE group was expanding. Individuals were coming into SPRITE from the computer club and from other groups within the Space. Tommy from the core group of users became Chairperson of the Space management committee and due to his work, and the work of other members of the SPRITE group in the centre as a whole, relations between the computer users and other users of the centre had improved considerably. A couple of people from the Creative Writing group at the Space started coming to the SPRITE sessions and were taught word-processing by other users during the skill-sharing sessions. Two users from Open Door also began to regularly attend the sessions.

(29) Activity of the SPRITE group also became focused outside the centre. SPRITE had begun a regular open day in its' city centre office where anybody could drop-in to have a go on the computers. About seven Space

users attended this session every week. Three of them were also quite actively involved in a cross-centre group that worked on the production of a SPRITE newsletter. Individuals from the Space group were also beginning to get jobs through their involvement in the project. All of the core group had, by this time, done some part-time temporary work relating to computers whilst maintaining their involvement in the project. Two other members of the SPRITE group were also planning to set up their own businesses.

(30) At the beginning of June 1987 the library building was alarmed and the equipment from SPRITE and the libraries was returned to the Space. This considerably enhanced the project and the user group were now quite capable of running the Monday morning sessions by themselves without the SPRITE workers. The group felt at this time that they needed more equipment from SPRITE as what they had was very well-used. A general problem was that all the equipment had to be locked away at the end of the day and could only be used on those days assigned to the SPRITE project or the computer club. The new equipment requested was not provided by SPRITE as they were now working in nine centres and demand for equipment was generally high. Out of all the centres the Space was the most well developed and the users were taking important roles within the rest of the project, for example chairing the new user committee and co-ordinating the newsletter group.

(31) The SPRITE users were also actively taking part in projects or activities designed to publicise the Space. In July 1987 they were part of a Space community arts day in which a number of local groups took part. The SPRITE group demonstrated desk-top publishing and digitising for local people who attended the arts day.

(32) As user control was an important part of the SPRITE philosophy, it was interesting to see to what extent the Space users felt that they had control over the way that SPRITE was developing in their centre during this period of time. The general view of the Space users was that the SPRITE project workers were happy to take into account their views when planning the direction of the project in their centre. For example one user commented:

" You can make comments and say whatever you feel, your opinions are taken into account I feel, which is very good, I can say: "Well that's no good" or 'that's very good", and they listen to you. I think it's a very flexible approach to people and what they want out of things".

(33) Other users generally agreed with these comments, although the view was expressed that it was very much up to each individual how much say they wanted.

" I've probably not had much say, but that's more regard to me than anything else, I mean there's certain things going off, there's these Wednesday night meetings and things like that, that I can't get to, so I suppose it's sort of to some degree up to each individual to make us own effort, if you're busy with other things then you've got problems getting involved".

This opinion was echoed by another user who was the Space's representative on the SPRITE management committee. He said:

" I think it's sometimes left up to the user representatives, it's left up to them a lot to air everybody else's point of view, like they'll come up to me before a management committee and say " we're unhappy about this", and then I have to broach the subject..."

(34) Therefore although the users generally felt that they did have an amount of say about SPRITE in their centre, there was the general feeling that it was up to each individual how much they wanted to contribute.

(35) Fieldwork at the Space ended in August 1987. Over the last three months a number of issues were emerging that were never really resolved. One important one was about the amount of voluntary work that the group was doing within SPRITE as a whole. Some of the users began to feel resentful about the amount of time they were putting into the project without what they considered to be just rewards. For example one of the users, when talking about how he would like to see the project develop at the Space, summed up his frustrations in the following way:

"I'd like to see the end project being marketable into some sort of, well I'd like to see something that we could sell, even if it dont, its just that it would have some sort of possibilities, potential, so thats what I'd like to see, something we've finished and got some sort of recognition for."

Space users also felt that they were relied upon too much as the 'showpiece' of the SPRITE project. As one of the users said:

" I think people, when they mention SPRITE, Space get mentioned a lot and I think we should give the Space a rest and try and get the other centres pushing. Otherwise it's going to be: 'Do you know SPRITE?', 'oh its something to do with the Space isn't it?'"

(36) Individual members of the group were also becoming fed up with the way they were always expected to teach the same skills in the skill-sharing sessions. As Rob suggested:

" It's just sometimes you don't seem to be consulted, it's just a matter of well such and such wants to learn such and such, Rob here will show you how to do that, you just seem to be shoved, and I mean it's alright once or twice but every week or every time something comes up. To me you just seem to be getting labels, oh such and such does word processing and such and such does art. I mean everybody up at the Space can use roughly every piece of software to certain degrees, but it just seems to be left to certain people."

Another user commented:

" I know we all, like Kenny was saying, everybody gets labelled, like I'm a graphics man, he's a word-processor man, and then we get lumbered and then get a bit fed up sometimes."

Despite a certain amount of dis-illusionment with project work, constructive ideas were still emerging from the group as to how project work could develop. For example:

" I think that the projects should be around people rather than centres, I think the links are good enough, it's just getting people there on the right days, not everybody can make it everyday, I still think skill-sharing is your answer really."

(37) As well as the continuation of the skill-sharing sessions and the developing links with other centres, the Space were becoming quite involved with printing and desk-top publishing at this time. On one occasion they printed a number of leaflets for the Forum to advertise a demonstration they were organising, they also printed tickets for events and change of address cards for various community groups. They were also developing the graphics side of printing by using a video digitiser. Computerized photographs now appeared regularly in the SPRITE Rounder. This had become one of the main focuses of their activities.

(38) Data from the interviews that were conducted with Space users suggested that they gained a lot by being involved with SPRITE. Interviews with eight regular users suggested that the most important benefits that they had gained from being involved with SPRITE were the development of skills and making contact with new people. When talking about skills comments ranged from:

" Well I certainly know more about computers than I did"

to

" Well I know how to use the computer now, instead of just plugging it in and wobbling the joystick. I use it for writing letters 'cos I've got word processor now. I've always had one just for the sake of it, but now, I actually USE it. Like if anyone wants owt doing, I'll say "O.K., do you want it doing on the computer?"

(39) Despite the development of new skills, only one user at the Space felt that being involved with SPRITE had made them any more employable. This question within the interview schedule was greeted with an amount of cynicism from the Space users. Generally they felt that there weren't really jobs available to them, and that if there were, they would need to have more formal qualifications, the type that SPRITE didn't provide.

(40) A major gain from being involved with the SPRITE project was the social contacts that users made. This came up regularly within the interviews as being a crucial aspect of SPRITE, and one that had positive implications beyond making new friends. In particular meeting new people was seen as a way of increasing confidence. As one user commented:

" I come here to meet people and you get to know people, that's the best part, you see different personalities opening up. I have changed, not just because of this, but over the last few months I have gained more confidence. It brings you out of your shell in fact, doing this kind of thing. A person could come into a room very timid and withdrawn like I was, and they can come out and start talking to people, instead of sitting at the back of the room all the time, I sit in the front row now. "

Some of the users also felt more confident with computers. For example:

" I'm more confident on different computers now than what I would have been. I can go on the majority of computers now and say I can do such and such on this, and if I can't do it, I can always read it up. "

(41) SPRITE performed an important function for this user group in that it provided them with a constructive activity with which they became involved. Several of them commented that before their involvement in SPRITE they had sat around all day watching the television and getting fed up with being unemployed. They felt SPRITE gave them more purpose. One user summed up this feeling, quite poignantly, in the following way:

" Before I came to SPRITE I was unemployed and was on the verge of cracking up like, I was fed up, I was depressed seriously, I had nothing to do. Now I look forward to every day really, it kind of creates a new lease of life, seriously, that's no joke. I'm happier you know, my mind is more at rest, it's taken me out of myself and given me some sort of hope for the future. There are things I can do now which I never even knew existed. I've been in contact with people, been to places with people, it's been very good."

(42) By August 1987, the Space had developed into an important community resource and a central feature within the SPRITE project. The description above covers more than one and a half years of SPRITE at the Space and highlights the major events and activities that took place. Before moving on to analyse the processes that contributed to SPRITE's development within the centre, it is worth adding a few personal comments that will serve to illustrate the environment of the Space as a community centre.

(43) In focusing on events it is difficult to present a picture of what visiting the Space as an action researcher was actually like. The advantage of action research is that it allows the researcher to take part in the project and get a real feel of what's going on. When I first encountered the 'Space lads' as they are affectionately known throughout SPRITE, I was initially intimidated by their overwhelming presence and the cohesiveness of the group. This was emphasized by the fact that they are an all-male group who indulge in constant mickey-taking. Over the eighteen months that

I was involved at the Space I grew to know them well and really enjoyed my fortnightly visits to the centre. The group always made me feel very welcome and, once the initial barriers had been broken down on both sides, we became good friends. I, like the other SPRITE workers and users, became the focus of their jokes. I received very rude birthday presents from them and they provided me with a constant source of outrageous and unrepeatable jokes.

(44) When I decided to leave the project full time they were excited at the prospect of interviewing me for the SPRITE newsletter. It was their chance to get their own back. Under the headline 'Cath goes big time' I was interviewed by three users, tape-recorder and all, about my decision to 'get a proper job'.

(45) Perhaps more than any other group within SPRITE, this group recognised the meaning of action research, and, when worried about any issue, they would use me as a 'go-between' between themselves and the project officers. The group were always prepared to take part in interviews, complete questionnaires or just talk to me generally about the project for the purposes of the evaluation. This was usually accompanied by phrases such as "oh no, Cath's got the bright lights out again" and "We'll be in the News of the World this week". However when in interviews or group discussions, they would always address themselves to the issues thoughtfully, and speak frankly about their experiences. Therefore the rich source of data that I collected from the Space over the 18 month period is a credit to their enthusiasm for SPRITE, and their willingness to participate in the research.

6.5 SPRITE AT THE SPACE: RESEARCH QUESTIONS

6.5(i) INTRODUCTION

The aim of this section is to address the first four research questions with reference to the Space. The numbers in brackets correspond to the number of the paragraph in the data section where the relevant evidence is presented.

Each research question will be addressed individually, focusing on the sub-questions that are attached. More detailed analysis of the impact that SPRITE had on the organisational dynamics of the community centres is presented in chapter 7.

6.5(ii) QUESTION 1

The first question is about the impact that SPRITE had on the Space as an organisation, this is divided into two sub-questions about the benefits and the problems that SPRITE brought to the centre.

6.5(iii) BENEFITS

SPRITE, by operating at the Space, brought a number of benefits to the centre. The first, and perhaps most obvious, was the provision of a new resource. Although there was already computer equipment at the centre (6), the only training available was the weekly introductory computing class provided by Adult Education. Users could also join the weekly computer club

(6), but the focus of the club was entertainment, rather than on the more constructive uses of computers. Therefore the introduction of SPRITE meant that there were regular training sessions with a back-up service both inside and outside of educational terms. SPRITE also provided the centre with new equipment to enhance the facility that already existed.

Before SPRITE entered the Space, the computer club clearly had some talented members in terms of skills and initiative (6). The group as a whole had expressed a desire to become involved with what they saw to be more constructive uses of computing (7,9). SPRITE's arrival at the Space meant that the skills and initiative of the group could be developed (15). This also had implications for the Space as a community project. The SPRITE group produced publicity about the centre (8) and also became more involved in the Space in other ways (31), for example through participation in the Space management committee. Three of the users became quite involved with the management committee, one of them eventually becoming chairperson (28) which he personally attributed to his involvement with SPRITE, and the resulting confidence he had built up. Therefore the enthusiasm of the group was not only directed into the SPRITE project, but also into the Space as a whole.

The presence of SPRITE at the Space also provided the centre with links with other community groups. Links were made with other groups around the city, through the development of community projects (14,20,22) and through involvement with other centres within SPRITE (12,23,29). Therefore, as a consequence of involvement, the Space became more well-known. An important part of this process was the enthusiasm of the user group (13), it is

doubtful whether SPRITE would have had the same impact on the centre if the user group had not responded in such a positive manner.

6.5(iv) PROBLEMS

Throughout the fieldwork it became apparent that the only problem associated with SPRITE being at the Space concerned the influence of the user group within the centre. The implementation of SPRITE at the Space clearly helped to develop this group. This meant that they became quite high-profile within the centre's activities. Although generally this was acceptable to the management committee and the SPRITE user group, there were incidents when their prominence caused problems within the centre. These incidents usually related to their attitudes to other groups that used the centre (11,18). To some extent this problem was controlled by the intervention of various people who worked with the group. With the establishment of the women's group for example, potential problems were diffused by interventions from sympathetic members of the SPRITE user group, by the SPRITE project workers, Adult Education workers, and myself. Without these interventions however, the problems may have become more serious.

Clearly the balance between a user group being active within a centre, without being too prominent is a difficult one to achieve. Within the Space, I think it was achieved, mainly because the process was being monitored, firstly by members of the user group who were concerned that SPRITE worked well within the Space, and secondly by the SPRITE workers and myself as evaluator.

Therefore to conclude this section, it seems evident that the establishment of SPRITE at the Space affected the organisation in a positive manner. The Space were given a new resource, that showed itself to be useful to the centre as a whole, and also developed the potential of a number of centre users. SPRITE also facilitated the development of one particular stakeholder group within the Space: the computer users. This had wide-ranging implications which were generally positive, but needed to be kept in check.

6.5(v) QUESTION 2

The second question is about how the organisation of the Space affected the implementation of SPRITE. The sub-questions below look at centre characteristics; centre resources; and user group characteristics. A list of factors that supported and impeded the development of SPRITE at the Space are then presented.

6.5(vi) CENTRE CHARACTERISTICS

From SPRITE first entering the centre it became clear that the Space was supportive to the project as a whole. The aims of the City Libraries department in providing resources for the Space project (1) fitted in comfortably with the aims of SPRITE. The fact that the Space was a new, under-resourced centre meant that the management committee were keen to have a new resource within the organisation, especially one that would build on the computing facility that they already had. The centre was still

very much in its initial stages of development (4), therefore it was relatively easy to adapt to the changes that were necessary to accommodate a new project like SPRITE.

The management committee of the centre was also conducive to the philosophy of SPRITE. As there were no full time workers in the centre, the users were relied upon heavily to develop their own projects. Therefore control of the facility remained largely in their hands. The Space management committee also facilitated this control by trying to create a culture within the centre where all user groups felt the centre was their own community space. SPRITE users, like other user groups, had good representation on the Space management committee which meant they could make an input into the centre as well as SPRITE. In practice the management committee served as an efficient integrative mechanism, by bringing all the user groups of the centre together regularly.

An important feature of the Space is its physical location. As described earlier (1) it is situated within a densely populated area where there are high rates of unemployment. Therefore in theory it is accessible to a large number of unemployed people. In practice the users who first became involved with the Space had been involved in community groups before. Some new people did become involved in the project over the eighteen months through the various activities designed to publicise the Space (31,37), however the Space, like many other community centres had few resources for outreach work. Another aspect of the centre's location is that it is very close to the town centre and therefore on a number of well-used bus routes into the city. This proved to be quite significant in the development of

the project in that the centre was easily accessible by public transport to users from other centres within the SPRITE project.

The links that the centre had with both City Council Departments (15) and other groups that used the centre (28) also had an impact on SPRITE. The link that the Space had with the Libraries Department was particularly important. From the beginning SPRITE took advantage of the close links that had been developed. Individual librarians were keen to liase with SPRITE and provide support for the project's activities within the Space. These links worked well most of the time, and eventually led to collaboration between the SPRITE user group and the libraries on a number of levels (22,26,31). The experience of liasing with the libraries at the Space provided a firm basis for SPRITE and the Libraries Department to collaborate outside of the Space in other areas of the project. As SPRITE was a new project, interconnections with other organisations working in the local area provided an important form of support, rather than creating the negative effects of environmental turbulence.

The SPRITE user group also developed links with Adult Education workers who taught classes at the Space. These links were forged when Duke Street Neighbourhood Centre moved into the building temporarily (19). In particular Adult Education resources were useful in the development of the womens' classes (17). Their resources were responsible for the outreach work and for the provision of a creche during those sessions. The workers also directed individuals that attended their classes into the SPRITE sessions (28).

Overall then, the most important characteristics of the centre that enhanced the development of the project were the close links that the centre had with other organisations, and in particular the City Council Libraries Department.

6.5(vii) CENTRE FACILITIES

Although the Space supported the implementation of SPRITE within the centre and provided the project with access to its' facilities, the lack of resources at the centre did have an impact. Rather than suggesting that lack of resources created problems for the project, it is more accurate to suggest that some of the opportunities that the project had for development were restricted.

In terms of physical layout, the original Space had only three rooms: one large hall off which there were two small rooms. This had implications for the way the centre was used. Rather than being used by individuals on a drop-in basis, groups scheduled to meet weekly at a particular time in the building. New groups wanting to use the Space would be fitted into the weekly timetable. Therefore when the SPRITE sessions were operating there were no other user groups within the building. This meant that members of other user groups weren't used to seeing the computer group in action and would have to make a special effort to find out what went on in the SPRITE sessions. Although this problem was offset by regular publicity, another consequence was that the other groups who used the Space weren't visible whilst the SPRITE sessions were taking place.

The general lack of facilities within the building had implications for the particular target groups that were the focus of SPRITE; in this case people with disabilities (2) and women (10,17). Although interventions were tried to encourage women to become involved (18), the fact that there was only creche provision during Adult Education sponsored classes meant that when women did attend SPRITE sessions they had nowhere to leave their children. Although some women did bring toddlers to some of the sessions (25), on these occasions it was impossible for them to concentrate on computing as they had to keep a constant eye on what their children were doing. Therefore the lack of a creche at the Space was one of the fundamental reasons why local women did not become more involved with the SPRITE project. It was evident that there were women interested in the project (18,25), but their interest was never maintained.

The issue of people with disabilities been given better access to SPRITE at the Space never arose to the same extent. Although access to the centre was up a steep staircase, people in wheelchairs could be physically carried up the stairs. This happened when the Space were visited by representatives from the Forum of People with Disabilities (16).

One other problem that arose with centre facilities was that the building was not alarmed. When SPRITE first took the decision to put computing equipment into the Space, it was felt that the building was relatively safe, with the centre being situated on the first floor. However it was shown that this was not the case (26). After the burglary, when the SPRITE equipment was removed for safety reasons, the SPRITE user group were without computer equipment for three months which clearly had an impact of

the development of the project (27).

Some of the issues described here were evident to the Space management committee when the centre was first opened. The plans for the re-furbishment of the centre included creche space, three meeting rooms, a reception area, a cafe area where individuals could drop-in for a cup of tea or a chat, and a computer room. The delay in the building work (about 18 months) meant that the new Space opened on July 2nd 1988, therefore all fieldwork was done in the original centre. Completion of building work was often viewed by the SPRITE user group as the answer to many of the problems that they had encountered, in particular that of access to equipment (30).

Despite some of the problems that emerged with the facilities of the Space centre, SPRITE developed here in terms of outcomes (20,29,37), perhaps further than at any other centre. This suggests that other factors rather than the facilities of a community centre are important in facilitating the development of SPRITE.

6.5(viii) USER GROUP CHARACTERISTICS

The user group that SPRITE worked with at the Space had a number of distinctive characteristics that clearly had an impact on the project's implementation. Firstly there was an 'in-group' of five people who were consistently involved with the project from the beginning. Although there were clear personality clashes within this group (23), they remained a core group that typified the concept of a Space user. There were also two other individuals who were on the fringes of the group and about ten other users

who floated in and out of the project during its time at the Space (28). At the beginning the group fitted into Politser and Pattisons' (1980) classification of a 'recreational group' as their aim was to amuse themselves through the use of computers. However during their involvement with SPRITE they moved towards being a 'civic development group' as their emphasis became more on developing their own skills.

The group had a particularly strong sense of identity. The 'in-group' specifically had known each other for a period of time through their involvement within the computer club. They were of the same age group, and had all been unemployed for a long period of time after working in semi-skilled/ unskilled jobs. Only one of them had family responsibilities, and therefore the group collectively had the time to commit themselves to their computer club and the SPRITE project. Their individual psychological investment within the group was evident.

Although personality clashes sometimes occurred within the group (23), ostracised individuals were welcomed back into the group after a period of time. By being very committed to the SPRITE project, this group influenced the other 'floating' users to join in, through their help with technical matters and their maintenance of the informal atmosphere within the centre (43).

The strong identity of the group at the Space reinforced the image that they presented to the outside world. Where this was positive, such as in their pride in their computer resource (13), the image presented was that of a skilled, but accessible group of people. When the group were concerned

about something, or felt that their resource was being threatened (18), then their united front became intimidating to outsiders.

The strength of the group enabled them to have a large part to play in the development of SPRITE as a whole. Whenever the project had to do a presentation, at a conference or to outside funding bodies for example, the Space would always put on a good show, not just in terms of their skills or their accessibility but through being able to laugh at themselves and other people. Therefore they often performed the role of the project show-piece. It is not surprising therefore that some of them eventually got fed up with this role (35).

A major characteristic of the SPRITE group at the Space, which distinguished them from other groups that became involved within SPRITE, was their pre-SPRITE experience of using computers (6). This experience enabled them to define clearly their aims with being involved with SPRITE (7,9) and also had an impact on the type of training that was provided at the centre by the SPRITE Project Officers. There was no evidence of any crises of confidence that groups or individuals often suffer when faced with computers for the first time, indeed the group were very enthusiastic about learning as much as possible about various computers and their applications. The training at the Space therefore focused on introducing users to new applications, which they then followed up at their own pace (10). Generally new applications were grasped quickly and therefore the role of the project officers was one of consultants, helping to turn ideas into realities, rather than being trainers (25). The group was articulate in presenting its training needs which were reflected in the programme

designed. Therefore the pace of training at the Space was a lot quicker than at other SPRITE centres.

The pace of training had implications for new users joining the project at the Space (10,11). The notion of skill-sharing sessions (25,28) effectively meant that new users could be trained by the skilled users and therefore their needs could still be catered for within the training process. There were however some problems with skill-sharing in practice (33). As the skills of the core group developed, they relied on the project workers less. This in itself released the project workers to spend more time with new users introducing them to the basics of computing. What is unknown, however, is the extent to which the image of the core group, an important component of which was their skill, intimidated new people from taking part.

Other users within SPRITE who weren't at the Space clearly viewed them as a skilled group (12). The keenness of the group, to mix with users from other centres (23,29), clearly had an impact on the development and the general atmosphere of the project at the Space, an example being the way in which outsiders were regularly encouraged to visit the centre when they needed any help or advice about computing. It also encouraged the development of projects where users were passing their skills onto, and working with, other community groups (14,22,37).

The advanced level of this group of users generally led to them exerting more demands on the project as a whole. This became problematic when representatives of the project felt that they could not respond to these

demands, for example with new or advanced equipment (30), and with realistic remuneration for the time and effort that they put into the community projects (32).

Despite the problems that are associated with the particular characteristics of the group at the Space, the evidence presented suggests clearly that the nature of the group was a crucial factor in enabling the successful development of the project in this centre.

6.5(ix) SUPPORTING AND INHIBITING FACTORS

From the discussion of the data in the last section, the following list of supporting and inhibiting factors has been derived:

1. Factors that supported the development of SPRITE at the Space

Centre characteristics:

- Good links with libraries and Adult Education
- Centre location
- Supportive structure (eg: management committee)

Centre facilities/ resources:

- Existing computer facility

User group characteristics:

- Strong group identity

Skilled user group

Time to invest in the project (eg: involvement with SPRITE outside of the Space).

2. Factors that inhibited the development of SPRITE at the Space:

Centre facilities/ resources:

Problems with access (eg: creche, disabled access, number of rooms)

Problems with security

This list will be returned to in the next chapter where cross-site analysis considers the difference between the way SPRITE was implemented at the different centres.

6.5(x) QUESTION 3

The third research question is about the impact that being involved with SPRITE has on individuals in the centres, with particular regard to the acquisition of skills and psychological benefits.

6.5(xi) USER SKILLS

As previously stated (6), the users at the Space already had some computer skills before they became involved in SPRITE. Evidence suggests that the user group extended their computer skills considerably through being involved with the project (38). Perhaps the major consequence for the users was that SPRITE provided them with a direction in which to develop already acquired skills. Familiarity with the keyboard, the appropriate terminology and the logic behind how computers operate, was transferred to the new machines that could be used for more constructive (Amstrad PCW8256), or more creative (Atari ST), purposes. Skills were developed in databases (16,20); word processing (38); desk-top publishing (37) and computer graphics/ photography (37). These skills were put to community use.

When considering the development of skills with SPRITE, it is important to realise that this group developed a number of other non-technical skills. Their involvement in community projects, particularly those for other community groups, meant that users had to act as consultants (15,20). They became aware of how to identify the needs of other user groups, and how those needs could be translated into practice through the development of systems. Other communication skills were developed too. Again through

community projects, the users had to interact with a wide range of people, including other community centre users (15). Their participation in management committees and the SPRITE project generally (28,29) meant that they regularly communicated with 'professionals' and representatives of fund-raising bodies.

Other forms of communication skills were developed through the teaching process (28). Skill-sharing enabled users to develop teaching skills to such an extent that some of the group eventually gained employment within SPRITE (29), or other local organisations, teaching computing to others.

Therefore in discussing the impact of SPRITE on individual skills, it is clear that the implications extend beyond simply learning new computer skills. At this centre, the users developed a wide range of communication and organisational skills. This is a clear reflection of the extent to which users became involved with the project, the speed at which training progressed, and the distinctive nature of the training process.

6.5(xii) PSYCHOLOGICAL BENEFITS

Evidence from the last section suggests that, for the Space users, involvement with SPRITE improved their confidence and general self-esteem (40). These findings about SPRITE at the Space fit in with the discussion in chapter 2.2(iii) of the literature on the psychological effects of unemployment. One could argue that for this group, involvement within SPRITE served to offset some of the negative psychological consequences that are associated with long-term unemployment. If this is the case it is

important to identify the specific characteristics of SPRITE that produced those outcomes for these individuals.

From the data, it appears that the crucial aspects of SPRITE that facilitated the increase in confidence were the opportunities it provided for purposeful activity (15,38), increased social contacts (40), and the development of new skills (38). Although the aim of this research question is not to 'test' psychological theories of unemployment, connections can be made. The psychological benefits that the Space users reported from their involvement are similar to what Jahoda (1982) suggests are the latent functions of employment. These were described in chapter 2.2(iii) and are: imposed time structure; shared experience and contacts; goals and purposes; personal status and social identity; and enforced activity. According to Jahoda, it is the lack of these supports that has a psychologically harmful effect on the unemployed. These benefits are also similar to some of Warr's (1986) environmental factors that are important for mental health, for example: opportunity for skill use; variety; opportunity for interpersonal contact; and externally generated goals.

Therefore from the data relating to the Space, it would appear that involvement with SPRITE provides users with some of the important supports that are usually associated with regular employment, specifically shared experiences and contacts; goals and purposes; opportunity to use skills; and personal status and social identity. For this group who were very dedicated and involved with the project, SPRITE also provided them with a way to structure their week and a number of activities to be involved with. What SPRITE didn't provide however, was a substitute for the manifest

functions of employment, such as pay and job security in Jahoda's model, or availability of money and physical security in Warr's model. Indeed this is evident in the extent to which some of the users became fed up with working for the project for personal status rather than financial reward (35).

One of the major criticisms of Jahoda's deprivation model addresses the assertion that individuals are reliant on the supportive latent functions of employment for their effective psychological functioning. The assumption underlying this assertion is that human beings are reactive, rather than active, resourceful people who can develop strategies to deal with their individual or collective deprivation.

Within the Space, it is evident that the SPRITE user group actively constructed their involvement with SPRITE to suit their perceived needs. The SPRITE project was presented to this group as a resource, but it was their effectiveness as a group in pursuing their collective aims that led to the successful development of the project within the Space with its consequent impact on their self-esteem. Indeed this proactivity on behalf of the group allowed them to use the SPRITE project as a mechanism for turning the negative aspects of the enforced idleness of unemployment around to their own benefit. Therefore their input into SPRITE enabled the project to compensate for the latent functions of employment that were inaccessible to the group. This analysis would suggest that a project like SPRITE can help alleviate the harmful psychological effects of unemployment, in that users can create and construct their own opportunities within the resources that the project provides. This analysis however relies on the view that individuals, or groups, can be pro-active

in responding to their experience of unemployment. As all involvement with SPRITE was on a voluntary basis, the psychological rewards that the users at the Space felt they had gained, confidence for example (40), clearly justified their involvement.

Confidence and self-esteem have also been linked with perceptions of control. The work of Turkle (1985) on computer use and desire for control was described in chapter 2.2(ii). She argues that for many of her sample of computer hobbyists their relationships with their computers, and their ability to control them, compensates for the alienation that they feel at work. Computers for her sample replaced something else that they felt they should be achieving from life, giving them a sense of self-esteem and self-identity. There are similarities between her sample and this group of Space users. This group were unemployed computer hobbyists, who pursued their past-time fervently. Before their involvement with SPRITE, it is likely that their relationships with their computers did follow the pattern that Turkle suggests, filling the time that they would have spent at work with an activity that they were good at, and had a degree of control over. This would have given individuals enough confidence to join a computer club. Additionally, the use of computers provided entertainment to counteract the boredom of unemployment.

Where this group differs from Turkle's sample however is with their use of computers at the group level. Without the social contacts that occur at the workplace they focused on the computer club as a social activity. This provided them with the opportunity to identify their own and their community centre's needs. Their involvement within SPRITE enabled them to

extend beyond their individual aims, unlike Turkle's sample, to use computers at a group level to pursue a collective goal. Although the interviews were conducted individually, the increase of confidence described by members of the group needs to be seen at the collective, rather than the individual level. The achievements of the Space users arose from their ability to contribute individual ideas to the collective good. The projects that were developed relied on the successful interaction of group members and their increasingly confident presentation of themselves to the outside world.

Evidence from the interview data (39) suggests that in general, the users at the Space did not feel that they were any more employable as a result of their involvement with the SPRITE project. At first this result may seem disappointing, however it would seem to result from a realistic appraisal of the opportunities available within the local labour market. The major reason behind this view was that SPRITE did not provide them with any formal qualifications that could be shown to a future employer (39).

In terms of actual, rather than perceptions of, employability, some users at the Space did obtain employment during their period of involvement with the project (29). They also widened their scope as regards the kind of jobs that they would consider applying for. For example, when looking for jobs, Space users perceived themselves to be as appropriate for community work jobs as they were for computer-based work. This may be a reflection of the likelihood of employment on the MSC's Community Programme scheme which was generally high. Alternatively, their involvement within SPRITE could have led them to think about new areas of work not previously considered.

Therefore this group of SPRITE users at the Space clearly benefitted from their involvement with the project. The main benefits came from the development of skills and confidence, meeting new people, and engaging in activities which they perceived to be constructive.

6.5(xiii) QUESTION 4

The fourth research question is concerned with the extent to which individuals involved with SPRITE had an impact on the project. At the Space, users generally felt that they had some say in the way that the project developed at their centre (32). The SPRITE workers were keen to listen to their ideas, and the users felt they had particular influence on the nature of the training sessions and on the kind of equipment that the centre should have. This participation in decision-making was helped through regular discussions that took place between the project workers and the centre users (11,27). However, it is more appropriate to see this as a process of consultation, rather than one of user control. Clearly the users couldn't have all the equipment they wanted (30). The projects that they became involved with were also in part determined by other influences rather than just the group view. Such influences included those of community groups who requested input from the Space, and also the interests of the SPRITE workers. In practice, developments within the project were negotiated between the various stakeholder groups. Although the user group would make a substantial contribution to those negotiations, other stakeholder groups clearly had a role to play.

One interesting aspect of the consultation process is the view expressed by the SPRITE users, that it was very much up to an individual how much input they had into the decision-making process (33). This reflects the amount of commitment that individuals could afford to give the project. Where individual commitment was high, users attended the SPRITE sessions two days a week, and the weekly open day at the SPRITE office. This was the case with all the core group. Therefore, these users would have more regular contact with the SPRITE workers and would therefore have a greater opportunity to put their views across.

Looking at the implementation of SPRITE at the Space as a whole, it is fair to comment that the development of the project did reflect user interests. Their interest in desk-top publishing for example, which was expressed at the very beginning of the project (7), was followed up once the relevant software was available (25), and became one of the major focuses of their activities.

In conclusion, it would appear that the users at the Space did have a significant impact on the way that SPRITE developed at their centre, through the process of consultation, rather than control. However, this impact was limited because of the differing interests of the stakeholder groups concerned.

6.6 EVALUATION OF AIMS

The users at the Space expressed a number of aims they wanted to achieve through being involved with SPRITE (7,9). These are shown below:

- (1) To bring new people into their group;
- (2) To facilitate communication between the groups that used the centre;
- (3) To gain software that would enable them to produce a newsletter for distribution around the local community to publicise the Space and the facilities that the computer group had;
- (4) To be involved with more constructive uses of computers, rather than just game-playing.

The implementation of SPRITE was successful in achieving the first aim. New people joined in with the group from the beginning of the project in the Space. Another 3 members became closely involved with the core group over the field work period, and a number of regular 'floating' members attended the SPRITE sessions (28). Although these people tended to take a backseat in the development of community projects, and didn't get involved with other areas of SPRITE work, they still attended the SPRITE sessions at the centre.

The second aim of the users was not accomplished to the same extent. The physical environment of the centre was one of the barriers to this, as the various user groups of the Space did not generally meet each other, except at management committee meetings where their representatives were present.

Generally though, the arrival of SPRITE did not achieve an increase in communication between user groups during the period of fieldwork.

With the third aim, from the beginning of SPRITE at the Space, the appropriate software was made available for making posters to advertise the centre and the computer group. However, the Space users had to wait a long time until the appropriate desk-top publishing software for newsletter production was available (25). When this software arrived, some of the SPRITE users helped to produce a local newsletter called 'Local Rag'. This was designed for the local community and publicised a number of facilities in the area as well as the Space.

The fourth aim, that of becoming involved with more constructive uses of computers rather than game-playing, was clearly achieved. Examples of the community projects that the users became involved in (14,22), and the actual products that the group developed (37), show that they did move from using computers purely for entertainment to being able to use them for socially useful purposes.

Therefore, in evaluating SPRITE against these criteria as set by the users, we can see that generally the project was relatively successful at the Space. The only aim that wasn't achieved was that of facilitating communication between the groups that use the centre. It is likely that this aim still has the potential to be achieved, now that building work at the Space has been completed and a number of groups can use the centre at the same time.

6.9 EVALUATION OF INTERVENTIONS

As a number of day to day interventions were made at each centre (see chapter 9), within each case study only one specific example of an intervention will be considered. In relation to the Space, the intervention described in this section is the one that was designed to bring women into SPRITE at the Space. This has been chosen because it addressed a problem that had been recognised by all the Space users, the SPRITE workers, and the evaluation.

At the Space, one of the early problems identified by the users (9,17) was that there were no women involved with the computer project. This was also noted by myself, as evaluator, and the project workers. We were particularly concerned that the equal opportunities brief of the project should be promoted in all centres. It seemed apparent that some intervention should be made that would encourage the involvement of women within the group. My role within this process was to consult the relevant stakeholder groups and design a satisfactory intervention that could achieve the aim of bringing women into the project at the Space. This role was considered appropriate, not only from the research perspective, but also because I was the only full-time female worker on the SPRITE project. The format of this intervention was designed by me, in consultation with the SPRITE workers, local adult education outreach workers, the Space computer group, and a local Mother and Toddler's group who had expressed an interest in learning about computers. The intervention made - a series of weekly classes for women only - is described in paragraph 20 of the data section.

Each of the stakeholder groups involved had clear positions about the intervention. I believed that because the computer group were all male and had a very strong identity, women would be intimidated about coming into the centre to use computers during the SPRITE sessions. This view was shared by the local adult education workers and by the local women. We all believed that a series of women only classes would give the women the confidence eventually to integrate themselves into the Space computer group. A similar process was taking place at the Open Door centre on the regular women's day.

This view was not shared by all of the SPRITE user group who were split roughly half and half as to what they thought about women's classes. Half believed it was a good idea that could potentially introduce women into the project whereas the other half, for a number of reasons, felt that they didn't want women only sessions. Their arguments against classes were: firstly, they didn't want to be deprived of an afternoon's use of their equipment; secondly, they didn't think women only sessions were a good idea because they created divisions; and finally, but perhaps the most serious for them, they believed that these women could eventually take over their computing facility. It would then become a women only resource, thus repeating history for the group in relation to what happened at their previous centre (5,18). This view was encouraged by the fact that the adult education outreach worker whose brief it was to work with women, was the person they felt was responsible for them being 'thrown out' of their previous centre.

The SPRITE project officers were also divided in their views. One was clearly in favour of the ten week classes, arguing that this would be the most successful way of bringing women into the project. The other was uncertain, arguing that he disagreed with the politics behind the idea of separating women and men, but couldn't see a better approach. Both however were concerned that the equal opportunities brief of the project was not being implemented at the Space.

When the classes started, an amount of hostility emerged from the male user group, which, to a certain extent was reinforced by one of the SPRITE project officers. This hostility was directed towards the tutor of the classes, who the users knew because she was a user at Open Door, and also towards myself. I was the target because as the only female SPRITE worker, and the only SPRITE worker involved with the classes, I was held responsible. Also the Space users, familiar with my action research role, were used to telling me exactly what they thought about things!

The hostility was manifested in three ways. Firstly there were continual complaints about the equipment not being put away properly at the end of the sessions which myself and the tutor believed to be unfounded. Secondly, when the SPRITE sessions in the morning finished, some of the users would hang around playing games on the computers so that there wasn't enough time to move the machines into the other room for the women's sessions. This meant that the tutor and myself had to ask these users to leave the machines every week. Thirdly, this set of users would ignore the women, and sometimes the tutor and myself. This was particularly distressing as previously we had had a good relationship with them.

This hostility was diffused slightly by my talking to the male user group and trying to re-assure them that their resource was not going to be taken over. However the hostility eventually disappeared after the women attending the classes and the male users met up at a Northern College weekend. After this meeting, and the reassurance that the women wanted to become involved with the whole group, negative feelings were dissipated. The classes then continued peacefully until Easter and were successful in that they introduced the women from the Mother and Toddler group to the skills of computing. In the short term, this intervention successfully achieved its' aim.

When the classes finished, a number of women continued to attend the regular Monday morning sessions (25), however after a period of time this involvement stopped. This was mainly due to childcare problems, as there was no regular creche at the Space.

Overall then, this intervention succeeded in a number of ways:

1. It introduced local women to computer skills;
2. It enabled some of the issues around the area of bringing women into the project to be aired. For example, the previous experience of the user group at their old centre was brought out into the open;
3. It encouraged the development of links between the SPRITE project, the Space users, and local community/ adult education workers. The outreach work that was done for the women's classes

brought new people into the Space as a whole.

However, the intervention failed in bringing women users into the Space on a permanent basis. Although they became familiar with the computers and were generally welcomed by the male group, there were no appropriate facilities for them to leave their children and use the computers in peace.

Most of the interventions at the Space took place on a day to day basis and weren't as controversial as the one described above. The role of such interventions, and the evaluation framework that was used for interventions, are described and analysed in more detail in chapter 9.

6.8 SUMMARY OF OUTCOMES AND CONCLUSIONS

The previous sections of this chapter have described some of the results of the implementation of SPRITE at the Space. The purpose of this section is to summarise the outcomes that resulted from SPRITE's involvement at the Space between February 1986 and September 1987. These are shown below.

1. THE CENTRE: SPRITE's involvement during this period of time helped to establish a computer resource within the Space which was under user control. This resource was well-used and was still being developed when the fieldwork ended. Links had also been developed between the libraries and SPRITE as a result of their involvement with the Space. These links were useful for other centres within the project.

2. THE USER GROUP: The user group who were already using the Space as a computer club developed considerably as a result of SPRITE's involvement. In particular they achieved their aims of becoming involved in more constructive uses of computers, and applying their skills in what they considered to be socially useful areas. Individuals also became involved in other areas of the SPRITE project. Therefore their interaction with SPRITE led to the empowerment of the group so that they could identify their own needs and the needs of other community groups. They could then work towards their goals as defined by these needs.

3. INDIVIDUALS: For the individuals involved with the project SPRITE helped to develop their computing, organisational, social, and communication skills. Through this process they became more confident and some of them

found work. Two of the core group obtained employment on part time community programme schemes: one concerned with teaching computers in youth clubs, and the other concerned with the regular publication of a community newsletter. Three of the core group were employed at various times to run sessions on behalf of SPRITE that were funded by the W.E.A. These were in areas of desk-top publishing, setting up a computer club, and working with a group of mentally handicapped people. One of the group got a part-time job at a local college as a computer technician. Another member of the group has set up his own business, providing computing services to community groups. All of these people continue to use the Space and are still actively involved in the SPRITE project.

4. PRODUCTS: A number of products were produced at the Space during the period of field work. (The term 'products' is defined loosely here to refer to anything produced using the computer facility). Although none of them have been marketed as yet (September, 1987), they all show some potential for being useful to other community groups. The database and mailing list for the Forum of People with Disabilities, and the database for Low Edges Tenants Association, are two products useful for those types of community groups. Other products have been made with desk-top publishing software. For example, tickets, posters, leaflets, and cards have been produced and are sold cheaply to other community groups. The user group also produce an annual calendar that they distribute to their friends. The SPRITE newsletter is also produced mainly by members of the Space computer group.

The experience of SPRITE's implementation at the Space is a success story. Despite a number of problems the project has worked well at the centre and

is continuing to do so. A major part of that success is due to the enthusiasm of the user group and the positive response of the centre to the project. The case studies that follow show that SPRITE has not worked as successfully in all centres. The list of supporting and inhibiting factors of SPRITE's development within this centre, when compared to the experience at other centres, will add further insights into why this is the case.

6.9 OPEN DOOR: THE CENTRE

(1) Open Door was an unemployed centre located in south-east Sheffield. The population of the local community are generally skilled working class people, the vast majority being white. Open Door consisted of a set of rooms - a large hall (one side of it partitioned off to make a creche), two smaller rooms and a coffee bar. On one side of the hall was an area set aside for the centre's printing facilities which were used on a regular basis by local community groups. This set of rooms together, made up the first floor of the Frecheville Co-operative supermarket.

(2) The centre owed its existence to the input of workers from the City's Adult Education Service. In 1982 Adult Education centrally set aside some "seeding money" to develop work with unemployed people within the Sheffield area. At Frecheville, the adult education workers came to an agreement with the Co-op to rent the rooms on the first floor above the supermarket so that they could be used as a drop-in centre for the unemployed of the area. The centre was to be funded jointly by the Adult Education Service and DEED. Therefore the input of Adult Education was crucial in the development of the centre.

(3) The Constitution of the centre, as described in the Annual Report (1984-1985) specifies the aims of Open Door:

" To encourage and develop social, recreational and educational activities and to take up campaigns with and on behalf of the unemployed and all unwaged in the day to day activities of the centre.

To provide information and advice to the unemployed and others in the community and surrounding areas; to provide a community

resource, and to develop links with other agencies in the community.

To provide a base for day time adult education classes and activities." (p. 2)

(4) Open Door was managed by a management committee whose responsibilities included putting the aims of the centre into practice, and running the centre on a day to day basis. The structure of this committee is described in the same annual report in the following way:

" The structure agreed seeks to put the real management of the centre in the hands of the people who use it, while recognising the interests of major funders (Adult Education and employment department) and the need to work closely with other groups in the local neighbourhood such as the Health Centre and the Citizen's Advice Bureau. 50% of the Management Committee are therefore elected by the Users' Meeting." (p. 3)

(5) Therefore the committee aimed to be as responsive as possible to the individuals and groups that used the centre. Regular user meetings were held monthly which anyone in the centre was welcome to attend. Therefore the emphasis of the centre was on user participation in the decision-making process.

(6) The centre employed a number of workers. There were two full-time workers (one an Administrator and one a Development worker) who helped to run the centre, and a number of part-time creche and coffee bar workers. A number of local Adult Education tutors also regularly taught classes at the centre.

(7) As well as the Adult Education classes, a number of local community

groups used the facilities, for example an anglers group, a history workshop and a single parents group. Practically all the users of Open Door came from the surrounding area. There were mainly white and there was a wide age range. 70% of the centre users were women, and particularly popular was the weekly women's day at the centre when a number of activities took place for women only. This was viewed as a way of providing an entry into other centre facilities for women who may have been lacking in confidence about using the centre on a day to day basis. The excellent creche facilities that the centre provided encouraged local women to drop in on a Wednesday to attend the special classes such as Keep Fit; a women's health group; and 'Action Packed' where women sampled activities such as pot-holing, climbing and motor-cycling.

(8) The general appearance of Open Door when SPRITE first started working there was that it was a well-used, established, lively centre for the unemployed. The centre also had a reputation for being involved with political campaigns, especially those that affected unemployed people. The centre was very active in supporting local miners during the strike and had also been involved in campaigns against cuts in local government funding, and other attacks on the living standards of the unemployed. The philosophy and purpose of Open Door was summed up by one of the SPRITE users as:

" It's an unemployed drop-in, but I think it covers a lot more than that, we have to encourage people in various different ways, both in local activities and in things like personal abilities and confidence, and the knowledge that just because they're unemployed doesn't mean they're unimportant. "

(9) Within the centre there were a number of identifiable groups. Apart from the groups who came together for a reason such as the single parents group, there was a group of young men, sometimes numbering as many as 15,

who spent all day playing cards. There was also a particular group who clearly identified themselves with the politics of the centre and were active in the centre management committee. Other groups that emerged will be described later in the case study.

(10) Sadly, Open Door Unemployed Drop-in Centre closed in April 1988 when the Frecheville Co-op decided that they were going to demolish the building. Although some of the resources were re-located in Frecheville School, the closing of the centre meant the loss of a valuable resource to the Frecheville area.

6.10 THE SPRITE USER GROUP AT OPEN DOOR

(11) The group that SPRITE became involved with at Open Door were not a group in the true sense, rather they were a collection of users from the centre. At the beginning of the project there were about 15 people who attended the SPRITE sessions, ten of whom became identifiable to other centre users as SPRITE users. Three of them (Kath, Claire and Sheila) were part of a group that had set up a playgroup for the under-fives in the local area. They were married with young children, and used the centre as a place to leave their children safely so that they could have a chat or attend a class. Another three (Geoff, Joe and Alison) were involved in the management committee of the centre and used the centre generally for a number of activities. These three were well-known to all the centre users. The remaining four cannot really be classified into any group. Two (Winston and Ray), were older men who had come to the centre after reading publicity

about SPRITE, and the other two, (Liz and Jane) were young women who used the centre on a drop-in basis.

(12) Therefore an important aspect of the SPRITE user group at Open Door was that they were not a coherent group in the psychological sense, that is, they had no shared sense of identity. In terms of computing, none of them had had any formal experience before coming to SPRITE. Some of them had home computers but they were mainly used by their children for playing games. Therefore, the computing experience of the group was considerably limited. Open Door had one computer, a BBC. This was used by the young lads in the centre for games only. The lack of experience within the group however, was compensated for by their enthusiasm for learning about computers and being involved with SPRITE. They also had considerable experience of being involved in community organisations as a result of their involvement with Open Door. The implementation of SPRITE at Open Door is described in the next section.

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6.11 SPRITE AT OPEN DOOR

(13) A meeting took place in February 1986 to discuss the implementation of SPRITE at Open Door. This meeting was with the two centre workers, three user representatives from the management committee (Joe, Geoff, and Kath), and the SPRITE workers. During this meeting the centre workers and users all expressed a keen interest in the SPRITE project. The primary aim of the centre in relation to computers that emerged from this meeting was in using SPRITE as another facility for the users of the centre. Various computer applications were also suggested. The centre workers and users suggested that Open Door had expanded considerably over the previous 18 months and that the increased contact with local groups had produced vast amounts of information that needed to be collated. There was also the suggestion that a computer could display job or training opportunities in a format that was easily accessible to the users of the centre. Therefore all the applications suggested at this time were concerned with how computers could be useful in making various types of information more accessible to centre users and workers.

(14) One problem that emerged at this time concerned the siting of the computer facility. Although Open Door as a building was relatively secure, in that it was located on the first floor, petty thefts from the centre happened regularly. It was felt that the computers had to be somewhere that was accessible, but also somewhere they could be locked away at the end of the day. As the centre was already short of space, it was agreed that SPRITE would pay for the building of a computer workshop that would be placed on one wall of the main hall. This was completed by May 1986.

(15) As with other SPRITE centres, Open Door decided to launch the arrival of SPRITE through a computer Open Day. This took place on 18th April 1986 and was successfully publicised throughout the local community. One user described what happened:

" We had an exhibition for a full day for people from the local community to have a go, which was very successful. We got some new members who have been there since the start of the SPRITE project. One advantage is that we are already established so the publicity angle has all been worked out. We got it in the Gazette and everything, all advertising that the SPRITE project was taking place at Open Door. "

Lots of people attended the open day and a few put their names down as being interested in SPRITE. The success of the day very much fired the enthusiasm of the users from the management committee who had already expressed an interest. A couple of the SPRITE users from the Space and SADACCA also showed up to help out with the demonstration of equipment, forming the basis for links that were to develop later between the centres.

(16) During the open day I was approached by the two workers at Open Door who expressed some concern about the arrival of SPRITE at the centre. Their main concerns surrounded how the introduction of a computer facility would affect their jobs. Neither of them had had any experience of using computers before and they felt that if users had problems with computer use they wouldn't be able to answer their questions. Their other concern was with how the room would be supervised. They felt it would need almost full-time supervision, yet they would not have the time to do this. It was agreed that we would discuss some of these issues with the users during the week after the open day. At these discussions a number of users volunteered to take responsibility for supervising the computer facility. They would

unlock and lock the room when necessary and monitor its use.

(17) On the 2nd of May 1986 SPRITE began training sessions at the centre. Fifteen users came to the first session where the project officers gave an introduction to the computers that were in the room. Regular introductory sessions took place twice weekly until July. They were well-attended and by July, the users at Open Door had developed basic skills in programming and word processing. For six weeks of this period a trainee from the Women's Technology Training Workshop on placement with SPRITE was based in the centre and provided back-up to the SPRITE sessions. This meant that interested users could use the computing facility every day of the week, and have someone to go to when any problems emerged.

(18) As users were interested in business applications of computers a visit was arranged to Sheffield City Council's Computer Services Department. Here the representative from Computer Services on the SPRITE management committee showed the users around the computer installation, describing how the system was used for the administration of housing benefit etc. He in turn was invited to Open Door to have a look at the centre and how the computer facility was being used.

(19) The SPRITE project workers anticipated that after the summer break the users would be ready to begin working on community projects. The computer room was a hive of activity and the user group were developing their skills at a fast pace. They were also having regular meetings without the SPRITE project workers where they discussed and planned the day-to-day supervision of the computer room. In June 1986, seven users from Open Door attended the

first SPRITE weekend at Northern College. Here they expressed their aims with being involved with the project. They were particularly concerned that the facility at Open Door became a community resource. As one user said:

" Once we've got more knowledge about how to use it, we can extend it into the community, but at the moment there's a lot of users who want to use it and we're trying to teach them as best we can but to extend it into the community like we want to do, as with the printing facilities, so people can use the word processor, we can't do it at the moment cos we haven't got the knowledge. "

Another user commented:

" I think it would be nice to open up a community information service so if anyone wants to know where to go, such as where is the nearest cab, then it can actually go on the computer."

(20) Therefore the aims of the Open Door users in taking part in SPRITE were to provide a community resource for the local area. The main barrier that they saw to this process was that the computer room needed to be organised in a more efficient manner. They envisaged that they would need a booking system for the room and a method of organising their software so that outsiders could come in and use the facility without any problems.

(21) This weekend served the same purpose for the Open Door users that it had for the other two centres that attended, in that it introduced them to other groups involved with the SPRITE project. Over the next few months links developed between the centres as a result of these initial contacts. For example, the women at Open Door had told the Space group that if they wanted any help in trying to bring women into their centre then they would happily visit. This happened later in the year when I went to talk to a group of women about the Space computing facility. One of the women from Open Door came with me and told the women all about her experiences of learning to use computers. The Space and SADACCA users also visited Open

Door shortly after the Northern College weekend.

(22) Some of the group expressed an interest in forming a computer club, along the same lines as the Space computer club. Over the summer period a Space user was employed at Open Door with Summer measures money to help start a games club. During July a games club was introduced that would run one afternoon a week. The aim of this session from the Open Door workers perspective, was to try and introduce some of the lads from the card school into the computer room. This actually worked, however it had far-reaching consequences. During the summer period Open Door was fairly quiet. Adult education were no longer present, and the users who had children on holiday from school tended to stay away from the centre. Therefore some of the key SPRITE users were not around over the summer period. Consequently the computer room was not effectively supervised. What tended to happen during this period was that individuals who had joined the computer club would go in and use the computers for games. Some of the SPRITE users felt quite hostile towards the game players as they were concerned that continual game-playing might damage the equipment. However it was often difficult for them to ask people to leave the machines or stop playing games:

" When we are trying to work on the computer, you'll get outsiders coming in and wanting to put games on and disturbing you ... the games are much more likely to muck the machine up than what we do, and that's one of the things I'm a bit disappointed in, surely the machines should mainly be to use, whereas we're risking damage by people playing games. "

(23) Therefore over the summer period supervision of the computer room became a problem. Although a games club meant that a different group of people were becoming involved in the project, it had effectively legitimised the notion that the computers could be used for playing games

on, which the SPRITE user group weren't happy about. The workers were also unhappy about the supervision of the room. They felt that as they couldn't keep a constant watch the room had to remain closed unless someone took responsibility for the keys. However they weren't clear who was allowed to have keys to the facility. They believed that all centre users should have access to all centre facilities, and therefore they should be able to give the computer room keys to the game-players. The SPRITE users disagreed with this.

(24) At the end of the summer period it was clear that problems were emerging about the role of SPRITE within the centre. The workers were still not happy with their role. Although SPRITE had agreed to run special classes to introduce them to the equipment and its potential, the Open Door workers had always been too busy to arrange a time for these sessions to take place. Other problems concerned how the SPRITE user group related to other groups within the centre. It became apparent at this time that there was a division emerging between those involved with SPRITE and other users within the centre. The SPRITE users experienced and interpreted this division in different ways. For example:

" I don't know whose fault it is but I think they tend to think it's them and us, They see them all in there, bashing about at the computer and they feel isolated. I don't know if they think we're a clique, I get that impression that they sometimes feel a bit shut out in certain areas, that's the impression I get from what people have said, but I don't know why, it's just something that's happened. It's probably happened with other things, once a group is set up, it's difficult to break through into it without feeling too pushy I suppose."

(25) This individual located the underlying problem as being in the distinction between those who were involved with the computing facility and those who weren't. However other users had different views. One particular

user, Geoff, who was the representative from Open Door on SPRITE's management committee, believed that the differences between the two groups emerged from the extent to which they were involved in the more 'political' aspects of the centre. For example he believed that the centre shouldn't have a women's day as it excluded men. Therefore he labelled those users who supported the women's day as the political group. These views made him particularly unpopular with the Open Door workers who felt that he had alienated some of the users at the centre as a result of his views. The Open Door workers believed that this group of 'political' users would not become involved with SPRITE whilst he was a central figure, although his views were not necessarily shared by the rest of the SPRITE group. Geoff in turn felt that the workers were far too concerned with pursuing their own political aims to bother with what was going on in the centre, and specifically to put any input into the SPRITE project. Therefore tensions between the SPRITE user group and the workers were beginning to emerge.

(26) The centre workers had also expressed concern about the way SPRITE was operating at Open Door. They suggested to me that the relationship between SPRITE and the centre had never really been clarified. For this reason users outside of the project viewed SPRITE as a separate entity from Open Door, rather than as an integrated part of it. An example they gave was the approach taken by the SPRITE user group when they wanted to raise funds to purchase their own software. Rather than ask the centre for funds, they had organised their own jumble sale. The workers felt that if they had come to them they would have been sympathetic to their needs, however by raising money on their own they were placing SPRITE even further away from the centre.

(27) When SPRITE started again in earnest in September 1986, after the quiet summer period, discussions began to take place about the kind of community projects that users were interested in becoming involved with. It was decided that one group would begin a graphics project focusing on desk-top publishing which the group were particularly interested in, and the second group would begin a database project looking at how to computerise the records kept by the creche workers at Open Door. As a first project this would be useful to the centre, and would also provide users with the experience of using computers to respond to the needs of particular community groups.

(28) Attendance at the SPRITE sessions had dropped to eight regular users. Three of the the women in the group had started to do 'O' level computing and therefore, with their family commitments, didn't have as much time to devote to SPRITE as they had previously. Two other members of the group also got part-time jobs. During this time SPRITE was trying to bring some of the women who used the project on the women's day into the other SPRITE sessions. The W.E.A. were funding a class on Wednesday mornings, the weekly women's day, on behalf of SPRITE. As this class was over-subscribed one of the SPRITE users was running a session on Wednesday afternoons for a similar group of women. I also took part in two special women's days at Open Door to celebrate International Women's Day, the aims of these being to attract women into the regular SPRITE sessions. However the women who attended these women-only sessions seemed reluctant to use the centre on other days of the week. Another W.E.A. session was also running on a Friday morning. This was an introduction to programming and some of the SPRITE

users attended this session. Generally the remaining users were still enthusiastic about the project at this stage.

(29) In October 1986, the relationship between the SPRITE users and the centre as a whole was severely affected by the appointment of a new Administrator at the centre. One of the SPRITE users, Alison, had applied for this post and was a strong candidate having the relevant office skills and the experience of being the secretary to the centre management committee. However another centre user got the job. The successful candidate had been involved with the more 'political' side of the centre's activities. The appointment reflected the general view of the centre management committee that both the workers should have development briefs. This decision angered the SPRITE users and led to a generally unpleasant atmosphere within the centre as a whole. One of the SPRITE users expressed their anger about the workers and the other groupings in the following way:

" I don't think that there is anything wrong with SPRITE as such, it's Open Door, it's changed over the last 6 months or so, really changed, there's two different groups, or there was, there's only one now, it was split into two different groups, if you agreed with one policy you were in one different group, if you didn't agree you were in another group. As it happens, one group were all the SPRITE group, they said it was a clique but they just didn't want to get interested . But now the group who were the SPRITE group, well the main section of them who were the group who were fighting to keep Open Door open to the community, and now we've just decided that it's a waste of time, and that group's dropped out now, all them people have actually dropped out."

(30) As the above comment points out, the decision about the job led to the three SPRITE users who were on Open Door's management committee resigning from their posts and ending their involvement with Open Door as a whole. Apart from the loss of enthusiastic users and the impact on continuity within the user group, the implication was that all SPRITE users were

identified as being in the other camp to the person who got the job.

(31) The development of SPRITE at this time was very difficult. The project at Open Door began to stagnate, despite the fact that a group of five committed users remained. Although some new ideas came forward at this time, such as training the management committee in computer use, there was a general pessimistic view of how SPRITE could develop. As one user commented:

" I hope all the projects that we've started off get somewhere, it seems to be taking so long, I think it's with not being a set number of people doing it every week, we seem to be going a bit slow at the moment."

(32) Although the women's sessions had gone well, those users did not use the computing facility on any other day. The database project had been dropped because there wasn't enough interest, and the publicity/ graphics project was suffering from the same sort of problems. Just before christmas the mouse that was attached to the Atari computer was stolen, which meant that this machine could no longer be used. As this was the most popular machine this loss clearly affected the motivation of the remaining SPRITE users. The SPRITE workers felt strongly that Open Door should pay for the replacement of the mouse, and, as it took a long time for them to provide the money, it was a while before the machine was back in use. The games club had fizzled out after the summer sessions had been completed and by christmas it was clear that something needed to be done to re-vitalise the project at Open Door.

(33) After discussions between myself, the SPRITE workers and the remaining SPRITE users at Open Door, a decision was taken that some form of

development work needed to be done, around SPRITE within the centre. As the action researcher, I took the responsibility for initiating a series of interventions that were designed to bring more people into the project. In January 1987 SPRITE started a three pronged development programme. The first part was concerned with training the centre management committee and workers in the basics of how to use the computer room. They could then help out other individuals or groups who wanted to use the facility. The second approach was an attempt to re-vitalise the computer club. Two users from the Space were employed by the W.E.A. to run a session for 10 weeks at the centre with the aim of building up a computer club. Finally I was employed, on the same terms by the W.E.A. to do general development work within the centre.

(34) Over then next few months there was considerable SPRITE activity at Open Door. As well as the regular SPRITE sessions, I made links with the single parents group who were a coherent group with a strong identity within the centre. After a couple of introductory computing sessions, it was clear that there was interest within the group. One of the SPRITE workers began regular sessions with the group on a Tuesday morning. I also did work with individuals in the computer room with the aim of encouraging them to become involved with the facility and the SPRITE project. The women's sessions were funded again until Easter and I attended those a couple of times with the aim of introducing some of those women into the mainstream of the project. The computer club was also becoming successfully established. Games were restricted to Thursday afternoon's only and the structure of the club had been set up along similar lines to that at the Space.

(35) Therefore during January and February 1987 the computer room was once again a hive of activity. One of the SPRITE workers was running project sessions on a Tuesday afternoon with what remained of the original user group and some new people became involved with them as a result of the development work. One user was working on an information screen on the BBC machine that displayed details of the various activities that happened within Open Door and the surrounding community. This had the potential for development into a marketable product. Another user was writing a manual for the Locoscript software on the word processor. The computer room was therefore being used all day Tuesday, Wednesday and Thursdays.

(36) In February 1987 SPRITE had its' second weekend at Northern College. Five users from Open Door went on this weekend of whom three were from the original user group. In a discussion about the centre the group mentioned a number of issues that still needed to be overcome. One of the issues they identified was how to bring more people into the centre and the SPRITE resource. They agreed that when they got back to Open Door they would start thinking of ways of improving the publicity surrounding SPRITE. A recurring theme within the discussion however was the problems within the centre itself. The users perceived the main problems to be those of lack of centre and worker support for the project. As one of the users commented:

" Up at Open Door, there's so many problems, but it's their fault, I was on the management committee at Open Door when it was talking about putting SPRITE in and they were literally all for it, absolutely, the workers were all for it, there was only one objection and that was about having the computer room, that it would be sited in the wrong place. But the workers were all for it and when they realised that they were actually going to have to do something, that's when the novelty wore off. I don't think that SPRITE should go down on its knees and beg, please come and do something with our project."

Therefore despite the fact that SPRITE was working well at this stage, the users who had been with SPRITE since the beginning were still disillusioned. They believed that the problems with the workers still remained and consequently the workers were strongly resented by the SPRITE users at Open Door.

(37) In March 1987 the period of development work ended. Users from all the different groups involved with SPRITE came together for a meeting to discuss how they wanted the project to develop within Open Door. At this meeting each of the groups using the facility described what they were currently doing. A new representative was elected to the SPRITE management committee and arrangements were made about who could have keys to open the computer room. It was also agreed that representatives from each group would meet monthly to discuss the administration of the computing facility.

(38) This meeting seemed like a productive way to end the period of development work. During discussions that I had with the two centre workers at this stage, they suggested that they both felt that they should have been more involved with SPRITE in the past, but that they had been busy within the centre as a whole. They also felt that the users who had been involved with SPRITE were individuals who weren't particularly good at developing groups or encouraging other people to join in. At this stage they suggested that they would take the responsibility to continue the development of the project. Despite these comments, in practice the behaviour of the workers in relation to SPRITE never really changed.

(39) An additional resource also became available at this time in that a worker from Adult Education who had a few hours spare on his timetable was allocated to SPRITE to do some development work. After discussions with the user group, it was decided that he would organise a number of day schools to which all community groups within the local area would be invited. These would cover word processing, databases and desk-top publishing and, as well as publicising the project, would develop the facility into a resource for the local community as a whole, in line with the original aim of the user group.

(40) The sessions with the single parents group continued over the next few months until they were able to use the facility without SPRITE worker support. They were using the computer for a number of things, in particular for the group's administration. Letters requesting financial support were now written using the mail-merge facilities and they produced a database to keep files on all their members.

(41) The projects session continued with any number from one to six individuals working on specific projects. The information screen system was completed but unfortunately could only be used in the computer room as it was considered unsafe to leave a computer unattended in the main hall. A problem with the projects session was that none of the users used the centre at other times of the week, therefore no work took place unless the SPRITE workers were there. As a result of these problems, it was difficult to maintain work and interest around particular projects. Some of these users began to drift away and attend other SPRITE centres or attend SPRITE on its' weekly open day rather than using the facilities at Open Door. One

of the users became quite involved with the SPRITE newsletter group and therefore focused her activity at a wider level of SPRITE.

(42) In June 1987, the three day schools took place. It was unfortunate that after the effort put into these by the Adult Education worker, the SPRITE workers and the remaining centre users, no new people attended. Although several groups sent apologies for their non-attendance, the failure of these events to bring new users into the facility had an adverse effect on the morale of the user group and the SPRITE project workers. This happened at the same time as the single parents group, who had previously been well-established in the centre, were having arguments with the centre management committee and centre workers about their constitution. They were beginning to feel they weren't getting enough support at Open Door and were looking around for another community centre to base themselves in. At this time too, Open Door heard that the building was going to be closed in December 1987 and knocked down for re-development by the Co-op. This had an adverse affect on the centre as a whole and therefore usage of the centre was generally declining.

(43) Consequently by July 1987, the situation with regard to SPRITE at Open Door had returned to what it was in December 1986. Very few people were using the facility and both users and SPRITE workers had given up the idea of the management committee or workers offering any support to the computer project. In July the project workers and myself discussed the possibility of moving some of the equipment out of Open Door. In particular the Amstrad and the Atari machines which were not being used at the centre were in considerable demand throughout the rest of SPRITE. After talking to the

remaining users it was decided that this would be the most appropriate next move.

(44) At this stage the SPRITE workers were approached by Adult Education who requested that they leave the BBCs and the Commodores in the room so that a tutor could use them to teach introductory computing within the centre. As the only group still using the facility to any extent were the computer club who could manage adequately with those machines, it was agreed that this would happen. The single parents group had by this time moved to the Woodthorpe centre and were using the facilities there. Therefore the involvement of the SPRITE workers stopped at Open Door in August 1987. The W.E.A. funded computer classes with an Adult Education tutor from the September, and the remaining SPRITE users moved to other centres. Open Door finally closed down for demolition in April 1988.

(45) Despite the unfortunate way in which the SPRITE project ended at Open Door, the users who had stayed with the project felt that they had gained something from being involved. Six of the SPRITE users were interviewed. They all commented on how they had developed a number of computing skills. For the women in particular, who had all been out of the labour market for some time whilst caring for children, these new found skills were linked to confidence:

" I've got more confidence with computers now ... and as computers are getting more into day-to-day jobs, when you've been out of work for a long time, once you go back to work everything has altered so much, I think you'd feel a lot worse if you didn't have that confidence behind you."

For these women the chance to learn about computers also gave them a better understanding of their children's education. One member of the single

parents group, during a discussion of the project at Northern College, described it in the following way:

" When we started our group, not one of us knew about computers, the only reason I got into computers was because my son's 5 year old and he were coming and talking about something I'd no idea about. So now, I've got to know the games that he was playing, and now I've moved on to something different."

Another commented:

" Well for me it's learned me how to talk to my kids about computers, and in September I'm going on this computer course. When I started with SPRITE I wouldn't have dreamt of going on it, so from wanting just to learn basics and how to talk to my little boy about it I've learnt a lot..."

(46) The other main benefit that the users felt they had gained from being involved with SPRITE was in meeting new people. As well as meeting users from other centres at Northern College, people also came into contact with representatives from local authority departments that were involved with SPRITE. The following comment sums up what SPRITE meant to one of the women who was involved with the project at Open Door:

" I might have found my vocation, so to speak, I'll stick to it now and I'll see it through, I might go further once I've done this 'O' level and try and get some eventual employment, confidence wise, meeting so many people, I suppose in a way contacts with the town hall. It seems awful but when I do come to get a job, I may be able to get a job because they know of what I've done. Also showing other people what..., the fact that helping people can be quite good fun through the right environment. And the SPRITE people themselves, I suppose, they're nice people, but I think I've gained a lot from it, yes."

(47) It was the female users at Open Door who seemed to have got the most out of the project, despite the problems that had occurred in the centre and the hostility that some of them had faced from their husbands as a result of their involvement with the project, especially with regard to Northern College weekends. All the users however believed that their skills had been enhanced as a result of being involved with the project.

(48) Open Door users, like the users at the Space, felt that they had had a role to play in the way the project developed at Open Door. The interview data suggests that all the users felt they had been consulted about the way the project had operated although like the Space, it was user consultation rather than user control. For example:

" I think we've had quite a lot (of say), maybe if the decision had already been made we were given the opportunity to say whether we object or not, or throw ideas in. I don't begrudge anything that has been decided upon. I think it's all been done in a way like a communal thing should be. Even though Ted and Steve have the ultimate decision to make, so to speak, they're open to criticism as well as praise."

(49) One user did suggest that it was up to the individual how much say they had:

"I think if you want to have your own say, I think it's taken note of, yeah, I think they take a lot of notice of what the users want, but I don't have much to say anyway."

At the centre level then, there was clearly consultation between project workers and SPRITE users. However whether this was actual user control of the project is arguable.

(50) As with the other case studies I will finish this section by including some of my own personal comments about the experience of being an action researcher within Open Door. When SPRITE first began at Open Door, it was a joy to visit the centre. The centre itself, and the computer room, were always hives of activity, and the coffee bar was a pleasant place to sit and talk to users of the centre that weren't involved with SPRITE. The centre had vast potential and when the initial selection of centres was first made, myself and the SPRITE workers were convinced that it would be

the most successful centre within the SPRITE project.

(51) I made some friends within the centre, particularly with the women who used SPRITE. Once the sessions were over, we would sit and drink tea and talk for ages about their problems with their husbands and the more exciting aspects of our everyday lives.

(52) The problems within the centre were unfortunate in that they inhibited the potential that SPRITE had for expanding what was already a thriving community resource. Out of all involved with SPRITE at the time, I think that I felt the most sympathy for the two workers at Open Door with the workload that they had to overcome in running a busy centre. Also in political terms I would identify myself as close to their views, which were far removed from those of the SPRITE user group. The sympathy arose from the fact that I spoke to them more than the SPRITE project workers, as a consequence of my action research role. As I had identified them as a key stakeholder group, I was concerned to discover their thoughts on what was happening within the centre. However the problems that existed slowly ate away at the morale of the SPRITE workers and users. As the project came to an end the SPRITE workers and users had run out of patience with the Open Door workers, at this stage it felt like I was the only person communicating between the different groups. The SPRITE workers in particular put a lot of energy into Open Door which, in hindsight, could have been more usefully directed at other centres.

(53) Therefore it was sad that the potential of SPRITE at Open Door was never achieved. However the users involved felt that they had personally

gained from being involved with the project and as well as the key group of users, over 30 women had been through the courses on the weekly women's day. The experience of SPRITE's implementation at Open Door also provided the project with many lessons which were useful when the project moved into other centres.

6.12 SPRITE AT OPEN DOOR: RESEARCH QUESTIONS

6.12(i) INTRODUCTION

The aim of this section is to address the first four research questions in relation to Open Door. As with previous case studies the reader will be referred back to the data in the previous section where necessary.

6.12(ii) QUESTION 1

The first question is about the impact that SPRITE had on Open Door as an organisation, this is divided into two sub-questions about the benefits and problems that SPRITE brought to a centre.

6.12(iii) BENEFITS

The main benefit that SPRITE brought to the centre was that of an additional resource. Previous to SPRITE's implementation Open Door had one computer that was very well-used (12). The introduction of SPRITE meant that there was a substantial new resource within the centre that had the potential to be accessible to the local community.

The establishment of the computer facility meant that particular user groups within the centre could develop their computing skills. This happened at both the individual and the group level in that the individuals who attended the SPRITE sessions became more skilled (45,53), whilst the single parents group applied these skills at the group level to become more

organised in their administration, for example through the mailing system (40). These skills however were not applied at the centre level. Ideas about how SPRITE could be useful to Open Door as an organisation (13), were never really taken up, mainly because of the lack of support from the centre workers (38,43). For some of the users at Open Door, SPRITE brought them links with other community centres (21). Although these were seen to be useful and productive to the people involved (46), again they made no impact at the centre level.

Overall then Open Door benefitted from SPRITE in that a new facility was created within the centre. Although other benefits occurred for the users involved (46,47), these were never extended to the centre as a whole.

6.12(iv) PROBLEMS

From the previous description of events at Open Door, it would seem that SPRITE created a number of problems for the centre. These fall into two categories: the problems that SPRITE actually brought into the centre, and secondly, problems that already existed in Open Door that SPRITE helped to emphasize and exaggerate.

In the first category, when Open Door management committee, workers and users were discussing the implementation of SPRITE at Open Door they were very keen to have the project in their centre (13). However the problem of supervision was never clearly addressed to the satisfaction of the centre workers (16,23). The SPRITE resource clearly needed adequate supervision in that the equipment was worth a lot of money, and there had been problems at

Open Door with thefts before (14). However despite the various attempts to address this issue (16,37), when the SPRITE workers were not in Open Door, it was difficult for the equipment to be supervised. Therefore the easiest solution from the workers' perspective was to keep the room locked (23). This meant that the computer facility wasn't easily accessible. In practice then, when SPRITE entered Open Door, as well as bringing with it a community resource, it brought the accompanying problems of that resource which remained unresolved, such as supervision.

One could question the extent to which supervision was an actual symptom of a wider problem that existed with SPRITE at Open Door. Supervision was a tangible dimension that the workers and users could comment on (16,23), however underlying the issues associated with supervision was the more general issue of SPRITE not being sufficiently integrated into Open Door as a centre. The main integrative mechanism to co-ordinate the various groups within the centre was the management committee. However after the SPRITE users (Geoff, John, and Kath) left the management committee (30), SPRITE was not represented on this body until March 1987 (37). Other problems such as the relationship between the SPRITE users and other user groups (22,24) could also be interpreted as symptoms of this lack of integration where SPRITE was perceived as something different from Open Door as a centre.

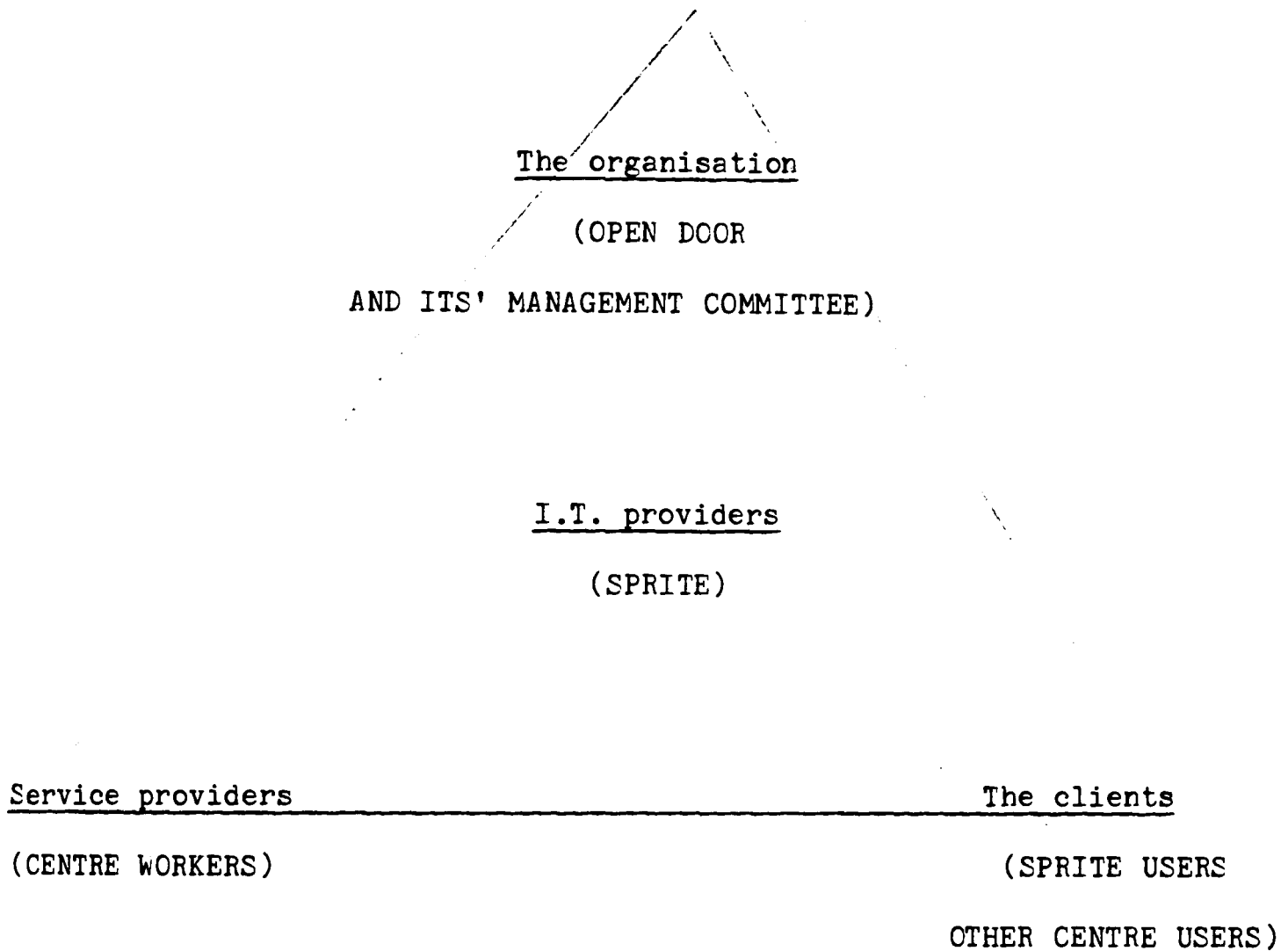
Apart from the obvious problems that SPRITE created within Open Door it is evident that the existence of SPRITE within the centre helped to exaggerate some of the problems that already existed within the centre. The political problems within the centre emerged quite early during the project's

implementation (29), which suggests that the undercurrents of the problems already existed before SPRITE became involved. It appears that when SPRITE first began the users who became involved were not the centre activists at Open Door. Although three of the users were on the centre management committee (11), they were noticeably different in their views about the centre from the centre workers (25). SPRITE were not aware of this at this stage.

Therefore the introduction of SPRITE provided a focus for the 'dissatisfied' users within the centre. Their involvement with SPRITE led to their formation as a group around a particular interest, that of computing. When they began to believe that they weren't getting the kind of support for that interest that other groups would have got (29,36), they began to resent the workers and the management committee. It is useful here to return to the stakeholder perspective that was described in Chapter 2.4(ii). In terms of stakeholders, the interest groups at Open Door can be seen in Figure 6.1.

FIGURE 6.1

THE STAKEHOLDER RELATIONSHIPS AT OPEN DOOR



Within the triangle there are two types of clients: Open Door users, and Open Door users who were involved with SPRITE. SPRITE effectively altered the dynamics of Open Door and exaggerated the political problems that already existed within the centre. This happened because SPRITE provided a focus, a legitimate reason (lack of support for the computer facility), for some users to turn against centre workers and the user group the workers identified with. The balance of power shifted in that the dissatisfied users now had a purpose around which to group themselves. This purpose was

seen to be exclusive (24) because it revolved around particular skills that the two centre workers and other users did not have (16). Therefore it is understandable that the group of SPRITE users were perceived to be a clique (24).

In a sense the empowerment of this group led to a political battle. The SPRITE users bid for power within the centre by attempting to influence the appointment of the new worker in order to gain more support. This battle was finally perceived as lost by the SPRITE users when the new administrator was appointed (29) and when the three SPRITE users who had previously been on Open Door's management committee finally resigned from their posts (30). At that stage it seemed that SPRITE had lost its' opportunity for gaining support from the centre workers.

Therefore to conclude, SPRITE clearly exaggerated the tensions that already existed at Open Door. None of those tensions were recognised or anticipated before the project began at the centre, however once they emerged they clearly had an important impact on SPRITE's development. The general approaches that SPRITE took to deal with these problems will be discussed in more detail in section 6.17 which examines the development work at Open Door as a process of intervention.

6.12(v) QUESTION 2

The second question is about how the organisation at Open Door affected the implementation of SPRITE. The sub-questions below look at centre characteristics, centre resources, and user group characteristics. A list

of factors that supported and impeded the development of SPRITE at Open Door are then presented.

6.12(vi) CENTRE CHARACTERISTICS

One of the distinctive characteristics of Open Door was that it was a well-established centre used by a variety of local groups (7,8). Therefore in theory there were a number of user groups and individuals within the centre that could become involved with the project. This was extremely useful in that no outreach work was necessary. Indeed few new users came into Open Door as a result of SPRITE being involved with the centre. The main problem was how to get the individuals and groups who used the centre interested in SPRITE. In practice a number of groups were introduced to computers as a result of SPRITE's presence including women from the weekly women's day (28), the single parents group (40), the young lads from the card school (22), and the collection of users who made up the identifiable SPRITE user group. Therefore when SPRITE began at Open Door, there was no shortage of potential users.

The fact that Open Door was an established organisation was reflected in the structure of the centre. The management committee had had enough time and experience to be able to work out a successful formula for the effective representation of user perspectives in the process of organisational decision-making (4). The emphasis of the centre on user control and participation (5), meant that the philosophy of SPRITE could be accommodated in line with the structure of Open Door. The centre's emphasis on providing the community with resources (3), also meant that it fitted

well into the brief of the SPRITE project.

Other elements of the centre's structure however, seemed to inhibit the participation of users within SPRITE. These related to the way that the centre workers' roles were organised. They were there both to support and develop activities within the centre as a whole, whilst encouraging the philosophy of user control. When SPRITE first began at Open Door the users took the responsibility for monitoring and developing the computer resource with an enthusiasm that almost excluded the rest of the centre (26). However once things became difficult in the centre politically (29), the fact that the centre had two workers meant that the SPRITE users could transfer responsibility for the development of the resource onto them. Their argument became that, as SPRITE was a resource for their centre, it was the responsibility of the centre (ie: management committee and workers), to support and develop that resource (36).

For example before October 1986, although the SPRITE users had recognised that supervision of the resource was a problem, they had always accepted the responsibility for dealing with that problem (20). However after that time they began to expect the workers to supervise the facility (36), as they saw it to be within their work role. This change of attitude occurred at the same time as the political upheavals at Open Door and as well as a way of attacking the processes within the centre that they didn't like, it was also a defensive measure, in that problems with SPRITE could be blamed on the centre workers.

It is impossible to know what would have happened if the resourcing of the

centre hadn't included two project workers. However, to some extent, this structure did provide the users somewhere convenient to attribute blame when things went wrong. The lesson to be learnt from this experience is that the boundaries of control over the computer room needed to be clearly worked out before SPRITE entered the centre. There were a number of reasons why this process hadn't happened. Firstly, Open Door was the first centre that SPRITE went into and SPRITE workers, centre users, and centre workers were keen that the project be implemented there as soon as possible (13). As SPRITE had no previous experience of being in centres, the important issues to be thrashed out hadn't been recognised. Secondly, the workers at Open Door, like most community workers during times of scarce resources, were determined to get as many resources for their centre as possible. Therefore many of the potential problems of the implementation may have been overlooked, and in particular the issues surrounding control of the resource. Thirdly, SPRITE's emphasis on the philosophy of user control meant that in early discussions the project workers were particularly keen to negotiate with Open Door's users rather than workers. Some of the workers early concerns about the implementation of SPRITE were not given the attention they deserved because the project workers saw their priority as responding to the needs of the users, in line with the SPRITE philosophy.

Another characteristic of Open Door was its' situation. The siting of Open Door meant that it was easily accessible to the local unemployed population and was well-identified as being part of the local community (1). However this did have some problems for the role of the centre within the project as a whole. As the centre was a 20 minute bus journey from the city it

meant that when the bus fares in Sheffield increased, it was expensive for users to travel from town to the SPRITE project base. Therefore few Open Door users visited SPRITE on the weekly open day. SPRITE users from the other centres also experienced similar problems when visiting Open Door. Although links with other centres were made (15,21), these were inhibited by the time and money that was necessary to visit the centre.

To conclude, the most important characteristics of Open Door that had an impact on the development of SPRITE were related to the fact that the centre was already well-established when SPRITE became involved. Routines for bringing new groups into the centre were already tried and tested, and to some extent this accounted for why the centre management committee and workers were not well-equipped to respond to the SPRITE project. In essence, the integration of SPRITE fully into the centre would have meant a change in working practices and attitudes of the centre workers and user groups. The lack of resources in personnel terms meant that Open Door as an organisation was used to responding reactively to small changes or expansions in the everyday life of the centre. SPRITE however, as a case of organisational change, required a more proactive approach to enable the organisation to deal with the issues that it provoked.

6.12(vii) CENTRE FACILITIES

The most valuable resource at Open Door was its' excellent creche facilities (1). These enabled many women to use the centre (7) and ensured that it was a useful base for women's activities within the local area. This clearly had an impact on SPRITE's development in that some of the

keenest members of the SPRITE group were women. Over 30 women had an introduction to computing through the SPRITE classes that were held on the weekly women's day. These women were almost a 'silent' part of the SPRITE project in that during the implementation they confined themselves to being involved with the Wednesday classes only (28) However SPRITE had more female users here than at any other centre involved in the first stage of the project. This would appear to be a direct consequence of the creche facilities that the centre provided.

Unfortunately the centre didn't have any facilities for people with disabilities being situated on the first floor (1). Although two people with disabilities became involved with the project, both of them were mobile enough to manage the stairs.

The centre generally had other good facilities. The coffee bar meant that SPRITE workers and users had somewhere pleasant to talk in an informal setting outside of the computer room with non-SPRITE and SPRITE users. The printing facilities (1) meant that many of the SPRITE users had had experience of printing leaflets before they became involved with the project. On the one hand this created an interest in the users in the desk-top publishing aspect of the project (27). However, it did have some disadvantages, for example the centre users were used to printing perfectly adequate leaflets without computers. The centre also had a sophisticated electric typewriter with some memory store, therefore again users could produce professional looking documents without going through the trials of learning how to word process. To a certain extent, the presence of such facilities at Open Door discouraged centre users from becoming involved

with SPRITE. This was particularly true of the users who were political activists and spent a lot of time using the printing facilities.

The major resource problem that the centre had was lack of space (14). This had clear implications for the development of SPRITE. The response of SPRITE was to build a computer room in the main hall (14). Although this was useful for teaching sessions in a quiet environment, in practice it created a real physical barrier between the computing activities and the rest of the centre. For a user outside the project to see what was going on in the computer room they actually had to venture inside to take a look. Although this had implications for supervision, additionally the construction of the room had created a psychological as well as a physical barrier. It could be construed that SPRITE happened within that room and nowhere else within the centre. In hindsight the building of the room was a bad move for SPRITE, although at the time there didn't seem to be any alternative way to respond to the lack of space and security within the centre.

Another problem at Open Door was that as the centre's activities had increased, the level of resources had remained the same. Although the centre was going from strength to strength, it did not have the personnel to adapt to the increasing volume of work (13). The workers continual rumblings about the amount of work they had to do (16,24,38), reflected this problem.

However despite the problems with space and personnel, Open Door clearly had some useful resources, such as the creche facilities. These facilitated

the development of SPRITE. However the question must be asked about whether the centre really needed a computer facility with the printing resources that it already had. Although the introduction of computers could have enhanced already existing facilities, the computer facility was not successfully integrated into the centre as a whole.

6.12(viii) USER GROUP CHARACTERISTICS

The most distinctive feature of the group that was identified as the SPRITE user group was that rather than being a coherent group, they were more a collection of individuals (11). Within that collection of individuals there were particular sub-groups (11), however generally the common theme that brought them together was an interest in computing. The identity of the group was forged from their involvement with SPRITE, rather than on any pre-existing characteristics.

In terms of skills, none of them had any computer experience apart from game-playing before becoming involved with SPRITE, however they had considerable community experience as a result of being users of Open Door (12). This proved to be beneficial in that it helped them to define their aims in terms of providing a community resource (13,19). They also had the motivation to develop computer skills (12). What is interesting about the development of the group is that once they had developed the basic skills by the Autumn of 1986, no further advancement was made. There were a number of reasons for this.

Firstly the majority of the user group at Open Door had important

commitments outside of the centre. Of the initial group of twelve, eight had family responsibilities. These were particularly evident for the women, who often had problems conveying to their husbands the notion that being active in the community was a worthwhile activity (47,51). Therefore committing a large amount of time to the project, like the Space group for example, was not an option for most of them.

Secondly, in September 1986, many of the original group had progressed into further education or found part-time employment (28). Although this was encouraging in that most of those activities were computer-related and a direct consequence of their involvement in SPRITE, the decline in the number of users had an impact on the person power available to work on projects. This therefore affected SPRITE's development.

Thirdly, there were the political problems at Open Door that led to some of the users leaving altogether (29,30).

As a result of these factors the original user group no longer existed by December 1986 (32). Other individuals entered into the project and it was they who became the new user group who regularly attended the SPRITE sessions. This group again was essentially a collection of individuals who shared the common aim of working with computers.

The first series of training sessions at Open Door (17) progressed as they had done at any other centre. However the nature of the new SPRITE group that emerged after December 1986 meant that SPRITE training had to be continually adapted to suit individual needs (35). In practice this meant

that it was very difficult to work on community projects. The SPRITE workers had to teach a number of individuals different aspects of computing at the same time (41), which was understandably quite a difficult task. Where community projects did develop, it was the result of the concerted efforts of an individual user with SPRITE worker support (41).

The work that SPRITE did with the single parents group (34) was the only time that the project was involved with an existing group who had a shared interest beyond that of developing computer skills. This group fits clearly into Politser and Pattison's (1980) classification of a 'self-interest group'. The group emphasized mutual support and protecting their interests against the outside world. In terms of outcomes the work with this group was probably the most successful of all (40). This suggests that SPRITE has the most potential with already existing groups, although environmental factors would moderate the extent to which this is the case.

Therefore the constitution of the user group clearly had an important part to play in the way that the SPRITE project progressed at Open Door. It appeared that their common ground, their interest in computers, was not enough to keep them together in the face of outside hassles (30) and what were perceived to be (understandably) important commitments (28). The lack of group cohesiveness had important implications for training within the centre (31) and the general implementation of SPRITE. Although their enthusiasm encouraged the SPRITE project workers, the lack of continuity made it difficult for the potential of SPRITE at Open Door to be achieved or sustained.

6.12(ix) SUPPORTING AND INHIBITING FACTORS

From the discussion of the data in the last section, the following list of supporting and inhibiting factors have been derived:

1. Factors that supported the development of SPRITE at Open Door:

Centre characteristics:

Well-established and well-used centre.

Centre facilities/resources:

Good creche facilities.

User group characteristics:

Initial enthusiasm of group.

2. Factors that inhibited the development of SPRITE at Open Door:

Centre characteristics:

Lack of support from the workers and management committee which provoked political tensions within the centre.

Centre facilities/resources:

Lack of space (ie: the computer workshop).

User group characteristics:

Lack of cohesiveness within SPRITE group resulting from the lack of a shared goal other than an interest in computers.

This list will be returned to in the next chapter where cross-site analysis considers the differences between the way SPRITE was implemented in different centres.

6.12(x) QUESTION 3

The third research question is about the impact that being involved with SPRITE had for the individuals within Open Door. This includes the skills that the users developed and any psychological benefits that they felt they gained.

6.12(xi) USER SKILLS

Evidence suggests that a lot of users at Open Door gained new skills from being involved with SPRITE. Apart from the key user group a large number of people used the facility at some time during its' implementation at Open Door. For the core user group the major benefit from being involved with SPRITE was in developing those computing skills (45). As a result of the introductory sessions some of the users chose to do more formal courses and two of them went on to find work in computer-related areas (28). Therefore for the group as a whole, their new skills had opened up a new area in which they could attempt to find work (46).

For the women at Open Door, an important implication of them gaining computer skills was that they could now have a greater understanding of how their children were using computers at home and in school (45). Therefore these computer skills were not just perceived to be useful to employment settings but also to other important spheres of their lives, such as their home life.

Therefore the presence of SPRITE at Open Door led to a number of users at

the centre developing computer skills. As well as the core user group a number of centre users had passed through the introductory computing sessions that had taken place on the weekly women's day (53). Therefore that group of women had become familiar with a number of computer applications.

6.12(xii) PSYCHOLOGICAL BENEFITS

The core group of SPRITE users all believed that they had developed new skills. However there were clear differences within the six people interviewed with regard to the psychological benefits that they reported. The three women in the group all stated that involvement with SPRITE had given them increased confidence (45). This confidence was perceived to be the consequence of developing skills and meeting new people. It was also reported by the members of the single parents group.

These results are interesting in that this group of women used Open Door on a regular basis and were therefore not stuck alone at home with their children every day. For them what was distinctive about their involvement with SPRITE was that it introduced them to different kinds of people from outside their local community, such as the Space users, or the people who worked in Computer Services for example (18,21). Therefore, despite being actively involved with a community centre, they were also keen to meet people from other walks of life. This was perceived as of crucial importance to the women within the sample, but was not mentioned by the men. The SPRITE activities outside Open Door such as the Northern College weekends were particularly appealing to the women and it was those kind of

activities that their husbands tended to object to the most (47). Therefore these women clearly got some psychological support from being involved with Open Door, and their involvement with SPRITE meant that they could extend their social networks beyond their local community. For the men however, the acquisition of skills was seen to be the most important outcome of being involved with SPRITE.

This group were different from the Space users in that their family commitments meant that they already led quite active lives. It was difficult for them to put much commitment into SPRITE as their priorities lay elsewhere. Despite this, they managed to maintain an interest in SPRITE at Open Door which they clearly saw to be to their benefit.

6.12(xii) QUESTION 4

The fourth question is about the extent to which users at Open Door influenced the development of the project within the centre. Evidence suggests that they all believed that they had a say in the way SPRITE operated (48) within the centre on a day to day basis. However this influence was confined to what happened within the computer room. As with other centres though, it was up to an individual how much say they had (49).

At the beginning of the project the users had regular meetings about how the room would be managed (19). These meetings often took place without the SPRITE workers and the users took it upon themselves to make decisions about how the room was to be administered and used. Therefore during this

period they were clearly controlling what happened with the computer facility. These meetings went well at the beginning, however when the number of people involved with the management of the computer facility declined, it was a lot harder for the group to control what happened within the computer room. At this stage the users left it to the SPRITE workers and the centre workers to supervise what happened within the computer room. Regular SPRITE user meetings at Open Door stopped taking place and the remaining users relied heavily on the SPRITE project workers for a sense of direction. It was far harder for individuals to have any influence without the support of a strong user group behind them.

6.13 EVALUATION OF AIMS

The purpose of this section is to discuss to what extent the aims expressed by the users involved with the project at Open Door were achieved. The aims expressed by the users (13,19) were:

1. To provide another resource for the users of Open Door;
2. To develop a community computing resource for the local community;
3. To provide an information system for the local community.

The first aim was clearly achieved in that SPRITE was another resource that Open Door users could draw upon. The computers could be used by the groups that used the centre and individuals could decide to go to particular training sessions that suited their needs. Therefore the resource was established and was generally accessible to those users in the centre that wanted to become involved.

The second aim of developing a computing resource for the community was not achieved. Although there was a resource in the centre that in theory was open to all the local community, in practice few people from outside the centre came in to use the computers. Attempts to bring in new groups that operated within the local area failed (42). So although the resource existed, it was not developed to the extent that publicity could be used to attract people from outside the centre. Instead, the energy of the SPRITE

users and workers was directed within the centre and was focused on building the resource by working with existing centre users.

The third aim, to provide an information system for the local community, was one that the SPRITE users were working towards throughout their involvement with the project. The users initially envisaged that such a system would include all types of information (19) and would be easily accessible to any member of the community who dropped in with a particular information requirement. Although one of the users was working on an information screen which included information on all of Open Door's activities (35), on completion this could not be used outside of the computer room (41).

The barriers that prevented the centre users achieving their aims are the same barriers that inhibited the development of SPRITE. The general lack of support within the centre and lack of coherence within the SPRITE user group meant that it was difficult to work towards aims 2 and 3. Therefore although SPRITE created a resource for the centre at Open Door, the second and third aims were not achieved.

6.14 EVALUATION OF INTERVENTIONS

The aim of this section is to consider interventions that were made at Open Door from an action research perspective. The intervention that will be considered here is the package of development work that took place at Open Door between January and March 1987. This has been chosen because it was an important move on behalf of SPRITE to attempt to improve the way the

project was operating at Open Door, and was designed to accommodate all the political interests that had emerged during the project's implementation.

By December 1986 it was clear that there were problems in the way that SPRITE had been implemented at Open Door. The centre had initially seemed to have great potential to develop community computing products in that it had an enthusiastic SPRITE user group (12), and was a vibrant well-used centre (8). However none of this potential had been achieved. The evaluation had identified the following problems with the use of the facility at Open Door:

1. There had been a decline in numbers from the original SPRITE user group. Therefore the computer facility was not being used as regularly as it could be. This led to a worry about the safety of the equipment;
2. Various political problems within the centre had meant that the centre workers and management committee felt alienated from what was happening within the computer room;
3. Users attending the sessions on the weekly women's day were not feeding into the rest of SPRITE;
4. Although there was some interest in a games club at Open Door, there were no key individuals to motivate those interested to form a group;
5. Various key users who were active in other Open Door activities

were not involved with SPRITE;

6. The above factors combined had led to dis-illusionment amongst the remaining SPRITE user group.

When these factors were taken into account an intervention strategy was planned in consultation with all the interested parties. The aim of this intervention was to build up a number of groups around the computing facility who could control and monitor the use of the resource and help to integrate it more within the centre. The intervention took the form of a package of development work. This is described in paragraphs 39 and 40 of the data. Briefly the development work comprised of the following:

1. A couple of training sessions were laid on for the centre management committee and workers about how to use the computers;

2. I was employed by the W.E.A. for 10 sessions that aimed to bring new people into the computer facility. I spent three sessions working with the single parents group and two teaching the secretary of the management committee word processing. I also gave a number of users within the centre who had not previously been involved with SPRITE individual coaching on the computers. I also spent some time with the Open Door workers talking about how they could help to develop the SPRITE group. Additionally I attended the women's day sessions and spoke to the women there about what was happening within SPRITE.

3. Two Space users were employed to re-build the remnants of the computer club so as to accommodate the needs of those interested in playing games on the computers.

Whilst this work was taking place the SPRITE project workers were still running their weekly project sessions at the centre.

The results of this intervention were that temporarily more people used the computer room (paras. 44 - 47). However this impact only lasted a few months, much to the dismay of the SPRITE workers and regular users.

Although the games club continued for a couple of months, it fizzled out to just a few members when the support of the Space users was no longer available. The sessions for the workers and the management committee were badly attended despite being arranged for a time that was convenient to them. Some new centre users did become involved with the facility, however they tended to use it on an individual basis and their involvement diminished as time went on. Although some of the women from the women's group attended the user meeting at the end of the development work (37), as they tended to use the centre only on a Wednesday, their involvement remained limited. The only real success of the development work was that the single parents group became actively involved with the project at Open Door and SPRITE as a whole (40). Therefore as the expected new input to SPRITE did not materialise, the regular users remained dis-illusioned.

Although this intervention had some success, most notably with the single parents group, it generally did not achieve its aims. Initially it seemed that SPRITE could not function at Open Door without continual input from

the SPRITE or sessional workers. For example during the first couple of months of SPRITE's implementation, when there were many people involved with the project, the trainee from the W.T.T.W. was always on hand to deal with any problems (17). The games club also worked well when there was support from the Space users (22,34) but fizzled out at other times. This was the first interpretation of events by myself and the SPRITE workers. However after further analysis of the data from the evaluation at Open Door, it became clear that the reason for the failure of the intervention was that it was addressing the wrong problem.

The problem that the SPRITE workers, users, and myself felt was responsible for the original decline in activity at Open Door was that there was no longer a strong user group who were prepared to put some commitment into SPRITE. Therefore all the development work was aimed at building a user group, or bringing into SPRITE new users who had the personality characteristics to take on that task. However the major problem was with the organisation of SPRITE and the centre generally in terms of integration. The political problems at Open Door meant that SPRITE had never been successfully integrated into Open Door as a resource for the centre. This had prevented the management committee and centre workers from being interested in the project, since they associated it with a particular group of users that were seen as atypical to the centre as a whole. Therefore the approach that the intervention took of attempting to build a group was not appropriate in this organisational context. Rather, greater efforts should have been directed towards discussing with Open Door's management committee and workers how the project could become a centre resource, therefore trying to ease the communication problems that had

emerged. Although discussions along those lines had previously taken place without much success, more open discussion at this stage could have led to the support of the centre workers and management committee for SPRITE. This might have had a more beneficial impact on the project.

The incorrect diagnosis of the problem was a consequence of the emphasis of the SPRITE philosophy. SPRITE's philosophy meant that its' primary consideration was in building groups around computers. Therefore when problems emerged the group was always the first focus of analysis. SPRITE's major consideration was to work with centre users rather than workers or management committees, therefore within that framework the project was more experienced in addressing problems at the group level. Therefore in effect, the philosophy of the project with its emphasis on users and user control, meant that any problems were addressed at that level. In retrospect one could argue that this was naive, in that users were viewed independently from their organisational context. The lack of recognition of the importance of the organisational context was at the root of the problems that were associated with SPRITE's implementation at Open Door.

Despite the relative failure of this intervention many lessons were learnt about how SPRITE should have been implemented within Open Door. It also provided some indications about how to approach other centres that were to become involved with the project at a later date. Perhaps the most important lesson learnt was that when approaching new centres SPRITE needed to be more aware of the political dynamics of a centre and the views of the various stakeholder groups involved. Rather than focusing entirely on the user group, in line with the project philosophy, clearly other interests

need to be taken into account.

The process of intervention will be discussed in more detail in Chapter 9 which considers the implications of the action research model that was used in the evaluation of the SPRITE project.

6.15 SUMMARY OF OUTCOMES AND CONCLUSIONS

The previous sections have described the results of the implementation of SPRITE at Open Door. The purpose of this section is to summarise the outcomes that resulted from SPRITE's involvement at Open Door between May 1986 and September 1987.

1. THE CENTRE: SPRITE's involvement at Open Door led to the creation of a computer resource and enabled a number of centre users to acquire computer skills. However the implementation of the project encountered many problems as a result of its lack of integration into the centre as a whole. SPRITE also exacerbated some of the political problems that already existed within Open Door.

2. THE USER GROUP: The user group that originally became involved with SPRITE at Open Door were more a collection of individuals than a coherent group. Consequently, when problems began to emerge with regard to the implementation of SPRITE, the user group collapsed. Therefore after the first few months they had little control over the computer facility.

3. INDIVIDUALS: A number of individuals gained computer skills as a result of SPRITE being located in Open Door. Some of the users, notably the women, suggested that their involvement with SPRITE had helped them to increase their confidence with regard to returning to the labour market. It also provided them with sufficient knowledge so that they could talk to their children about computers, and gave them a chance to expand their social networks. For the men SPRITE provided them with the opportunity to develop

new computer-related skills. Some of the original user group went on to more formal computing training and two of them gained part-time computer related work in offices, one in a Citizens Advice Bureau and one in a Building Society.

4. PRODUCTS: It was difficult for projects to develop at Open Door as by the time the users had acquired basic computer skills, there were insufficient regular users to maintain the motivation around any particular project. Although an information screen was designed, for security reasons it was not accessible to users of the centre without constant supervision.

SPRITE succeeded in providing a computer resource at Open Door and training a number of users in basic computing skills. However the problems that emerged with the centre inhibited the development of the project in terms of the creation of community computing products. In terms of person-hours, more resources were directed into Open Door than any other SPRITE centre, however the centre failed to live up to its expected potential. Despite the enthusiasm of a number of centre users the project was never integrated into Open Door which prevented it from being accessible to the majority of users. This was a result of a lack of awareness of the political problems from the SPRITE end, and a lack of support for SPRITE from the organisation. More insights will be provided into this situation in the cross-site analysis which considers why SPRITE worked differently at Open Door than it did at SADACCA or the Space.

6.16 SADACCA: THE CENTRE

(1) SADACCA stands for Sheffield and District Afro-Caribbean Community Association. It is a large community centre in Sheffield City Centre designed to cater for the needs of Sheffield's Afro-Caribbean community. SADACCA occupies a large building which has been renovated by members of the city's Afro-Caribbean community under a building scheme financed by the M.S.C. The building was opened by Clive Lloyd in April 1986. The centre is beautifully decorated and well-laid out with a number of rooms for specific activities. Facilities include community workshops, office space, a recording studio and music rooms, video suite, dance hall, cafe and bar. A number of groups meet within the building and various Adult Education classes take place there. Disabled access to the building is good and part of the third floor is for women only. There is also a creche that runs throughout the centre's opening hours.

(2) SADACCA is run by a management committee that was formed from representatives of the different groups working in the Afro-Caribbean community before SADACCA existed. The centre has an educational ethos and is concerned with promoting opportunities within the Black community through training and education, as well as providing facilities for recreation. The management committee holds a meeting once a month to which all centre users are welcome to attend. They employ seven full-time staff with various responsibilities, for example Centre manager, Administrator, Financial Controller, Bar Manager etc. The centre also has over 80 staff who are financed by the M.S.C.'s Community Programme Scheme. These staff are mainly part-time workers. This position will change considerably when

Community Programme is abolished in September 1988. The centre clearly has extensive resources, both in terms of personnel and facilities.

(3) The initial aim was for SPRITE and SADACCA to work together to provide computer training for the Afro-Caribbean population. One of the users described the centre's aims with regard to SPRITE in the following way:

" When SADACCA was setting up it wanted a computer based resource in the centre and the management got in touch with SPRITE. It was a dual venture setting it up. SPRITE have chipped in a lot of money but SADACCA have got some equipment as well. The idea was that SADACCA would advertise for people to come along, and get people to come along and use the computer facility. It's primarily for Afro-Caribbeans though, because we thought that SPRITE would be working with other groups where the indigenous population were different."

(4) Therefore in deciding to work in SADACCA, SPRITE was addressing itself to a particular target group within the unwaged population: Sheffield's Black community.

SPRITE began sessions in the centre in May 1986 and still had strong links with the centre when the fieldwork ended.

6.17 THE SPRITE USER GROUP

(5) The user group that SPRITE became involved with were more a collection of individuals than a regular user group at the centre. Early discussions between SPRITE and SADACCA had taken place before the centre opened, therefore the centre had no user groups as such at that time. Consequently the individuals who became involved with SPRITE were new to the centre as well as to the project.

(6) The initial user group that attended the SPRITE sessions after the open day consisted of six people aged between 18 and 35: four women and two men. Most of them had family responsibilities and were quite active outside of their involvement in SADACCA. Before joining SPRITE the four women in the group had all been on typing courses and were therefore familiar with keyboard layout, however none of them had used a computer before. Of the two male members of the group, one had been on a short computing course at college and the other had had no previous computing experience. Therefore not only were the group new to the centre but also new to computers.

The next section describes the processes by which SPRITE developed at SADACCA.

6.18 SPRITE AT SADACCA

(7) The SPRITE project had initial discussions with the workers at SADACCA about the implementation of the project in January 1986. SADACCA had successfully bid for Urban Programme funding for a computer suite. Therefore the agreement was that SADACCA would pay for the furnishings of the computer room and provide four BBC machines. SPRITE in turn would provide the centre with two Commodore 64s, an Atari ST, and an Amstrad PCW8256. At early meetings it was agreed that SPRITE would work closely with the Adult Education worker who was to run computer classes at the centre. The main topic of discussion became how to get people interested in using computers at SADACCA. It was decided that SPRITE would put on a computer exhibition to attract prospective users into the project, during the first week after the centre opened.

(8) The exhibition took place in May 1986. A number of people said that they were interested in taking part in SPRITE, though by and large the exhibition was monopolised by the children who were in the centre on that day. SPRITE began sessions in the computer room at SADACCA on May 23rd. Over the next few months the project ran introductory sessions as they had at the other two centres, introducing users to the machines and applications such as word-processing and database use. About six people regularly attended these sessions. In general they were different from other users within SPRITE in that their aims were clearly educational. Although they were concerned to develop a community resource they were also keen to use computers to enhance their chances within the labour market:

" I think that computing is so important today that to have just a little bit of experience in the field is important, if I went for a

job, well I may not be brilliant at computing, but at least I've done a little bit, I know a bit about word processing etc. "

Therefore their emphasis was on education and training, in line with the aims of SADACCA.

(9) In June 1986, five of the users went on the first SPRITE weekend to Northern College. Here they suggested that the major problem of the group at that time was the number of people attending the SPRITE sessions. They were keen to increase the number so that they could begin work on projects. Some of the users pointed out that the computer facility was well-used outside of the SPRITE sessions, for example in the evenings and weekends. The group felt that the reason that only 5-6 people attended the SPRITE sessions was because they had not been well-publicised. This was a comment addressed to the centre as a whole, not just the SPRITE project. An excerpt from that discussion is shown below:

(10) Susan: But a lot of people do not know what SADACCA is saying, they don't know what's inside the building. I didn't know. If my friend weren't working down there and I didn't go and see her, I wouldn't know what was happening down there

Kevin: Well I think that part of the problem is to do with information not being spread around, yeah, but overall it's partly to do with people as well, people really want it on a plate for them, they're not prepared to make an effort because a lot of things are done to publicise events that go on there.

Steven: But you keep talking about people who use the SADACCA centre, everything's not just set up for people who use the SADACCA centre ...

Susan: No. It's for the community.

Steven: All I'm saying is that people don't know that there's computers there.

Kevin: I think it's always going to be a problem, publicity, actually informing everybody

Steven: I'm just saying that more people could have been reached.

Kevin: Just one final point, I think that the SADACCA centre has been

equipped marvellously with computers, and I think it's a tremendous facility for the community, it's good to know that there are groups going in regularly who are using the facilities, but also there are people who go in at different times. Admittedly they are people of school age who use it mainly on the weekend, they know what they're doing and I let them in, they use the machines to occupy themselves for a couple of hours, so there are people who come in and use the machines at other times, if we can build on that, maybe get a computer club going in the evenings so that the machines can be used and people can have more access then, that will be a good thing, but that's something we'll have to work on in the future."

(11) Therefore issues surrounding the use of the facility were aired on this weekend. The users agreed that after the weekend they would ensure that posters were put up all around SADACCA to advertise what was happening in the computer room. The weekend also allowed the SADACCA users to meet other users of SPRITE from the Space and Open Door. This formed the basis for links that would develop between the centres.

(12) In September 1986 some of the users within the group left the SPRITE project. Two of the users got part time jobs, and two, who had been living in Britain temporarily went home to Zimbabwe, and India respectively. Therefore only three people: Susan, Steven and Laura were regularly attending the SPRITE sessions. The W.E.A. was financing a tutor at the centre one afternoon a week who under the direction of SPRITE was running a drop-in session. Here users and workers would drop in with computer problems that the tutor would help them sort out. The remaining users were quite keen to get involved with projects. As one of them said:

" I think it would be nice if SADACCA could do some project that actually works, that people from SADACCA are involved in to set up and in the end works, that would be a nice sort of plus for the people, nice sort of confidence booster as well, it would be good to set up a project and be able to see it working, being able to set something up that is useful for the centre, it would be a good idea to have something like that."

(13) By November it was clear that there was a continual shifting

population of centre users who attended the SPRITE sessions. A number of centre workers also used the computer facility for their administration work. In practice the distinction between centre users and centre workers was somewhat blurred, in that most of the workers were on Community Programme schemes and had been recruited from the centre users.

(14) At this stage the project workers had discussions with the core group about how SPRITE should develop within the centre. The users described their frustrations with the present situation:

" The problem with the SPRITE group is that we need more users 'cos at the moment if you think about it there's only really me and Steven, I mean you've got people dropping in when they want to, sometimes they come back and sometimes they don't, but if we could get more users. More people is all we need."

" There's still the problem of getting people in. Thursday is one of our best days, that's when we have people in in the mornings and the afternoons, and Wednesday nights, sometimes you have a lot, but most of the time you only get about four or three. "

(15) A number of ideas emerged about how to bring more people into the project. More publicity was put up in SADACCA about the SPRITE sessions. SPRITE also held a big open day at SADACCA to which all the City Councillors were invited. The aim of this was to publicise the SPRITE project as a whole but it also brought SPRITE out of the computer room and therefore publicised the project to SADACCA users.

(16) In December 1986 SPRITE were approached by the Information Officer at SADACCA. She had been asked by the manager of the centre to computerize the information held about members of the SADAC club. It was decided that after christmas the SPRITE users would work with her to design an appropriate system. This would give the SPRITE users a worthwhile project to work on

that could be useful to other community groups. Outside of the SPRITE sessions, the computer facility was being well used. A chess club were using it on a Tuesday evening; an Adult Education class was running on a Wednesday evening; and the youth club were using the machines on a Saturday.

(17) In January 1987 discussions took place between the SPRITE users, workers, and the Adult Education tutor about what kind of sessions to run over the next few months. At that meeting it was agreed that a drop-in class would be run by SPRITE to respond to the needs of the shifting population. Two more formal classes were also proposed: one run by the SPRITE workers which would concentrate on the development of the database for the SADAC club, and the other run by the Adult Education tutor which would focus on Systems Analysis. Therefore the needs of the SADACCA workers and SPRITE users would be catered for.

(18) An important development occurred at the beginning of 1987, in that SADACCA gained money to finance the post of a part-time Computer Technician for a year, under the VPP scheme. This job went to a SPRITE user: Steven, whose role was to organise the software within the computer room and also help with the sessions. This meant that there was someone on hand to supervise the use of the facility, and attend to the needs of the workers, and other SADACCA users who used the computers now and again. At this time another keen user also joined the core group of three. He had come into SPRITE through the Space but began to attend sessions at both centres.

(19) The project sessions began by considering the issues surrounding the

computerisation of the membership list. The merits and problems of a number of database packages were evaluated. During this period the drop-in sessions were also well-attended. The Adult Education worker however, decided to cancel his sessions as there seemed to be a lack of demand. Clearly there were still problems about regular attendance at sessions.

(20) In February 1987, SPRITE held a second weekend at Northern College. As well as the four key users, four of the C.P. workers from SADACCA attended the weekend. During the weekend it became apparent that this group were particularly concerned with gaining qualifications around computing. Indeed three of the four key SPRITE users were taking formal qualifications in computing outside of their involvement with SPRITE. As well as attending the SPRITE sessions they used the computer facility for their coursework and homework. The workers on the other hand, despite being interested in using SPRITE to help with the administration of the centre, found it difficult to attend any of the SPRITE sessions because of their work commitments.

(21) In March 1987, it seemed obvious that the project needed to re-think the way that SPRITE was working at the centre. Although the database project had folded because the Information Worker had left suddenly, the facility was still being well-used and the support of the computer technician had encouraged the involvement of new groups. SPRITE users from other centres were having their weekly newsletter meeting in the SADACCA computer room as it had the best facilities. This meant that the regular SPRITE users at SADACCA had good contacts with the other SPRITE centres and users. A SPRITE user from the Space was also running a regular session with

a group of mentally handicapped people who used the computer room at SADACCA. This was being financed by the W.E.A. SPRITE had also been approached by the Financial Controller at SADACCA who wanted help and advice with a computer accounts system for the centre.

(22) What became clear was that the computer facility was being used in a constructive manner and as a community resource. The only sessions that weren't well-attended were those ran by the SPRITE project workers. At this stage the project workers and myself, after consultation with the SPRITE users, decided that they would stop running these regular weekly sessions as there didn't seem to be a demand for them. In practice SPRITE had helped to create a community resource and could now take a back seat in the development process. This was particularly useful in that SPRITE was now working in five centres and demand for project worker time was considerable. It was agreed that the workers would continue to support the facility through working on the computer accounts system project, but that their regular involvement would end there.

(23) The aim of the computer accounts system was to design a computer system that would incorporate a cash book, a pay roll, and a fixed asset register. The design team was to consist of the relevant workers and users at SADACCA; representatives from SPRITE; Micropraxis (a software collective with whom SPRITE had good links); and the City Council Computer Services Department who had agreed to provide their expert advice. This design team would meet twice fortnightly. It was also proposed that in line with the desire of SADACCA users to gain formal training, these design sessions would run in conjunction with a weekly office skills class run by the

computer technician. Students from the office skills course would then attend a course in database management at Granville College, a local Further Education college in Sheffield. SPRITE would negotiate the content of this course which would provide students with a City and Guilds Certificate on course completion.

(24) The office skills training scheme began on April 24th 1987. This course seemed to have a particular appeal for the SADACCA users. Steven, the user who became the computer room technician, summed it up in the following way:

" The course, that's what I've wanted, I mentioned it a long time ago when I first came to SPRITE, I've been saying that all the time, that's something that I've always wanted, something more formal, a more formal qualification. Most definitely that is what people at SADACCA want, people I've talked to, 'cos some people I've talked to they say " oh yeh, I'd love to come down but what do you get at the end of it?" Then they say "Well I'll be better off going to college then, wont I?". They want computers to give them jobs, but I don't think that they look at it as giving them jobs, rather as giving them an edge, so they can produce a piece of paper saying that they can do that."

(25) From April 1987 SPRITE had less input into SADACCA. The project workers provided technical and moral support to the office skills class, and went to the meetings of the system design team once a fortnight. Additionally they focused their energies on negotiating the curriculum for the database management systems course at Granville College. This was quite an exciting development for SPRITE in that it set an important precedent. A local college was responding to the needs of a particular community group in the design of a course curriculum. The users at SADACCA articulated their needs which were accounted for within the course design and structure.

(26) Over the next few months the office skills classes progressed well and a number of people were prepared to enrol for the City and Guilds course when the fieldwork finished in September 1987. One of the SPRITE users who had been with the project since the beginning, described the position they were at in July 1987:

" Before September we'll be putting the accounts on the computer and then in September they'll be giving us a course in spreadsheets and databases. We've got to be at Granville one day a week, so hopefully at the end of it we should get a certificate, a recognised certificate. Plus we're supposed to be writing a wage packet, the idea is to get people to know about accounting first and then get them onto the computers. We've got quite a few though, we've got a big class, and of a Wednesday night we've got a computer club. There's about 12 of us and a lot have joined lately because they didn't know about it before. "

(27) Therefore as the fieldwork came to an end, the SPRITE workers were having little input into the centre as such, but the computer facility was developing considerably. There was also scope for the development of an accounts system that would be useful to other community groups.

(28) During the implementation of SPRITE at SADACCA there were only three regular SPRITE users. Therefore only these three users were interviewed, although on two separate occasions. This group were quite out-going and had a strong identity to other members of the SPRITE project. This was based on them being a close-knit group who had become good friends as a result of their involvement with the project. They were well-liked throughout SPRITE and popular with the users from other centres. It was evident from their responses that they felt they had gained a lot from being involved with the project. SPRITE was seen to be important in that it provided the opportunity for social contacts:

" The point is that I enjoy being with people and you get a lot of that with the SPRITE group. I mean you can't be selfish and join the SPRITE group, it wouldn't work at all 'cos the whole thing is

about sharing what you've got. I've learned about computers and I've met new friends so there you are."

(29) Another commented:

" You get to meet a lot of people don't you, you get a wider variance of personalities, nice people as well, I think that's got a lot to do with it. I think it also makes you aware of things that are going off around the city."

(30) These SPRITE users also felt that they had developed a number of skills from their involvement with SPRITE:

" You learn a lot more about people, about communicating with people, talking to people, as well as picking up information about software, machines etc "

" If you go to someone and they say "What machine can you use?" you can turn around and say "Well I've done Basic on the BBC, I've done word-processing on the Amstrad, I've done graphics on the Atari and I've played me games on the Commodore, there's four machines that you can use."

(31) For the other users who had been through the project who completed the second questionnaire, they believed that the most important things about SPRITE were "Being aware of what a computer can do" and "Getting formal qualifications in computing". This reinforces the comments made by the computer technician earlier, that the SPRITE users at SADACCA were particularly keen to gain qualifications that would help them to get jobs.

(32) When asked how much say they had had in SPRITE at SADACCA, the three users all felt that they had been consulted about what had happened within SPRITE. They were all involved with other areas of SPRITE and were familiar with people from the other centres. Two of them had been SADACCA's representatives on the SPRITE management committee at various times, and they had been involved with presentations that SPRITE had made to conferences and funding bodies. Therefore they were not shy about telling

the SPRITE workers what they thought. As Susan said: " If anything happens that I dont like in the computer room then my voice is heard, it's true."

Another commented:

" I think it's safe to say that I've had quite a lot of say, me and Chris (the Adult Education tutor) we've talked about things and gone across to SPRITE and put it to them and most of what's happened has come from talking about what we can do. I see that as quite a lot of say."

(33) To conclude the description of what happened at SADACCA, as with the other case studies, I will add a few personal comments. SADACCA was initially the slowest of the SPRITE centres to develop. At first myself and the project workers were concerned about this situation and were keen to discover ways in which we could improve it. However when we sat back and considered the situation in the centre more closely, we realised that the computer resource at SADACCA could manage perfectly well without us, indeed it was well-used outside of the SPRITE sessions. It was when we as a project team realized this , and started to concentrate on supporting more apecific aspects of the project, that the exciting developments really began.

(34) The discussion in the next section aims to provide some insights into why this was the case. I feel that some of the initial difficulties that we had in planning the project resulted from us being three white community workers in a setting where our 'clients' were all black. It is hard to say specifically how this affected the way that SPRITE worked at SADACCA, but clearly it would have had some implications, either conscious or unconscious, for the way that we worked in the centre, and the way the centre workers and users responded to us.

(35) It was difficult to see how the computer facility at SADACCA was being so successful when the SPRITE sessions were badly attended. The other two centres where SPRITE was working at this time seemed very dependent on the presence of SPRITE workers. However only the three regular SPRITE users at SADACCA showed a keen interest in attending the SPRITE sessions in the centre. Those individuals, like the core users at other centres, contributed a lot to SPRITE. The computer facility would never had been what it eventually became without their input, and in particular, the support of the computer technician.

6.19 SPRITE AT SADACCA: RESEARCH QUESTIONS

6.19(i) INTRODUCTION

The aim of this section is to address the first four research questions in relation to SPRITE at SADACCA. As with previous case studies the reader will be referred back to the data in the previous section where necessary.

6.19(ii) QUESTION ONE

The first question is about the impact that SPRITE had on SADACCA as an organisation, this is divided into two sub-questions which address the benefits and problems that SPRITE brought to the centre.

6.19(iii) QUESTION ONE: BENEFITS

As with the other centres where SPRITE worked, SADACCA benefitted from involvement with the project by gaining a computer resource with the requisite back-up and support. As the aims of the centre were educational (2), the presence of computers at SADACCA gave members of the Black community that used the centre the opportunity to learn basic computing skills. This was important, as these skills were perceived to be crucial to the process of occupying a more advantageous position within the labour market (8). As well as providing a resource for the SPRITE users within the centre, the computer facility was also used by other groups within the centre.

One of these groups was the workers at SADACCA. The facility considerably helped the centre's administration system in that they had access to word-processors and other office applications of computing (13). This view was clear from the comments of various SADACCA workers who had attended SPRITE Northern College weekends. The development of the accounts system (23) for example, could not have been done without SPRITE support. As well as providing a useful training exercise for the users at SADACCA, the aim of this system was that it would eventually benefit the centre as a whole.

The computers also provided a resource for other user groups within the centre. The youth club used them for recreational purposes (10), as did the chess club, and the mentally handicapped group (21). Additionally a number of other individuals who weren't tied to any group dropped in to use the computers for various pieces of work they had to do.

Therefore the greatest benefit that came to SADACCA was the provision of a computer resource that could be used by many groups and individuals depending on their perceived needs.

6.19(iv) PROBLEMS

In practice the implementation of SPRITE brought no particular problems to the centre. As SADACCA was such a large centre (1), the SPRITE project within it was a small fish in a very big pool. As the project generally maintained a low profile and the user group was only small, no real demands were placed on the management or workers of the centre. Therefore SPRITE in practice did little to alter the stakeholder relationships within the

centre and consequently no problems emerged.

6.19(v) QUESTION 2

The second question is about how the organisation of SADACCA affected the implementation of SPRITE. The sub-questions below look at centre characteristics; centre resources; and user group characteristics. A list of factors that supported and inhibited the development of SPRITE at SADACCA are then presented.

6.19(vi) CENTRE CHARACTERISTICS

There were a number of characteristics of SADACCA that clearly had an impact on the way SPRITE was implemented. Firstly the culture of the centre was somewhat different to the other centres in which SPRITE worked. The emphasis was on providing a service to the local Black community (1) with education and training for greater opportunities (2) being the primary motivator behind the organisation. This gave the centre quite a different ethos from that of an unemployed centre where the emphasis is typically on providing the unwaged with support throughout their period of unemployment. The culture of SADACCA is different from that of SPRITE in that although SPRITE does provide a service to its' users, the emphasis is clearly on user control, so the users are in effect expected to construct their own resource from the supports that SPRITE provides.

The structure of SADACCA is a direct product of its' culture. The number of workers that the centre employs, means that centre activities are largely

dependent on the input of workers, rather than users. Therefore it is difficult to develop the philosophy of user control when the users are consumers of a service, rather than activists in creating that service. The fact that the initial discussions that SPRITE had with SADACCA involved centre workers rather than users (5) is a function of this, although admittedly SADACCA did not have an established user group at this time. The large number of workers also explains to some extent why the facility began to work well when a computer technician was employed in the computer room. An internal worker for the resource was seen to be the way forward from the perspective of SADACCA's management and users (18). In practice, this method of developing the resource was more effective than the approach of SPRITE, which attempted to develop the user group. SADACCA's approach fits in more clearly with the culture of the centre, rather than the culture of SPRITE.

The decision-making structure of the centre and the hierarchy of the workers (2) also had an impact on SPRITE's implementation. In practice none of the SPRITE users or workers ever attended the management committee meetings, their major contact with the organisational hierarchy was with individual workers. Although the organisation clearly had a 'person' culture (Harrison 1985), in that the role of the organisation was to provide training and recreational facilities and therefore serve the needs of the individuals within it, the centre had a clear hierarchy with individual workers responsible for particular aspects of the organisation (2). In practice the roles of these workers within SADACCA were more explicit than in any other centre. This clearly had an impact on the implementation of SPRITE in that the roles of the users were less clearly

defined. Indeed the role of users within the SPRITE culture was contradicted by the fact that within SADACCA the workers clearly controlled the resource, an issue that was never questioned by the SPRITE users. This is understandable in the context of SADACCA making a large financial input into the computer resource (3,7). It is not surprising that they expected their workers to control its' use.

Therefore the centre's structure and culture had an influence on what the users wanted out of SPRITE (3,8), and the role that the SPRITE workers played within the centre. The scenario that emerged was that the resource belonged to SADACCA as an organisation, rather than to SADACCA's users or the SPRITE project. As this view was shared by SADACCA's workers and users alike, the resource was well-used and successful with limited support from the SPRITE project workers.

The final characteristic of the centre was its' location (1). As it was situated in the city centre it was easily accessible to all the users of SPRITE. However individuals used the centre not because it was in their local area, but because they were members of a particular minority group in Sheffield.

6.19(vii) CENTRE FACILITIES

As stated within the introduction to this case study (1), SADACCA had excellent facilities. Unlike most community centres within Sheffield it is well-decorated and very well-resourced. The layout of the centre with its purposely equipped rooms had an impact on the way the centre was used. As

with the Space, users tended to use SADACCA for specific activities or group meetings during the day. In the evenings the centre was used for activities, concerts and functions.

The siting of the computers in their own room meant that SPRITE had a low profile within the centre. Individuals and user groups would not have seen the computers unless they made an attempt to discover where the computer room was. This was the case with most of the facilities that SADACCA provided. Therefore it was crucial that the computer room and the various courses offered were well-publicised within the building. This is clear from some of the comments of the SPRITE users (10).

The facilities of the building generally encouraged SPRITE users from other centres to come and visit the SPRITE group at SADACCA, for example SPRITE user group and newsletter meetings were held in the centre (21). Therefore SADACCA users had an input into other aspects of SPRITE (21,30) and generally knew what was taking place within SPRITE as a whole.

Therefore the facilities at SADACCA meant that although the project had comfortable conditions in which to work, it maintained a low profile in the centre as a whole. This had clear implications for the number of people who used SPRITE. As most users of SADACCA went into the centre for specific activities, they often would not know about the existence of the computer room.

6.19(xiii) USER GROUP CHARACTERISTICS

When discussing the characteristics of the user group at SADACCA, two different groups will be referred to. The first is the core group involved with SPRITE, and the second is the group of people who dropped in to use the facility.

The first group, although small, were very committed to SPRITE and its' aims. They were keen to bring new people into the computer room (9) and were also keen to develop community projects that would be useful to the centre as a whole (12). They had a considerable amount of psychological investment within the group and were clearly good friends. Their strong identity as a group (28) was based on them being unified as SADACCA users of SPRITE rather than on any other dimension. Indeed they got quite annoyed if anyone within SPRITE suggested that their colour alone was an organising principle for their group. Rather it was their identification with SPRITE within their centre that made them different from other users of SADACCA.

All members of this group had at sometime made the decision that they wanted computing skills to enhance their position within the labour market. What is interesting is the approach that they chose to achieve this aim. After their initial involvement with SPRITE, three of them began to go to college on a part time basis to study computing (20). Therefore they acknowledged that SPRITE would not give them formal qualifications. However they remained with the project for the other things that it provided, for example contacts with other people in an informal atmosphere (28,29), and the chance to work on computer applications for the community. Although

they successfully attempted to move SPRITE within SADACCA in the direction of more formal computing courses (24), they were keen that it maintained its' collective identity.

It is difficult to fit this group into one of the categories of community groups defined by Politser and Pattison (Chapter 2.3(v)). Rather they cross the boundaries between two categories. They are clearly a social communion group to the extent that they provided regular support for each other, however they also displayed the characteristics of a civil development group in that they were keen to develop the skills of their members through education and experience. Neither one of these functions took precedence over the other.

The other group that used SPRITE at SADACCA were those people who dropped in to use the facility. These users were mostly centre workers (13,20) who didn't have the time to attend training sessions. They used the computers for specific administrative tasks. Their use of the facility had a number of implications for the way that SPRITE developed. The main implication was that they were not concerned with attending sessions that were put on by the SPRITE project workers. This group differed from the other in that they shared the identity of SADACCA users or workers, whereas the others were clearly identified through their involvement with SPRITE. The involvement of the workers however, allowed the development of the facility into a resource for the centre as a whole.

Their involvement also raised a number of important issues about SPRITE. In the beginning it was clear that as they were workers, they were not the

target population that SPRITE was funded to address. However the SPRITE philosophy of user control meant that it was up to a particular community centre and its' users what use they made of a computing facility. As their involvement with the facility was never questioned by the SPRITE user group who didn't see a clear distinction between centre users and workers (13), this was never challenged. In practice this group were important in the development of the computer room as a resource for SADACCA. The SPRITE project workers, rather than providing them with training, became consultants who were on hand when they encountered any problems.

The fact that there were two very different groups using the facility had implications for the training process at SADACCA. Although the project progressed through the introductory training sessions as it had done at the other centres, the lack of a large coherent user group meant that it was difficult for projects to develop. It was only when the two groups came together, as with the payroll system (23), that community projects could be worked upon.

6.19(ix) SUPPORTING AND INHIBITING FACTORS

From the discussion of the data in the last section, the following list of supporting and inhibiting factors have been derived:

1. Factors that supported the development of SPRITE at SADACCA:

Centre characteristics:

Centre location.

Centre facilities/resources:

Excellent resources.

User group characteristics:

Committed user group.

2. Factors that inhibited the development of SPRITE at SADACCA:

Centre characteristics:

Philosophy of training and education.

Worker control of computing facility.

Centre facilities/ resources:

Siting of computer room.

User group characteristics:

Small group of users.

It is important to point out that this list of factors relates to the development of the SPRITE project within SADACCA, rather than the general development and use of the computer facility as a whole. This list will be returned to in the next chapter where cross-site analysis considers the differences between the way SPRITE was implemented in the different centres.

6.19(x) QUESTION THREE

The third research question is about the impact that being involved with SPRITE has on individuals within the centres, in particular in terms of skills and psychological benefits.

6.19(xi) QUESTION THREE:USER SKILLS

Evidence from the last section suggests that the core group of users at SADACCA gained computing skills as a result of being involved with SPRITE (30). Computing was new to most of them (6), yet the interest developed by SPRITE led them to more formal computing courses (20). In the same way as the Space, the users also developed non-technical skills through their work in community projects (23), where they had to understand how to act as 'consultants' to the SADACCA management in the development of the pay-roll system.

As well as providing computer skills SPRITE also enhanced the communication skills of this group. Their experience within SADACCA meant that they often gave advice to other centre users and workers about computing problems. Their involvement with the project more widely also gave them the chance to develop a number of communication skills (30), through being involved in conference presentations for example (32).

Generally these skills led to users feeling that they were more employable, indeed they all found work in part-time computer-related employment.

6.19(xii) PSYCHOLOGICAL BENEFITS

As suggested earlier, the core group of three SADACCA users chose to be involved with SPRITE for reasons other than the development of computer skills. They were particularly keen on the collective philosophy of the project (28) and the informal approach to training. Therefore for this group of SADACCA users, formal training in computers wasn't enough in that they wanted a social element within the training process. This was provided by SPRITE (28,29).

This group were similar to the users at the Space in that they constructed SPRITE within their centre so that they could achieve what they wanted from the project. They identified an important aspect of SPRITE as being the chance that it gave them to share their computer experiences with a number of other people in a community setting. The opportunity for shared experiences was a theme throughout the interviews and was clearly one of the reasons that they stayed with the SPRITE project when they were getting computer training elsewhere. Therefore to summarise, involvement with SPRITE for this small group meant that they could extend their social networks whilst learning about something enabled them to develop marketable skills.

6.19(xiii) QUESTION FOUR

The fourth question is about the extent to which users at SADACCA influenced the way the project developed within their centre. It is evident that the SPRITE users felt that they had some input into the way SPRITE

worked within the centre, however the project, as a result of its own philosophy, did not initially respond to their demands for formal training. Rather, the provision of formal training came at a later stage (23).

There was some incongruence between what the users at SADACCA wanted, and what SPRITE provided. Throughout the implementation of SPRITE the core users commented that they, and other users of the centre, were interested in attaining qualifications (24). This issue was not addressed by the SPRITE project team however, who were concerned to follow the SPRITE training programme and begin work on community projects. This would suggest that the users at SADACCA as a whole did not have much input into the processes that affected SPRITE's development. Additionally, the structure and the culture of the centre, where centre workers had a large input into decision-making, could have inhibited centre users from being more assertive about their computing needs. Although the core group had some say in day to day decision-making (32), longer term strategies were hindered by the project team not recognising the true nature of the SADACCA users perceived needs.

The core group however clearly believed that they had some input into the way SPRITE worked at SADACCA (32), though like the other centres they recognised that this input into the process was a result of their involvement.

6.20 EVALUATION OF AIMS

The purpose of this section is to discuss to what extent the aims expressed by the SPRITE users involved with the project at SADACCA were achieved. The aims expressed by the users (3,12) are shown below:

- 1) To provide a computer based resource within the centre;
- 2) To develop community computing projects that would be useful to the centre;
- 3) To provide computer training for the Afro-Caribbean community

With the first aim, the implementation of SPRITE clearly facilitated the establishment of a computer-based resource within SADACCA. This resource was well-used by workers and users within the centre and also by a number of groups (16). Therefore this aim has clearly been achieved.

The second aim was only beginning to happen when the fieldwork ended. The SPRITE project workers had found it difficult to work on projects with such a small user group. The first project had to be aborted (19), and the main emphasis for projects became the pay-roll system. This project was begun in April 1987 in conjunction with the office skills course. At the time the fieldwork ended the users were ready to attend the course at Granville College (26). To update this information, at time of writing (August 1988), the pay-roll system has been completed through the sustained efforts of the SPRITE user group. However unfortunately this system is not to be implemented. In April 1988 the Government introduced new guidelines which effectively mean the end of the Community Programme scheme. As these new

rules will have a massive impact on the organisation (during the fieldwork SADACCA employed over 80 C.P. workers), it was felt by the SADACCA management and workers that it was not worth entering all the data into a system that would in effect be inappropriate in a few months time. Rather they are waiting until the implications of the new rules are more apparent. This is clearly a great disappointment to all involved at SADACCA, however hopefully the system can still be of use to the centre and other community groups.

The third aim, to provide computer training for the Afro-Caribbean community, has been achieved to some extent and particularly within the core user group (28,30). However this training was on an informal basis until the office skills sessions began. It became evident as the project progressed at SADACCA that some centre users were concerned to gain formal qualifications in computing. Although SPRITE's aim is not to provide formal training there are some interesting issues that the experience of SPRITE at SADACCA raises.

In particular it highlights the racial distinction between the SPRITE workers and project sponsors and the SADACCA workers and users. What became evident as the project progressed in SADACCA was that the Black community have a particular set of needs in training terms that were not recognised by the SPRITE sponsors. As Black people are discriminated against within the labour market, formal training and qualifications become even more important to gain an advantageous position when applying for jobs. However the SPRITE workers and sponsors (including myself) failed to recognise these distinctive needs and organised the implementation of SPRITE along

the same lines as other centres. In hindsight, it may have been more useful to the users of SADACCA who clearly gained from being involved with the project (28,29,30), if these needs had been recognised at an earlier stage, and if formal training had then been provided. Such SPRITE sessions would probably have been better attended.

Therefore in evaluating SPRITE against these criteria as set by the users, we can see that SPRITE was successful in providing a community resource for SADACCA and in providing training to the SPRITE user group. However to some extent the success was limited by a failure to acknowledge the perceived training needs of the SADACCA users.

6.21 EVALUATION OF INTERVENTIONS

The aim of this section is to consider interventions that were made at SADACCA from an action research perspective. The intervention described here is the decision to withdraw the SPRITE project workers from regular weekly sessions at SADACCA. This represented an important decision for the future of SPRITE at SADACCA, and also raised implications for the project as a whole.

One of the first problems that was identified by the users of SADACCA was in getting more people involved with the SPRITE project (10). This problem emerged continually throughout the first 10 months of SPRITE's implementation and was clearly frustrating to the core group of users (14) who were keen to begin working on community projects (12). Although the computer facility at other times was being well-used (10,16) few people

were attending the sessions run by the SPRITE project workers (16,22).

By March 1987 it became apparent to all involved within the project that some intervention should be made. The following factors had been identified by the evaluation:

1. The existing group of users wanted some kind of formal training;
2. The SPRITE users at SADACCA were concerned that they were wasting the SPRITE workers time by expecting them to attend the centre for twice weekly sessions. They had achieved an appropriate standard of computing knowledge to work by themselves within the computer room;
3. The presence of the computer room technician at SADACCA meant that he was now effectively servicing the needs of the SADACCA workers who dropped in to use the facility for their administration or for help with particular computing problems;
4. As SPRITE was currently working in five centres the project workers were in increased demand within other centres;
5. All of the core users at SADACCA regularly used the weekly open day at SPRITE's central office and therefore had regular contact with the SPRITE workers outside of their sessions at SADACCA.

When these factors were taken into consideration it was agreed by myself and the project workers, in consultation with SPRITE users at SADACCA, that the SPRITE workers would no longer visit twice weekly but would instead visit once fortnightly for the session that was at that time focused on the design of the payroll system. They would however still provide back-up to

the resource in terms of technical support. The aims of this intervention were:

1. To ensure that the facility at SADACCA was maintained at its current level without the SPRITE users feeling that they were being neglected by the project workers;
2. To ensure that the sessions that the project workers still ran at SADACCA would be utilised effectively by setting them aside for work on community projects;
3. To release the SPRITE workers to spend more time at other centres.

The users suggested that they were happy with this decision and the reasoning behind it. They did express some concern however that they may lose touch with the SPRITE workers. The project workers were initially concerned that the decision to almost withdraw from SADACCA may look like they were giving up with the facility. The question of SPRITE withdrawing from a centre had not arisen within the project before. Yet it seemed sensible as unless SPRITE was to expand in personnel terms, it would be difficult to implement the project in new centres without withdrawing from some as the project progressed. Therefore they concluded that the reason to withdraw from the project was because it had in fact been successful in creating a centre resource. Their input was no longer required to the same extent. The facility was a well established community resource and the development of projects could become the major emphasis. I believed that as SPRITE was expanding at a very fast rate the workers could no longer afford to work in a centre that was effectively self-sufficient.

In March 1987 the project workers began to visit SADACCA for the fortnightly project session only. In practice after this time SADACCA continued as the same community resource as it had been in the past. When interviewed in July 1987 two of the core users suggested that they would like to see the SPRITE workers more, but they believed that it was unfair of them to expect any further input from them as they were clearly over-worked given the number of centres that SPRITE was working in.

Therefore this intervention succeeded in a number of ways:

1. It released the project workers from their weekly commitment to SADACCA enabling them to spend more time developing new centres;
2. The resource at SADACCA continued successfully under the guidance of the computer technician;
3. The SPRITE users continued their involvement with the project despite seeing the project workers less;
4. The project sessions focusing on the development of the payroll system continued.

Therefore overall this intervention clearly achieved its' aims. The data that the evaluation collected had led to an intervention to alleviate the situation. This had been negotiated between myself, the SPRITE workers, and the SPRITE users at SADACCA. The role of such interventions is described in Chapter 9.

6.22 SUMMARY OF OUTCOMES AND CONCLUSIONS

The previous sections have described the results of the implementation of SPRITE at SADACCA. The purpose of this section is to summarise the outcomes that resulted from SPRITE's involvement at SADACCA between April 1986 and September 1987.

1. THE CENTRE: SPRITE's involvement at SADACCA led to the creation of a well-used computer facility that was useful to centre users and centre workers. It represented an effective collaboration between the SPRITE project and SADACCA.
2. THE USER GROUP: The user group that became involved with SPRITE achieved their aim of establishing a computer resource at SADACCA. Through their involvement with SPRITE they also began to identify their needs with regard to computing.
3. INDIVIDUALS: The presence of SPRITE at SADACCA allowed the small group of three SPRITE users to develop a number of skills and make new social contacts. It also introduced them to a new field of study in which they eventually found part-time employment. Two became employed at SADACCA, and one got a job on a C.P. scheme teaching computing in a local youth club. Other users who were involved with the project temporarily, also went on to study for formal qualifications in computing.
4. PRODUCTS: The lack of regular SPRITE users at SADACCA meant that it was difficult to develop products. However despite this two important products

emerged. The first was a new course that was developed at Granville College which was unique in that it was based on community consultation and geared towards the needs of the SPRITE users at SADACCA. The second product was the system that the users had devised for SADACCA's payroll. This could be useful to other similar community centres.

The computing facility was clearly a success at SADACCA in that it was used by the workers and users alike for educational, administrative, and recreational purposes. However the distinctive character of SPRITE training was not appealing to the vast majority of the centre users and consequently lack of users was a barrier to the development of the project. The progress of the project was a result of the commitment of a small group of SPRITE users whose enthusiasm encouraged the SPRITE workers to respond to their needs. The list of supporting and inhibiting factors will be used in the cross-site analysis to explain why SPRITE worked differently at SADACCA than it did at Open Door or the Space.

6.23 OTHER CENTRES: AN INTRODUCTION

SPRITE also created computer resources in a further six centres besides the Space, Open Door and SADACCA. These centres became involved at a later stage within the project, and with different levels of support. The three centre case studies have illustrated the kind of organisations within which SPRITE worked. In order to present a more complete picture for the reader, this section describes the remaining six centres where SPRITE worked. The descriptions of the centres rely on the following sources of information:

1. Group discussions at Northern College: These are appropriate for those centres which sent users to one of the three weekends that the project had at Northern College. This applies to all the centres except for Standhouse School.
2. Minutes of SPRITE management committee meetings from November 1985 to September 1987.
3. Minutes of SPRITE strategy meetings: These were the regular fortnightly meetings that I had with the project workers where we talked about the implementation of SPRITE within the centres.
4. Observation: I visited all of the centres, except Printaid, a number of times and wrote up my notes in the structured diary format.

The descriptions of the centres will cover the following issues: the centre; the user group; SPRITE within the centre; and conclusions.

6.24 THE FORUM OF PEOPLE WITH DISABILITIES.

6.24(i) THE CENTRE

The Forum is a city centre based project in Sheffield that acts as a co-ordinating and campaigning group for people with disabilities. During SPRITE's implementation the Forum had an office in the city centre and employed a number of workers under the Community Programme Scheme. As with SADACCA, the distinction between workers and users at the Forum is not obvious. The Forum organises activities on a number of levels. One of the Forum's workers suggested that the important thing about the Forum for him was that it "intended to improve the self-image of disabled people". It also works as an effective campaigning body pressurising the City Council to improve its' services for the disabled population of Sheffield. For example the Forum is currently pressurising the council to revoke the license of the new Odeon cinema in Sheffield where access for people with disabilities is practically impossible. As well as campaigning, the Forum is keen to develop training opportunities for people with disabilities and has a full-time Training Officer.

6.24(ii) THE USER GROUP

The user groups of the Forum are different organisations for people with disabilities within Sheffield, for example Dial, the Spastics Workshop, and the Multiple Sclerosis Society. The Forum users who became involved with SPRITE were mainly those workers and users that were based at the central office. They were keen to become involved for two reasons: firstly, to use computers to help improve their administration including communication with

their members, and secondly, to have a computer training facility for people with disabilities.

6.24(iii) SPRITE AT THE FORUM

SPRITE initially met members of the Forum when they approached the project for help in the design of a database for a membership mailing list. This is described in detail within the Space case study. Once this project was complete and members of the Forum had been trained in use of the system, the SPRITE user group expressed an interest in gaining further computing skills. The group perceived these skills to be important to disabled people as they provided them with employment opportunities. They expressed the concern however, that any training needed to be conducted at a suitable pace for disabled people who may have specialised needs. The excerpt below comes from a discussion between members of the Forum during a Northern College weekend and highlights the importance of adaptable training:

Jim: But to go back to our first priority Joe, it's the type of training. I've put down here that first we need a well-designed training model that is run to our special requirements.

Arthur: You've got to say the reasons as to why exactly you feel that that type of training course is necessary...

Joe: Lack of self-esteem, lack of love of self, self-confidence.

Jim: And it's not just lack of confidence either, it's the fact that all through life people with disabilities haven't been given the opportunity to keep up with the pace

Joe: That's why it's important that it's set up at the pace that we need and not what somebody else needs. What I see is us actually getting in with the person that designs the things, and saying "this is how we want it", give him the criteria and say "Can you provide a module that will cover all this?"

In April 1987, SPRITE provided a course for six members of the Forum in introductory computing skills. This course was very successful and the

Forum decided to purchase 12 Amstrad machines for training courses in their central office. These machines were well-used for administration purposes and also for the training sessions that SPRITE began to provide. After an initial 10 week training course financed by the W.E.A., the project workers visited the centre once a week. These sessions were used by the Forum workers and users to talk with the SPRITE workers about any computing problems that they had. The Forum members were resistant to regular class input as they believed that this inhibited people working at their own speed.

In September 1987 when the fieldwork finished the Forum were negotiating with SPRITE for a weeks' course to be held at Northern College to introduce individuals to computing skills. The SPRITE workers were supporting the computing facility within the Forum through their weekly visits to the centre and some Forum workers and users were visiting the weekly SPRITE open day.

6.24(iv) CONCLUSIONS

SPRITE's involvement at the Forum provided the workers and user groups at the centre with an opportunity to become familiar with various applications of I.T. Their 'hands on' experience of computers meant that they could argue for more training resources for people with disabilities based on a clearer identification of their technology needs. It also meant that the administration of the Forum could be more efficient which is crucial to a campaigning and co-ordinating group. The Forum also contributed to SPRITE in that the organisation encouraged the SPRITE workers and users to become more aware of the particular needs that people with disabilities have.

6.25 WOODTHORPE 2000

6.25(i) THE CENTRE

The Woodthorpe 2000 group are based at Woodthorpe School which is in the middle of a large council estate in Sheffield. As a community centre the school has few resources except for a number of rooms that are used for Adult Education classes.

6.25(ii) THE USER GROUP

The group that SPRITE worked with at Woodthorpe were all women. One of them described how their group started in the following way:

" We started because we were interested in joining an Adult Education class (in office skills), about 30 people turned up, so we formed our own group at Woodthorpe School and contacted SPRITE to ask for their help"

This group were directed towards SPRITE by a local Adult Education worker who was a useful advisor and facilitator to the group.

The group were aged between 20 and 40 and most of them had childcare responsibilities. They were particularly interested in developing computer skills so that they could get back into the labour market. As one woman commented:

" We don't want to go back to cleaning, you know, cleaning other people's toilets and things like that. We've got so we want to do something better than what we have done and to do that we took up a typing and computer course but we had to form a group and push ourselves over time otherwise we'd have stopped where we were."

Therefore the group had clear aims with reference to computer training.

6.25(iii) SPRITE AT WOODTHORPE

SPRITE provided the Woodthorpe centre with 3 BBC machines and began regular training sessions at the centre in March 1987. The group made a successful application for a grant to the Women's Employment Forum to employ a tutor for 10 weeks. This tutor introduced the group to various office applications of computers. This training was complemented by the SPRITE sessions where the project workers focused on workshops around the various applications that were being covered by the tutor.

After these first sessions it became apparent that the women were concerned to have some formal training in computers. SPRITE negotiated for the women to go on a 10 week course at the Women's Technology Training Workshop which was organised around their interests. This course began in September 1987. Meanwhile the SPRITE project workers were running introductory computing sessions to a new group of users at Woodthorpe.

The commitment of this group of women to their centre and the development of computer skills was impressive. They became an important voice within the SPRITE project but maintained their presence within their centre. They had clear ideas about what they wanted out of SPRITE and made continual demands of the project workers, which were usually met. Therefore the centre has a lot of potential to develop in the near future.

6.25(iv) CONCLUSIONS

The Woodthorpe group, like the users at the Forum and SADACCA, recognised their disadvantaged position in the labour market and were keen to gain skills to improve their opportunities. Their commitment to their resource

and their enthusiasm for training led to them creating a successful resource for Woodthorpe Estate.

6.26 FIRTH PARK LIBRARY USER GROUP

6.26(i) THE CENTRE

The Firth Park Library User Group (FPLUG) are based in a large room within a public library in North Sheffield. When SPRITE first became involved with the group they had been given a grant for £65,000 to make alterations to the library building. These would include dividing the large room they had into a number of smaller community rooms, and making the building accessible to people with disabilities.

The groups that used the room were community groups from the local area. The room was used as a base for local community workers and had a number of facilities for printing etc. The user group as a whole were keen to include computing within these resources.

6.26(ii) THE USER GROUP

The group that became involved with SPRITE at Firth Park were all members of FPLUG. There were also members of other organisations such as Tenant's Associations, and the local Advice Centre. Therefore they were generally community activists. The group had an equal number of men and women aged between 35-55. Their average age was therefore higher than that of the other SPRITE user groups. All of them were unfamiliar with computers but they were keen to learn how computers could help to improve the administration and communication within, and between, local groups.

6.26(iii) SPRITE AT FIRTH PARK LIBRARY

In June 1987 SPRITE began to do regular sessions at Firth Park Library. These were based around introducing the group to word processing, database use, and desk-top publishing. Within a couple of months a small, but very enthusiastic group, had developed at the centre around the the computing facility. They were also involved in other areas of SPRITE and sent representatives regularly to the SPRITE user and management committee meetings. Members of the group also attended the SPRITE weekends at Northern College.

By September 1987 when the fieldwork was complete the group were ready to start work on community projects. They began to write a manual for the Locoscript word-processing software for the Amstrad 8256. This manual was eventually used by the SPRITE group at the Forum. They were also beginning to work on a database for the local Flower Estate Tenant's Association. The aim of this database was to improve accessibility to information about repairs. It was envisaged that the final product would be useful to other groups within the city. They were also keen on taking their skills back to their original organisations and passing them on to other users through the skill-sharing process.

They envisaged that when the alterations to the building had taken place, people from the local community could use the computer resource on a drop-in basis.

6.26(iv) CONCLUSIONS

SPRITE clearly got off to a good start within Firth Park Library. The user group have shown themselves to be very committed to the notion of computers being useful to the local community and are keen to do more work on projects. By the time the fieldwork was complete it was evident that there was considerable potential for expansion within this group.

6.27 STANDHOUSE SCHOOL

6.27(i) THE CENTRE

Standhouse School is set in the middle of Manor Estate, a large housing estate in Sheffield that is renowned for its' economic and social deprivation. Within the school there is a parents room where a group of parents arrange various community meetings and activities. Therefore the school has strong community links.

6.27(ii) THE USER GROUP

The user group at the school is a mixed group of parents and local people.

6.27(iii) SPRITE AT STANDHOUSE SCHOOL

After SPRITE had become established in the first five centres it became apparent that there was a noticeable gap in the areas of the city that SPRITE was serving, in that SPRITE was, as yet, not located within the Manor Estate. After meetings with the Manor Forum (a group made up of workers and residents of the Manor area) it was decided that Standhouse School was the most suitable location on the estate in which to site a computer resource. After consultation with the headmistress and the parents' group, SPRITE held an open day at the school in April 1988. The response to the open day was disappointing in that there did not seem to be the makings of a group. However as there was some interest expressed, the SPRITE workers began to take a computer down to the school once a week to do introductory sessions for a small number of individuals. It emerged then that those interested needed a more formal approach to training.

During the summer period when the school was shut, the SPRITE workers had a meeting with a worker from MATREC (Manor Training and Resource Centre) about how the computing group could be developed. It was agreed that MATREC would run an introductory computing course weekly in the parents' room at Standhouse School and that SPRITE would provide the technical support and a regular weekly open access session where people from the course could have more informal computer instruction.

This course was due to start in November 1987. Initial indications are that the classes are going well and that users are visiting the weekly open access classes that SPRITE are providing.

6.27(iv) CONCLUSIONS

The siting of SPRITE in Standhouse School has highlighted the problems of SPRITE working in centres where the user group has to be developed. The problems associated with this approach have been described in some of the previous cases. However by working with other community groups in the area SPRITE has now been able to provide a service that is more appropriate to the computing needs of the people of the area.

6.28 DARNALL MUSIC FACTORY

6.28(i) THE CENTRE

Darnall Music Factory is a community based recording studio sited in the east end of Sheffield. The studio is used for recording the work of unemployed local bands at cheap rates and is run on a non-profit making basis, any surplus being ploughed back into developing the studio. The

music factory also run music workshops at local youth clubs and community centres, and have weekly music workshops at the centre where unemployed people can learn how to play a number of instruments. At the time of the fieldwork, the centre had two part-time youth workers and four Community Programme workers who helped to manage the day-to-day activities of the centre.

6.28(ii) THE USER GROUP

The user group at the centre are mainly young unemployed people from the local area. Although regular workshops take place for girls only, the majority of users are male.

6.28(iii) SPRITE AT DARNALL MUSIC FACTORY

The original aim of SPRITE becoming involved at Darnall was that the centre would be given a computer in return for the Darnall users developing computer applications of music. This expertise within Darnall could be ploughed back into the project as a whole. An Atari ST was installed in the centre in July 1987 and was used in the studio side of the project by the project workers responsible for recording. The computer meant that the group could experiment with sound sampling techniques and generally keep abreast of developments within the field of computers and music.

The computer was also used in other ways within the music factory, for example for designing artwork, making posters, and general office administration.

When the fieldwork ended the computer was serving a useful purpose at the

centre. The centre also fed their knowledge back into the project by demonstrating music equipment at SPRITE open days and conferences, and by running workshops around computing and music at Northern College weekends.

6.28(iv) CONCLUSIONS

The presence of the SPRITE computer at Darnall Music Factory meant that the centre had similar equipment to that currently used in commercial recording studios. It also ensured that specific expertise was developed within an area of computing that was little understood throughout the SPRITE project. Therefore SPRITE helped to enhance an existing community resource.

6.29 PRINTAID

6.29(i) THE CENTRE

Printaid is a community based printshop located in the Philadelphia Centre in the Netherthorpe area of Sheffield. The aim of the organisation is to provide help and advice to community groups with regard to producing information about themselves. The centre has a variety of printing and layout equipment and local groups book time to use the facilities. Additionally Printaid have a weekly open day when people can drop in to see how the equipment works, use the facilities, or seek advice on printing and layout. When SPRITE became involved with Printaid they had three workers employed under the Community Programme scheme. The facility is managed by a management committee that includes local residents and community workers.

6.29(ii) THE USER GROUP

Printaid's facilities are used by a number of local and citywide groups who book themselves into the centre to use the facilities.

6.29(iii) SPRITE AT PRINTAID

Like Darnall Music Factory, the original aim of SPRITE becoming involved at Printaid was for them to do development work with the Atari machine in the area of desk-top publishing. They were interested in how computers could be used to improve the graphics and layout of their users' leaflets and publications. This computer would add to their own resources and their expertise could be ploughed back into the SPRITE project. SPRITE provided Printaid with an Atari machine and the appropriate desk-top publishing software in May 1987.

Printaid began to experiment with the machine, however when the fieldwork finished in September 1987, the centre was experiencing funding problems. Funding had ran out and the three workers were trying to operate the resource on a voluntary basis. This clearly created problems and there was little chance for the workers to do much development work with the computer. A couple of the workers attended sessions on the weekly SPRITE open day about desk-top publishing, therefore their individual skills were developing. However the organisation had no future source of funding when the fieldwork ended.

6.29(iv) CONCLUSIONS

An organisation like Printaid can clearly benefit from using computers through the enhancement of already existing printing facilities. Specifically, desk-top publishing software is useful to the groups that use Printaid for printing leaflets, magazines, annual reports etc. It is unfortunate that the funding for Printaid was not renewed.

CHAPTER 7

THE CROSS-SITE ANALYSIS

7.1. INTRODUCTION

Within each of the case studies in the last chapter, a list of supporting and inhibiting factors in SPRITE's development was presented for each centre. The aim of this chapter is to consider why SPRITE worked differently at the three centres and why the outcomes of the project were similar or different in each. In addressing this issue, approaches from the organisational literature (Chapter 2.3) will be used to shed light on organisational processes within the centres. By drawing upon this literature it is possible to evaluate the insights that it provides into the organisational processes of community centres.

The chapter begins by considering the outcomes of SPRITE in each centre.

7.2 A COMPARISON OF OUTCOMES

There are difficulties in making comparisons between the impact of SPRITE at the three centres as the organisations had different histories and different user groups when SPRITE entered them. However, as the case studies show, SPRITE had a different impact in each of the centres and a variety of outcomes emerged. The list below shows the outcomes of the implementation of SPRITE:.

THE SPACE

1. The establishment of a computer resource for the centre and the

community as a whole that was controlled by SPRITE users;

2. The development of five community computing products;
3. The acquisition of computer skills by a number of users, fourteen on a regular basis and six who attended W.E.A. sessions;
4. A number of psychological benefits to the user group, for example increased confidence and social contacts. Five of the users also found temporary part-time employment in computer-related areas.

OPEN DOOR

1. The establishment of a computer facility within the centre under the control of the centre workers;
2. The acquisition of computer skills by sixteen regular and thirty-four sessional users (ie: users who attended W.E.A. sessions);
3. Some psychological benefits for the user group, for example increased confidence. Two of the users found part-time employment.

SADACCA

1. The establishment of a computer facility for the centre as a whole under the control of the centre workers;
2. The acquisition of computer skills by centre workers and thirteen regular users and eight sessional users;
3. A number of psychological benefits for the user group;
4. The development of two community computing products.

At first glance it seems that the outcomes that SPRITE produced at each

centre are very similar. However differences are apparent. These differences are both quantitative, for example the number of products developed, and qualitative, for example the extent to which a computer project was successfully linked into the local community and under user control.

Additionally the case studies show that there was considerable variation in the processes by which SPRITE developed in each of the three centres. For example, at the Space the integration of SPRITE into the centre was fairly smooth compared with the same process at Open Door. Therefore the task of this chapter is to explain the differences in the processes by which the project developed at each centre, and therefore to understand the differences in outcomes.

The first clue as to why the processes of development were different arises from a consideration of the supporting and inhibiting factors described at the end of each case. From these supporting and inhibiting factors, the organisational characteristics on which the centres differ can be examined.

7.3 SUPPORTING AND INHIBITING FACTORS

Table 7.1 shows the supporting and inhibiting factors that influenced the development of the project within the centres.

TABLE 7.1

THE SUPPORTING AND INHIBITING FACTORS

SUPPORTING FACTORS

	<u>The Space</u>	<u>SADACCA</u>	<u>Open Door</u>
<u>Centre characteristics</u>	Supportive structure Links with libraries Accessible location		Well-established
<u>Centre facilities</u>	Existing computers	Good resources	Good creche
<u>User group characteristics</u>	Strong identity Skilled and committed	Committed user group	Initial enthusiasm of user group

INHIBITING FACTORS

	<u>The Space</u>	<u>SADACCA</u>	<u>Open Door</u>
<u>Centre characteristics</u>		Training philosophy/ Worker control of facility	Centre structure
<u>Centre facilities</u>	Security/ access	Siting of room	Lack of space
<u>User group characteristics</u>		Small user group	Lack of cohesiveness

This list is derived from the analysis of the data in chapter 6 and forms the basis for comparison between the centres by highlighting the organisational characteristics upon which the three centres can be classified. The structure of a centre for example, is an organisational characteristic which had an impact on the development of SPRITE. Additionally, there are a number of organisational processes that emerged during SPRITE's implementation. This category covers 'user group identity' for example. The SADACCA users of SPRITE had not met before they became involved with the project, however a clear group identity evolved during SPRITE's implementation. Therefore such emergent processes also need to be considered in evaluating the differential progress of SPRITE at the three centres.

The distinction between 'organisational characteristics' and 'organisational processes' is, however, not that clear. It could be argued that the structure of an organisation is continually emerging as a result of ongoing negotiation (Salaman, 1980, chapter 2.3(i)). In Open Door for example, on the appointment of a new centre worker (ch. 6.11, para. 29), the job description of that role was changed to fit in with the increasing demands that were being made on the centre. If one takes this approach to organisational structure then 'structure' is a snapshot of a process. Another example is that of user group identity. This could be viewed as a characteristic of an organisation, however the identity of a user group can also change through the intervention of a project like SPRITE. Such problems of definition emerge from a recognition that community centres are dynamic organisations that are continually in a state of change. Any comparison between such organisations therefore needs to recognise the

crucial factors within the change process.

The next stage of analysis in answering the question "Why did SPRITE work differently in different centres" is to highlight the important organisational characteristics and processes on which the centres can be classified. At this stage these will be referred to as 'organisational factors'. The literature on organisational behaviour is useful here in that the supporting/ inhibiting characteristics in Table 7.1 can be analysed in terms of the literature described in chapter 2.3. The extent to which this literature is useful in examining the supporting/ inhibiting characteristics will shed light on the applicability of the organisational literature to the analysis of community organisations.

7.4 ORGANISATIONAL FACTORS

The factors described here are based on the supporting/ inhibiting characteristics in Table 7.1 seen in the context of the organisational literature.

7.4(1) CENTRE STRUCTURE

The label 'structure' refers to the 'fixed' relationships of task organisation within each of the centres. Although it is recognised that structures can be dynamic or emergent within organisations, the reference to structure here applies to the structure of a centre at the point when SPRITE first began implementation in a centre. Each of the three centres had a structure common to many community centres and voluntary

organisations. A management committee with representatives from all stakeholder groups ran each centre. However the interpretation of the role of this committee was different in each case. At Open Door the workers had specific job descriptions and were accountable to the centre management committee. In SADACCA the structure was more hierarchical with various workers being responsible to line management within the organisation. Therefore the centre's structure was more mechanistic than that of Open Door. The structure of the Space was clearly organic (Burns and Stalker, 1961, chapter 2.3(i)) in that the management committee originally formed was designed to cope with the expected growth of the organisation. The differences between these structural forms had implications for the implementation of SPRITE.

At the Space the organic structure enabled SPRITE to fit comfortably into the centre, an example being that SPRITE users became involved with the running of the centre as a whole (ch. 6.4, para. 28). In Open Door, the structure, by providing for two full-time workers, encouraged the users to be more dependent on them to support the development of SPRITE. This was particularly true when the job description of one of the workers changed, so that both were responsible for development work within the centre. Although in theory the role of the workers was to encourage users to control their resource, in practice they were relied upon quite heavily for support (ch. 6.11, para. 23,36). This suggests that the users' perceptions of the organisational structure were somewhat different from the 'official' view (chapter 2.3(i)).

At SADACCA, the structure of the centre with its' emphasis on using workers

to develop aspects of the centre, conflicted with the original culture of SPRITE which was based on the notion of users managing resources. However SADACCA's approach proved useful when an individual worker was given the responsibility for the development of the computer room (ch. 6.18, para. 18). This suggests that although it was difficult to put the philosophy of user control into practice, the clarity of the roles of those workers and others within the hierarchy meant that the centre was well-prepared to accommodate SPRITE within that formal structure. That is, SPRITE was welcomed into the centre on SADACCA's terms. SADACCA's structure was indeed congruent with the organisation's needs and objectives (Child, 1984, chapter 2.3(i)), in terms of providing formal education and training to its users.

7.4(ii) INTEGRATION

The importance of integration within organisational structures was described in chapter 2.3(i). All three organisations comprised of different user groups with different aims and purposes. The formal integrative mechanisms in all cases were the centre management committees. For SPRITE, integration into the general activities of a centre was important. It meant that the project was accessible to users from the different user groups and could be viewed as a resource for the centre as a whole.

At the Space, SPRITE was integrated into the centre through the links it had with other organisations that used the centre and through the key role that SPRITE users played in the centre's management committee. At SADACCA the SPRITE facility was used regularly by the workers and was therefore

integrated into the general administration of the centre. Other centre user groups also used the facility. At Open Door however, one of the main problems was that SPRITE never became part of the activities of other user groups, the workers or the management committee. It was viewed in isolation as distinct from the centre by some of the user groups (ch. 6.11, para.24,26).

The general issues about integration within this research refer to the extent to which SPRITE, as an external resource, could be successfully integrated into a community centre. One of the factors that was particularly important to the integration process was the profile that SPRITE had within a particular centre. Although at SADACCA the project was integrated into the centre, it still retained a low profile. This is considered in the next section under the heading of 'prominence'.

7.4(iii) PROMINENCE

When discussing the integration of SPRITE into a centre an important aspect of that integration is the extent to which SPRITE maintained a physical profile within the centre. At both Open Door and the Space the siting of the computer facility meant that SPRITE was physically prominent. At the Space this was useful in that users visiting the centre could see the computers in use. At Open Door however this worked against SPRITE in that although everyone could see the facility, people had to physically enter the room to use the computers. As there was no other purpose for entering the room, the physical barrier attained psychological significance in that SPRITE was almost separate from the centre. At SADACCA people had to make a

special effort to find the computer room as it was hidden away off a corridor within the centre.

When considering the integration of SPRITE into a centre as a whole the prominence of the facility played an important part. Although SPRITE was integrated into SADACCA through centre workers using the facility, it had a low prominence. At the Space integration was successful and the resource was prominent. At Open Door, integration was unsuccessful, but the prominence of the resource could be viewed as hindering this process.

7.4(iv) CULTURE

The culture of a centre played an important part in how that centre influenced the implementation of SPRITE. The cultures of all three centres clearly had an impact on the aims that the users had in their involvement with SPRITE. At SADACCA for example, the culture of training and education was reflected in the demands that the users had of SPRITE. At Open Door the community culture meant that the users were keen to turn SPRITE into a community resource. The Space also had an outward looking community culture which was reflected in the views of the users. Therefore at the beginning of the project in each centre, users had a shared reality of what the aims of their centre were. In the Space and SADACCA these views of the organisational culture rarely differed from initial interpretations. At Open Door however, when political problems emerged, the SPRITE users began to believe that they had little power to enact the culture that they wanted for their centre. This led to considerable dissatisfaction within the SPRITE user group.

7.4 (v) CONTROL OF THE FACILITY

An important organisational factor that emerged from the case studies was the distinction between which group effectively controlled access to the computer facility. Within this factor there is a distinction between 'perceived' and 'actual' control of the computer facility. Initially at Open Door and the Space, control was seen to lie with the SPRITE user group, and to be monitored by the centre management committees. However, as the project developed at Open Door, control of the facility was perceived by the users as lying with the centre workers. At SADACCA, perceived and actual control remained with the centre workers from the beginning of the project and was concentrated in the hands of the computer room technician. As the SADACCA users were happy with this situation, control of the facility was not an issue at this centre. The same can be said for the Space. At Open Door however, the perceived change in control from one stakeholder group to another caused tension within the centre.

7.4(vi) USER GROUP IDENTITY

This emerged as an important issue within the case studies. This category can cover a number of issues, however the main focus is the extent to which the group was a cohesive unit when SPRITE began at each centre. For example, the group at the Space were clearly well-established, whereas the groups at Open Door and SADACCA were collections of individuals brought together to learn about computers. At the Space the users clearly had considerable psychological investment within the group (Chapter 2.3(v)).

This led to them having considerable commitment to the SPRITE project. At SADACCA the small group evolved from sharing an interest in computers to becoming a psychological group. At Open Door however, a strong group identity, although initially established, was not sustainable in the organisational context.

7.4(vii) ACCESS AND FACILITIES

This organisational factor refers to the extent to which the centres were accessible to particular groups and the facilities they had when SPRITE became involved. Open Door and SADACCA generally had good facilities and access, whereas the Space had few facilities and limited access for women and people with disabilities. Access and facilities had an important role to play in the development of the project.

The three centres are assessed on these organisational factors in Table 7.2.

TABLE 7.2

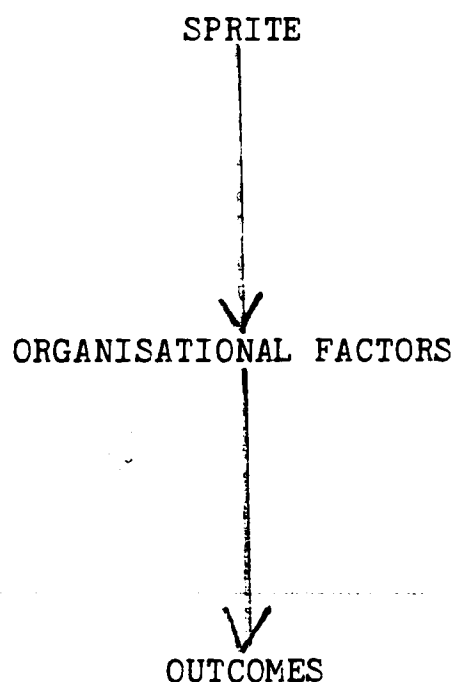
AN ASSESSMENT OF THE CENTRES ON THE ORGANISATIONAL FACTORS

	<u>The Space</u>	<u>SADACCA</u>	<u>Open Door</u>
<u>Centre structure</u>	Management committee with user reps	Hierarchical structure	Management committee with user reps
<u>Integration</u>	High	High	Low
<u>Prominence</u>	High	Low	High
<u>Centre culture</u>	Community	Educational	Community
<u>Control of facility</u>	SPRITE users	Centre workers	SPRITE users/ Centre workers
<u>User group identity</u>	Strong identity	Initially a new group/ Strong identity emerged	Strong identity/ eventual dissolution of group
<u>Access and facilities</u>	Poor	Good	Good

Although the implementation of the project was similar in each of the three centres, in terms of initial training and equipment provided, the processes by which SPRITE developed were different as a result of these organisational factors. This process is shown in Figure 7.3.

FIGURE 7.3

THE RELATIONSHIP BETWEEN ORGANISATIONAL FACTORS AND OUTCOMES



Each of the organisational factors is not independent, rather links can be made between them. There are clear links, for example, between structure, culture, and control of the facility. At the Space both the structure and culture of the centre were congruent with the principles behind the implementation of SPRITE. At Open Door however, although the centre had a community culture, the structure of the centre created difficulties when it

came to enacting that culture. For example when SPRITE empowered one particular stakeholder group within the centre, the structure of the centre was not equipped to adapt to that change. Although the centre was, in theory, controlled by the management committee which had community involvement, the repeated demands on the workers time meant that it was easier for them to exercise control over day to day decision-making rather than encouraging users to be more proactive in line with the centre's culture. At SADACCA, although the culture of the centre was different from that of SPRITE, the centre's organisational structure in reflecting that culture was well-equipped to deal with SPRITE. The emphasis of SPRITE at SADACCA became that of formal training, in line with the SADACCA culture. Therefore the centre's structure and culture, although somewhat different from that of SPRITE, could accommodate the implementation of the project and provide it with support.

Therefore these organisational factors account for the differential development of SPRITE at each of the centres. In terms of answering the question "Why did SPRITE work differently in the different centres", they clearly provide some insights into why outcomes at the centres were different. However the analysis presented in Figure 7.3 neglects a key aspect of the implementation of SPRITE: the research process. Within Figure 7.3 SPRITE is seen as a static phenomenon which has a uniform input into the centres. However, although the technology introduced into each of three centres was the same, in practice the input of SPRITE varied in each of the centres as a result of the action research process. Organisation around that technology was influenced by the research through the process of intervention. This presents an added dimension to the discussion.

7.5 THE ROLE OF INTERVENTIONS

In order to understand the relationship between organisational factors and outcomes it is necessary to consider the intervention aspect of the action research process. Throughout the evaluation many interventions were made at the centres. Three specific interventions are described in the case studies in chapter 6 and the process of feedback from interventions is elaborated upon in chapter 9. The role of interventions was to respond to particular issues or situations that arose within the project in order to increase the likelihood that the project would be successful in achieving its' aims. Therefore these interventions addressed organisational factors within the centres.

At the Space for example, the intervention described within the case study was designed to address the problems of access for women. All the relevant organisational factors at the Space were conducive to the establishment of SPRITE within the centre, except for that of access. Therefore the most significant intervention, described in the case study, addressed this problem. At SADACCA the intervention described in the case study addressed the issue of the incongruence between the cultures of SADACCA and SPRITE. Informal training was not conducive to the culture of SADACCA therefore, as a result of the intervention, the SPRITE workers only attended SADACCA to conduct formal training. This strategy was more in line with SADACCA's culture and was therefore more appropriate to other user groups. At Open Door the intervention described in the case study addressed the problem of user group identity by attempting to bring in new users who could develop

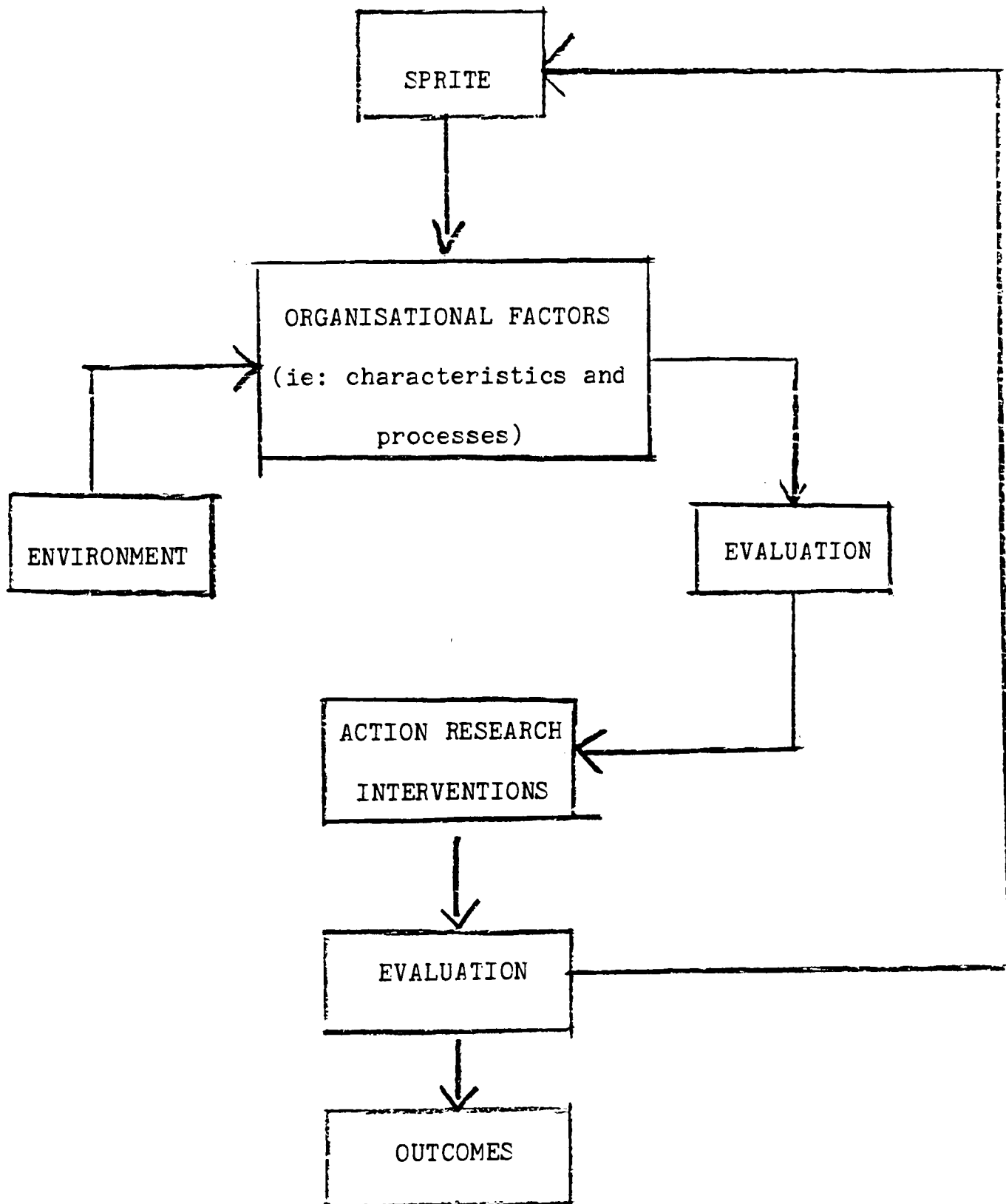
the project and the SPRITE group.

Whether these particular interventions were successful or not is not at issue here. In the Open Door case for example, as was pointed out in Chapter 5, it would, in retrospect, have been more appropriate to address the issue of lack of integration within the centre. The important point here is that interventions, as reactions to the day-to-day activities within the centres, were addressing the nature of the organisational factors. The aims of those interventions can be interpreted as promoting uniformity of outcomes between centres, that uniformity being based on SPRITE achieving in each centre the overall aim of establishing a successful computer facility and training a significant number of centre users in computer skills. Indeed, it follows from this argument that if all the interventions had been equally successful, there would have been less differences in the outcomes.

Within each of the centres interventions addressed different organisational factors, indeed those factors that were perceived as primary barriers to SPRITE achieving its aims. As different organisational factors were treated, it is understandable that different outcomes resulted. Therefore a thorough explanation of differences in outcomes between centres needs to consider the implications of the action research process. The fact that SPRITE had an in-built monitoring mechanism to identify the processes at work within the centres and keep the project on the right road for achieving its aims, clearly had an impact on both the processes and the outcomes at each centre. Figure 7.4 outlines the relationships between organisational factors, action research interventions, and outcomes.

FIGURE 7.4

A MODEL TO ILLUSTRATE THE RELATIONSHIP BETWEEN ORGANISATIONAL
FACTORS, ACTION RESEARCH INTERVENTIONS, AND OUTCOMES



This model suggests that when SPRITE entered a community centre a number of organisational factors became apparent. Where these factors were perceived as inhibitory to SPRITE's development within a centre, interventions were designed to address these factors. These interventions were then evaluated and the results of that evaluation fed back into the project. This evaluation of interventions affected SPRITE's future input into the centre. The outcomes of the implementation of SPRITE at a centre were therefore different as a result of firstly, the different organisational factors, secondly, the different input from SPRITE as a result of interventions, and thirdly, feedback from those interventions. Therefore the cyclical process of the evaluation model is apparent here. What is important about this model is that the organisations are seen as continually evolving entities. All of the organisational factors had the potential to change as a result of SPRITE's involvement within a centre. Additionally, within the model it is important to note that other factors will be having an impact in the centres at the same time, not just SPRITE. Therefore included within the model are environmental factors, examples could be expansion within a centre, cuts in a centre's budget, or building work.

The model in Figure 7.4 is useful in highlighting the relationships between the organisational factors, action research interventions, and differences in outcomes between centres. To take an example, at Open Door 34 centre users went through the special introductory sessions that the W.E.A. provided on behalf of SPRITE, compared to 6 users at the Space. This reflects the different focus of SPRITE training within the two centres. The

different focus emerged from a recognition of the organisational factors at work, and subsequent interventions. At Open Door there were considerably more introductory sessions with W.E.A. tutors as a result of the aim to build up the Open Door user group. The nature of the existing user group at the Space meant that SPRITE could focus on developing community projects, and therefore didn't need to provide introductory sessions with W.E.A. tutors, except for the women's classes.

Therefore in considering explanations for the differences in outcomes, there are two processes at work. The first is the different organisational factors that emerged within the centres, and the second is the differential inputs from SPRITE that resulted from action research interventions in response to these organisational factors.

Alternative explanations maybe possible for the differences in outcomes between centres. Examples lie in the category of 'environmental factors'. Additionally SPRITE could only make limited resources available to each centre. There was only a set number of sessions that the W.E.A. would fund for SPRITE so this could have had an impact on the number of people who went through these sessions at the centres. However, the action research, as a regulatory mechanism, took into account environmental factors and also influenced decisions about the distribution of resources.

An interesting final question is if all interventions had been successful would the outcomes at the three centres have been the same? I doubt whether this would have been the case for three reasons. Firstly, more resources would have been necessary to address all the issues that arose within the

implementation of SPRITE at the three centres. This was not possible with only one action researcher. Secondly, as was stated in the introduction to this chapter, the three centres had different histories and different user groups when SPRITE first entered them. Therefore uniformity of outcomes would have been a difficult task. Thirdly, and perhaps the most important, one of the overall aims of SPRITE was for unwaged people to decide in what ways they wanted to use computers. Thus uniformity of outcomes would have been a contradictory and unpopular aim for the project to pursue.

7.6 THE ORGANISATIONAL LITERATURE

As has been previously stated, the organisational literature has rarely been applied to an analysis of community organisations. Within this chapter aspects of the literature have been applied to provide an understanding of why SPRITE worked differently in the different centres. This section considers briefly the applicability of aspects of the organisational literature to an understanding of community centres, based on the analysis of SPRITE in the three organisations presented in this chapter.

7.6(i) ORGANISATIONAL STRUCTURE (ch. 2.3(i))

From the analysis of the data in 7.4(i) it appears that the literature on organisational structure can provide useful insights into understanding organisational differences between community centres. In the question of what factors are important in the design of an 'appropriate' structure for a community centre, the most important factor that arises from this data is the congruence of the structure with a centre's needs and objectives.

Another important factor is the ability of a given structure to adapt to change. This is particularly pertinent to community centres where change, in user groups for example, is common-place.

The concepts of differentiation, integration, and specialization can be used to examine the structures of community centres, however this literature is more appropriate to large organisations with an amount of structural complexity. Although the management committees of the three centres served as integrative mechanisms, this was not their main function. As community centres are usually small organisations, informal routes of information dissemination can be more successful than formal mechanisms of integration. However these comments refer to the question of organisational size rather than the applicability of the organisational literature to community groups. SADACCA for example, the largest of the three centres, contained a number of specialized groups. Integration between these units was achieved through the formal structure of the centre. Such a structure would have been inappropriate for a small organisation like the Space.

Prominence, arising from physical location has important psychological implications. Prominence emerged from the data as playing an important part in the integration process. This finding could be applied to other organisations outside of the voluntary sector. The siting of particular departments within commercial organisations for example, could be important to their integration within an organisation.

7.6(ii) ORGANISATIONAL CULTURE (Chapter 2.3(ii))

The application of the organisational literature on the role and meaning of culture has proved useful in understanding the data presented in the case studies. Apart from providing a tool by which community organisations can be classified, the 'shared reality' approach to culture provides a perspective from which to understand how individuals and groups within SPRITE responded to the project within their centre. Their demands of the project, and their aims in taking part were all influenced by the culture of the centre that they used. An understanding of culture also aids an understanding of the problems that SPRITE faced when working in centres where the culture conflicted with that of SPRITE. From these insights it seems that this literature has proven applications within a community centre setting.

7.6(iii) ORGANISATIONS AND THEIR ENVIRONMENTS (Chapter 2.3(iii))

This literature has not been referred to within this chapter as external considerations seemed to have little impact on the the differential impact of SPRITE within the centres. This could be because of the different aims of community organisations, which unlike commercial organisations are not affected by the threat of external competitors. However environmental factors had an impact on the development of SPRITE as an organisation (see Chapter 5). Therefore this section of the literature will be considered in the next chapter.

7.6(iv) TECHNOLOGY AND CHANGE (Chapter 2.4(iv))

A consideration of the literature on technology and change in the light of this data suggests that there are both similarities and differences between the introduction of technology into community organisations and commercial organisations. Perhaps the most obvious conclusion is that the technology itself did not determine its consequences. Rather it was decisions made by the stakeholder groups involved that affected how the computers were used in the centres, and the organisational factors that resulted. All the SPRITE centres initially had the same computing equipment but a variety of processes and outcomes resulted from that technology. Therefore this conclusion about the introduction of new technology is as applicable to the voluntary sector as it is to the commercial sector.

The issues that emerged within the community centres with regard to the introduction of technology are similar to those that have been described within the commercial sector. The control of the computer facility, for example, was an important organisational factor that emerged from the case studies. Despite such similarities however, caution needs to be expressed about generalising results between organisations that are clearly different in orientation. The aims and objectives of community organisations are clearly different from those of business organisations.

The implications of these differences are perhaps most apparent in terms of implementation strategies. SPRITE clearly took a 'grass-roots' approach to the introduction of computers, where the emphasis was on enabling users to determine their own computer needs. As Ebjorn-Anderson suggests, this

approach may be sub-optimal to the organisation therefore it is not often used in commercial organisations. However in community organisations where the aims are different, such a strategy is clearly appropriate. Although there are differences between the two kinds of organisations, the literature on the design and implementation of systems is relevant to both. An appropriate conclusion then is that as the issues that arise with regard to the introduction of I.T. are similar in both community and commercial organisations, the literature about those issues is of relevance to both. The generalisation of results however, has limited value as a result of the fundamental differences in orientation between commercial and community organisations.

7.6(v) COMMUNITY GROUPS

The issue of group identity arose as an important one within the case studies. The group processes that emerged within the case studies are similar to those of any psychological group within a work or social setting. The literature on the role of community groups and on the nature of groups generally has been useful in understanding the psychological investment that individuals have in community group membership.

7.7 SUMMARY AND CONCLUSIONS

This chapter has considered the question "Why did SPRITE work differently at the different centres". The answer to this question has focused on a consideration of the organisational factors that emerged within the centres as a result of the evaluation of SPRITE, and on the various interventions

that were made into the project as a result of the action research. The data from the case studies has been interpreted and analysed using the literature on organisational behaviour. This literature has then been evaluated for its applicability to community organisations.

To conclude, although there is little research about the way that voluntary organisations and in particular community organisations work (ch. 2.3), the analysis of the case studies suggests that the organisational literature can provide insights into the processes that emerge within community centres. The next chapter examines the extent to which the SPRITE project overall was successful in achieving its aims and objectives.

CHAPTER 8

8.1 INTRODUCTION

The major aim of this chapter is to address research question 5: To what extent is SPRITE successful in achieving its' aims and objectives? Whereas previous chapters have focused on SPRITE at the community centre level of implementation, the focus of this chapter is the project as a whole. Therefore the data referred to in brackets comes from Chapter 5: the SPRITE case study. This chapter will provide insights into which areas of the project were successful and the supporting factors that contributed to that success. It will also analyse why the project was not successful in various areas and the inhibiting factors in that process. After a consideration of these factors and their relationship to the 'enabling' characteristics derived from the pilot work (ch. 3.2), a list of recommendations for the establishment of future community computing projects is then provided. Therefore this section of the chapter provides feedback suitable for practitioners. As this chapter is based on the data in chapter 5, two further sections are included within this chapter. The first examines the extent to which the literature on commercial organisations and their environments is useful to an understanding of community organisations and their environments. The second looks at the extent to which the literature in chapter 2.2 (I.T., Unemployment and the Individual), is useful to an understanding of the experiences of individuals within the SPRITE project.

8.2 AN EVALUATION OF AIMS AND OBJECTIVES

In order to evaluate the extent to which SPRITE achieved its' aims and

objectives during the first two years of implementation, each will be considered in turn from the list presented in chapter 5.2(iii).

AIM 1: To provide a resource generally in the community in terms of personnel, training and equipment.

The case studies that precede this chapter suggest that SPRITE was successful in providing a computing resource within three community centres. Additionally another six centres also gained resources from SPRITE within the two year period. In terms of personnel, although it was difficult for two project workers to service nine centres (17,24,29), additional help came in the form of sessional W.E.A. tutors (17) and the process of skill-sharing that developed in a number of centres (24,29). This additional support was crucial to building resources in the nine centres. An important factor regarding personnel was the skills and abilities of the two project workers. Their organisational and computing skills enabled the project to be implemented in a professional manner. Additionally they had the communication and teaching skills necessary to encourage unwaged people to develop their confidence around the use of I.T. Their informal approach to training (18) was appreciated by project users as Figure 5.5 and data from the case studies shows. The workers enthusiasm for the project and community computing generally, made them popular with the users. They therefore played a key role in the success of the project as a whole.

In terms of training many users commented that SPRITE training was appropriate to their needs. Where more formal training was required, for

example at SADACCA, it was possible to set up this provision as a result of links with external agencies (27,29). Equipment was also provided to nine community centres. Although the users sometimes felt that they needed more equipment, for example at the Space, budget limitations meant that not all centres could have the equipment that they desired (28).

In addition to the work that was done in the nine centres, towards the end of the fieldwork it became apparent that a number of other community groups were relying on SPRITE for advice and back-up support for their individual computer facilities (36). This was an expansion of the original training brief of SPRITE which showed that by word of mouth an increasing number of groups were becoming aware of SPRITE's facilities and were using the project as a consultancy service (19).

Therefore SPRITE achieved its' first aim within the first two years in that a resource was provided within nine community centres in Sheffield and a consultancy service established for a number of other community groups who were interested in using computers. The supporting factors that facilitated this process were the skills of the project workers and the support for the project provided by the committed user group and the W.E.A.

AIM 2: To create awareness about I.T. and its' impact on everyday life.

By fulfilling the first aim of providing a computer resource for the community, SPRITE in effect created an awareness about the effects of I.T. amongst a number of unwaged people. Indeed "being aware of what a computer can do" was perceived by users as the most important function of SPRITE

(see Table 5.2). Access to computer training and resources in itself enabled people to gain more knowledge about the potential of I.T. systems. A typical comment that emerged from SPRITE users was that they would no longer accept "computer error" as a satisfactory explanation for why their social security benefit had not arrived on time. Rather, their knowledge of computer systems allowed them to challenge the information that was presented to them as the consumers of services.

The nature of SPRITE training also encouraged an awareness of the impact of I.T. Visits to organisations that used I.T. on a large scale, such as Computer Services in the City Council, ensured that users could see how I.T. was used in practice. Therefore the informality of SPRITE training and access to computer resources were the key supporting factors in ensuring that this aim was achieved.

AIM 3: To promote computer literacy and encourage access to technology by particular targetted groups.

SPRITE promoted the notion of computer literacy through its' implementation in the community centres. The interest generated within those centres for SPRITE suggests that computer literacy was perceived as a useful skill for people to learn. This view was echoed by some of the users involved with the project and their comments can be found within the centre case studies.

An extension of this aim sought to target particular groups within the unwaged community who traditionally have limited access to resources. These groups were identified as being women; ethnic minorites; people with

disabilities; and older people. Therefore the pertinent question in evaluating this aim is to what extent were I.T. resources made available to these groups as a result of the implementation of the SPRITE project.

In Table 5.1 figures are presented for the number of individuals who were involved with SPRITE during the first two years. Taking each of the groups in turn, it is possible to see which target groups had access to the project. The figures for the number of women who were involved with the project suggest that of the 123 users who had been through the project, 80 were women and 43 men. At first glance these figures look impressive in that more women were involved with SPRITE than men. However, looking more closely at the figures gives an additional insight into the situation. Of the female users, 50% were regular users of the project compared to 74% of the men. Therefore women were more likely to attend the W.E.A. sessions in the centres and be involved with the project on a sessional basis. Out of the total number of 80 female users, 36 had been through the women-only sessions that had been provided at the Space and Open Door. This meant that generally they would not have met the SPRITE project workers or other SPRITE users. (This is particularly the case for the women at Open Door who attended the sessions on the weekly women's day (n=36)).

There are a number of reasons why it was difficult for women to become involved in the project on a more regular basis. Most had childcare commitments which meant that certain SPRITE activities such as evening meetings or residential weekends were inaccessible to them. The provision of a creche at a centre was also important, see for example the number of women involved in the project at the Space compared to Open Door.

An important factor in this discussion is the fact that SPRITE had two male project workers (8). Clearly computer sessions on women's days at centres were out of bounds to them. It was recognised throughout SPRITE that this was a problem difficult to solve as there were no more resources for another project officer. Where centres had requested a woman tutor, either myself or a W.E.A. financed tutor would do the work. Although this mechanism enabled women to be involved with SPRITE through women-only activities, it meant that it was difficult to bring these women into other aspects of the SPRITE project. Additionally some women were not interested in becoming involved with SPRITE as a whole. At Open Door for example, many of the women that attended the W.E.A. sessions only attended the centre on the weekly women's day. They were happy to learn about computing on that basis without any additional contact with SPRITE.

Despite these problems of attracting women to the project on a more regular basis, SPRITE succeeded in making computing appealing to women, as the figures show. This in itself is a credit to the project.

When considering the extent to which ethnic minorities became involved with the project, Table 5.1 shows that 15% of the project users were from ethnic minorities. In practice these users were concentrated at SADACCA, a centre especially designed for people from the Afro-Caribbean community. Again one could argue that SPRITE could have been more attractive to Black people if it had had a Black worker or if the users at the other centres had not been all-white. However this was acknowledged as a problem and after the fieldwork ended SPRITE began to work with a number of other minority

groups, for example within the Asian and Yemeni communities. Therefore the experiences of the first two years have laid the basis for strengthening the project's equal opportunities brief by a recognition of the weaknesses of the project in this area and an attempt to compensate for them.

The figures in Table 5.1 show that 17% of SPRITE users were people with disabilities. Most of them were users at the Forum of People with disabilities therefore SPRITE's involvement with that group was clearly crucial for encouraging disabled people to become involved. In terms of the criteria for selecting SPRITE centres the ground that was made in equal opportunities was enabled by the siting of the project in centres that were designed to cater for a specific group, for example the Forum and SADACCA. If this had not been the case, evidence suggests that it would have been difficult for people from the target groups to become involved with the project, as, with the exception of women, they generally did not use the other centres.

The final target group of SPRITE users was "older people". This was based on a recognition that most people under 25 would have had access to computers at school or in the workplace. Sixty-seven percent of SPRITE users were over the age of 25 although of this total only four users were over 50. As the fieldwork was ending SPRITE was planning a course with a senior citizens group in an attempt to encourage more retired people to become involved with the project. SPRITE was successful in appealing to people who had not used computers before and to this extent it was accessible to 'older' people. However unlike the other target groups SPRITE was not sited in a centre where there was a concentration of retired

people. Therefore this inhibited 'older' people from becoming involved.

In assessing the extent to which SPRITE encouraged access to technology by particular target groups there are some difficulties, most notably with defining what an acceptable level of involvement is. For example what percentage level is an appropriate number of Black users? Bearing in mind such problems, evidence suggests that during the first two years of the project substantial advances were made in providing access to I.T. for the target groups.

AIM 4: To develop software suitable to the needs of the community

The proposal behind this aim was that SPRITE users, as members of the local community, would be most in touch with community needs in terms of software applications. As little software of relevance to unwaged people is available, the SPRITE project could encourage the development of such software, indeed a section of SPRITE's budget was specifically set aside for software development (approx £5,000 p.a.).

In practice, although a number of projects developed where existing software was adapted for community needs (see centre case studies), no new software was developed by SPRITE users. The section of the budget for commissioning software was spent on buying existing software for the centres. Lack of finance (17) led to the prioritisation of purchasing more software rather than commissioning specific packages. However a number of other factors also inhibited the achievement of this aim. Although a number of SPRITE users developed quite impressive computer skills, they were more

concerned with adapting existing packages to suit their needs rather than writing new ones. Additionally users were actively involved in other areas such as training other SPRITE users in introductory computing skills (29). The labour-intensive work of software production was not viewed as attractive by SPRITE users.

Although no new software was produced during the first two years, a number of packages were adapted so that they were appropriate relevant for community groups. In particular the databases that were created for Tenants Associations described in the case studies fit into this category. In those cases the SPRITE users would work as consultants to community groups, recognising their needs and incorporating them into systems that were essentially designed for business applications. Therefore to this extent this aim was achieved.

In retrospect, this aim could be considered as too ambitious for the project to achieve within the first two years. Certainly at some of the discussions about the future of SPRITE, users stated that they were concerned that a future SPRITE should not put too much emphasis on product development (32), as this was perceived to be at the expense at familiarising new users with computer skills. Product development was however a priority for DEED (34), as it was perceived as an outcome that would interest prospective funding bodies.

AIM 5: To ensure that centre users determine the direction of the project within their own particular centre.

The issue of user control within centres has been discussed previously in the centre case studies in chapter 6. Within that chapter it was suggested that generally users did have a large say in the direction that SPRITE took in their centre. Therefore at this level the aim was achieved. The two major characteristics that enabled the project to achieve this aim were the accessibility of the project workers to user concerns and needs, and the development of confidence by the users that enabled them to make demands of SPRITE. In practice, user control of the SPRITE project ended at the centre level. After the fieldwork a multi-centre user committee developed where users collectively began to make demands of the project management committee (39). However during the first two years their base of control was within the individual centres.

OBJECTIVE 1: To facilitate computer projects in each centre which have a specific goal linked to the community.

The case studies in Chapter 6 detail the various projects that each centre developed. Some of these projects were for the centres themselves (for example the publicity leaflets made to advertise the Space), whereas others were directed to servicing other local groups (for example the databases for Tenant's Associations). Each of these projects had specific goals, and although some centres developed more projects than others (chapter 7.2), it is apparent that within the first two years of the project this objective was met. The training was crucial in enabling users to become proficient in computers to the extent that they could work on project development. The users' enthusiasm was also important in ensuring that this objective was reached.

OBJECTIVE 2: To use the collective skills of the Advisory Committee to resource the project where necessary and appropriate, providing expertise that the community can draw upon.

The purpose behind this objective was to ensure that the organisations represented on the Advisory committee of SPRITE (which eventually became the management committee) would be able to give advice to SPRITE from their areas of expertise. In practice some representatives gave more support than others, although in general terms all the organisations represented contributed to the development of SPRITE. Examples of how this support was provided are referred to in the case studies however it is worth describing the roles of two of the City Council representatives. The Libraries representative contributed considerably to the project by providing resources to those centres that were based in libraries (Firth Park Library and the Space). Additional links were developed through the Writeback scheme at the Space. The Computer Services representative on the Advisory committee also provided useful advice to a number of SPRITE users about the issues surrounding systems design. Therefore this objective was reached during the first two years of the project's implementation as a result of the enthusiasm for the project that emerged from the members of the Advisory Committee.

OBJECTIVE 3: To eventually facilitate the development of a community network, electronic or otherwise in order to enable effective communication between community groups.

When SPRITE first began a number of people were interested in the notion of an electronic network to link community organisations throughout the city. SPRITE was perceived to be the appropriate vehicle to facilitate this development. In practice however, this development never occurred, mainly because of the expense that accompanies such networks. SPRITE was successful, however, in forging a network between the community centres that were involved with the project. Examples of how this network developed are given in the case studies in Chapter 6. The factors that encouraged this process were the cross-site activities that took place between centre user groups (25,27,30), and the social contacts that were made during the Northern College weekends (16,26,35). Therefore a network of community centres was developed, although financial costs meant that the network was not electronic.

The majority of the project's aims and objectives were achieved within the first two years of its' implementation. The supporting and inhibiting factors in the achievement of these aims and objectives are described in the next section of the chapter. Additional to the supporting factors that encouraged the achievement of aims, a hidden factor that influenced the project was the feedback that emerged from the action research. This aimed to facilitate the achievement of the project's aims. This is discussed fully in Chapter 9 which focuses on the action research process as a whole.

8.3 THE SUPPORTING AND INHIBITING FACTORS

This section focuses on the factors that either supported or inhibited SPRITE in achieving its aims and objectives. Table 8.1 shows these factors which are derived from the case study analysis of the implementation of SPRITE.

Before the SPRITE project began, Darwin, Fitter, Fryer and Smith (1985) provided a list of enabling conditions that they believed would be necessary for the establishment of a successful community computing project. These emerged from the pilot work (ch. 3.2) and focused on the pre-requisites for making I.T. accessible to unwaged people. Each of these will now be reviewed in the light of the findings from the evaluation of SPRITE's aims and objectives.

TABLE 8.1

THE FACTORS THAT SUPPORTED OR INHIBITED SPRITE
IN THE ACHIEVEMENT OF ITS' AIMS AND OBJECTIVES

AIM/OBJECTIVE	SUPPORTING FACTORS	INHIBITING FACTORS
1	Support from W.E.A. Support from SPRITE users Project worker skills	
2	Informality of training Access to I.T. resources	
3	Siting of project in centres specifically designed for target groups	White male workers Access problems to centres eg: creches and disabled access
4		Non-prioritisation
5	Project worker skills User motivation	
Obj. 1	Training focus User motivation	
2	Enthusiasm and support from outside agencies	
3	Social events	Financial cost

1. Access for wageless people: Computers need to be placed in a secure community centre so that they are accessible to the unwaged.

This enabling condition was accepted as crucial at the very start of the project. Indeed nearly all computer facilities were placed in local community centres. Although some groups also used SPRITE facilities within the city centre office, training within community centres was always seen as the main priority from the users' perspective (31). This would suggest that the number of people that SPRITE reached would have been considerably less if the project had only had a central base. Therefore this was a necessary enabling condition.

2. Equality of access: Special provision needs to be made for people with young children and physically handicapped people.

It has been argued that an inhibitor to SPRITE achieving its' equal opportunities brief was a lack of adequate disabled access and/or the lack of a creche at some of the centres. Evidence suggests that this enabling condition is important. For example far more women used SPRITE at Open Door and SADACCA where there were creches than at the Space. Additionally this enabling condition could be expanded upon in two ways in the light of the SPRITE evaluation. Firstly, to suggest that in order to reach target groups, at least one member of the SPRITE worker team should be from one of those target groups. Although SPRITE attracted members of the target groups without this factor which would suggest that it was not a pre-requisite for success, it was clearly an issue within the project (8). Extra resources had to be found to teach women-only sessions at Open Door and the Space.

The second addition is based on the argument that SPRITE should seek to locate itself in centres that are well-used by the target groups. This is supported by the fact that most of the disabled users in the project were from the Forum of People with Disabilities, and most of the Black users were from SADACCA.

3. Skills: There needs to be some form of introductory instruction in computing.

Clearly SPRITE recognised this and by providing introductory computing sessions within the centres provided users with the confidence to develop their computing skills. Comments made by the users throughout the project would support the view that this is an important pre-requisite.

4. Congruence with centre users' needs and objectives: Any courses developed need to be responsive to the needs and objectives of the users.

Again the informality of SPRITE training was based on this principle: that the content of SPRITE sessions should be relevant to the interests of centre users. This was a factor in SPRITE's success that was continually referred to by the project users as an important reason for their involvement within the project, and therefore was an important enabling characteristic.

5. Tutor support: The basic education should be provided by people with special skills, for example the people who give advice should be familiar with the needs of wageless people.

One of the supporting factors in Table 8.1 is the skills of the project workers. They were perceived as individuals who were particularly sensitive to the needs of wageless people and could provide training with those needs in mind. Again this enabling characteristic was important.

6. Financial support: The provision of computing facilities should not be a burden on centre users.

This enabling condition did not emerge as important within the SPRITE evaluation. This is because the project was set up so that it would provide the majority of resources to the centres. Therefore in practice the provision of computer facilities was not a financial burden on centre users. It is therefore difficult to evaluate the importance of financial support as an enabling characteristic, although one could speculate that if financial input into the project had been required from users, the total number of users involved with the project would have been considerably less.

7. Organisational issues: Issues such as security and use of equipment need to be negotiated with centre users at the centres where a project would be implemented.

In the centre case studies it was recognised as important that SPRITE should negotiate all aspects of its' implementation within a centre before entry. Where these negotiations were shown to be insufficient, for example at Open Door, organisational problems emerged. Therefore this enabling

condition has shown itself to be important although it is not included in Table 8.1 which focuses on the overall implementation of SPRITE.

Based on the evidence provided in the case studies, it can be concluded that the enabling conditions derived from the pilot work were appropriate to a community computing project such as SPRITE. However the inhibiting and supporting factors in Table 8.1 suggest that in the light of the SPRITE evaluation, some of these enabling conditions can be expanded to provide firmer guidelines to other people who wish to set up similar projects. A number of additional enabling conditions could also be inserted into the list. For example from Table 8.1 it appears that the support from local organisations was very important to the success of SPRITE in achieving its' aims and objectives. However this did not emerge from the pilot work as an enabling characteristic. The aim of the next section is to modify the enabling conditions from the pilot work in the light of the supporting factors from the SPRITE evaluation, and therefore produce a list of recommendations for groups or organisations that aim to set up projects similar to SPRITE.

8.4 RECOMMENDATIONS FOR FUTURE PROJECTS

These recommendations are aimed at a community computing project that aims to provide access to I.T. for all sections of the unwaged community.

1. ACCESS

A number of pre-requisite factors are crucial to ensure that computers are accessible to all sections of the unwaged community:

i) The computers should be sited in community centres that are regularly used by members of the local community and are well-used by any target groups. The centres should have childcare provision eg: a creche, and should be fully accessible to people with disabilities.

ii) The project workers should be representative of the target groups that the project wishes to attract.

2. SKILLS AND TRAINING

i) The training provided by the project should begin at an introductory level, recognising that for some unwaged people using computers is an intimidating prospect.

ii) The training should be as informal as possible. Additionally opportunities for more formal training and qualifications should be available to users if required.

iii) The focus of training sessions should recognise the distinctive needs of unwaged groups and focus the development of computing skills on those needs.

iv) Some training should take place outside of the usual environment of the project users, for example on residential weekends. This will enable social links between centres to be developed.

3. TUTOR SUPPORT

i) The tutors should be familiar and sympathetic to the needs of unwaged people.

4. LINKS WITH OUTSIDE AGENCIES

i) The project should seek to draw on the support of a number of outside agencies therefore providing expertise that might not exist within the project, or alternative routes to the development of skills for the user groups.

5. CENTRE CHARACTERISTICS

i) Extensive negotiations should take place with centres about the establishment of computer resources within centres. The roles of project workers, centre workers and centre users with regard to the computer facility should be clearly negotiated.

ii) The project should, where possible, seek to work with existing groups of users who have expressed a desire to learn about computing and its' potential within the community.

6. PROJECT RESOURCES

i) The project should have sufficient resources to ensure that no extra burden is placed on the community centres involved.

7. CONTINUOUS EVALUATION

i) Any project should have continuous evaluation, if possible.

(This final recommendation is included here as the process of action research influenced the extent to which SPRITE was successful in meeting its' aims and objectives.)

8.5 ORGANISATIONS IN THEIR ENVIRONMENTS

When reviewing the applicability of the organisational literature to community organisations in chapter 7.6, it was argued that the literature on organisations in their environments was more useful to an understanding of the development of SPRITE, than to the individual centres. Some of the supporting factors highlighted in Table 8.1 relate to environmental factors, for example links with outside agencies like the W.E.A. All of the dimensions of organisational environments suggested by Aldrich (1979) are appropriate to an understanding of the development of SPRITE. For example, with regard to environmental capacity, SPRITE was existing in a lean environment where resources were limited. Examples of the problems that lack of resourcing caused, abound within the case studies. Another example is that of environmental turbulence. Although it was important for SPRITE to have links with other groups outside the organisation, as is demonstrated in the recommendations for future projects, environmental turbulence was a concern expressed. The Space users for example, suggested that if SPRITE relied upon them too often for support, then people would begin to think that SPRITE was something that just happened at the Space (ch. 6.4).

As with other aspects of the organisational literature, caution needs to be expressed about generalizing the results of findings from the commercial sector to the community sector, where the orientation of an organisation maybe radically different. The literature on organisations and their environments does however provide useful insights by highlighting the environmental factors that are important to consider when evaluating the

success of SPRITE in achieving its' aims and objectives.

8.6 THE LITERATURE ON I.T., UNEMPLOYMENT AND THE INDIVIDUAL

This literature was reviewed in chapter 2.2. This section examines the applicability of this literature to the research findings. As with the organisational literature, the aim is not to test any specific hypotheses, but rather to see what areas are useful in understanding the experiences of unemployed individuals involved with SPRITE. Each section of the review will be considered in turn.

8.6(i) ATTITUDES TO NEW TECHNOLOGY (Ch. 2.2(i))

Figure 5.4 shows that some of the regular users interviewed reported that they had more positive attitudes to technology as a result of their involvement with SPRITE. This would suggest that in line with the argument put forward in the literature review, access to technology can have an effect on an individual's evaluation of that technology. As experiences within SPRITE were generally positive for people, their evaluations of technology became more positive. Particularly important here is the concept of technology use. Technology within SPRITE was used for a group's own ends, therefore it is understandable that attitudes became more positive. For the users of the project that weren't interviewed, Table 5.7 shows that 83% of the users who filled in the second questionnaire felt that 'being aware of what a computer can do' was the most important thing that came out of their involvement with SPRITE. Therefore an awareness of the capabilities of technology was important to these individuals.

It would appear then that there are similarities between this group of wageless people and other populations, in that familiarity with technology can affect and change attitudes. However caution needs to be expressed in making too much out of these similarities. Most of the research on attitudes to technology arises from the analysis of large numbers of responses to statistically validated scales. The findings reported here are based on small groups of people who in many cases were using technology collectively to achieve their aims. An additional problem is that this sample were self-selecting. Individuals chose whether or not to become involved with SPRITE. Those with pre-existing negative images of technology may have stayed away from the project. Those within the project were never asked directly whether they felt their attitudes had changed, rather such comments arose as responses to the question about personal gains arising from involvement with SPRITE.

Despite these problems, there are clearly links between these findings and those of other studies, in particular in relation to technology use and the consequent evaluation of that technology.

8.6(ii) SELF-ESTEEM AND DESIRE FOR CONTROL (Ch. 2.2(ii))

Within the literature review an argument was presented that effective technology use leads to an increase in an individual's self-esteem (Turkle, 1985). Such increases in self-esteem are seen to emerge from the knowledge that one can control the technology of the future. This argument was reviewed briefly in the Space case study (Ch 6.5(xii)) where it was

suggested that like Turkle's sample of computer hobbyists, the users at the Space also reported an increase in confidence and general self-esteem as a result of their involvement with computers through SPRITE. As results of the interviews with regular SPRITE users suggest (Figure 5.4, and the centre case studies), for some users confidence was seen to improve.

As was suggested in the Space case study, it is important to note that although these results seem similar to those reported by Turkle, they arise from a different context. The positive outcomes that individuals gained from their involvement with SPRITE arose from a number of distinctive features of the project. Figure 5.5 points to what those distinctive features were. Using technology by itself was not enough for this group, what was important was using technology collectively, rather than individually. This is the most important difference between this sample and Turkle's sample. The results for both groups are however similar in the relative impact on self-esteem. The findings from SPRITE would suggest that control of technology can be positive for individuals in a collective, as well as an individual, setting.

8.6 THE PSYCHOLOGICAL EFFECTS OF UNEMPLOYMENT (Ch 2.2(iii))

In the Space case study (Ch 6.4 (xii)), it was argued that individuals constructed their involvement with SPRITE so that it compensated for the negative psychological effects of unemployment. SPRITE provided these people with structured activity, opportunity for skill use and social contacts. Such positive outcomes reported by regular SPRITE users are similar to those supports that employment is seen to provide in Jahoda's

(1982) model. They also correspond to some of the factors that Warr (1987) argues are critical for mental health. There are clearly links then, between findings from research into the psychologically harmful effects of unemployment, and the benefits of SPRITE noted by this population of unwaged people. Warr's and Jahoda's models are useful in highlighting what is psychologically damaging about unemployment.

Once again however, it is difficult to compare the findings from unemployment research with the findings in this thesis. Although the similarities are clear, the population in this research was quite distinctive from other populations studied. Firstly, most of them had made the decision to do something constructive about their situation, most were already involved with community groups. Secondly, many of the benefits they reported arose from collective activity. Research about the psychologically harmful effects of unemployment tends to focus on an individual level of analysis, describing individual, rather than collective, forms of distress. Additionally the measures traditionally used to investigate the effects of unemployment on psychological well-being, such as the G.H.Q. for example, were not used in this research. Therefore, as with the other two sections of this part of the literature review, an individual, rather than a collective, level of analysis, and the subsequent methodological assumptions that underlie those levels of analysis, prevent a more in-depth comparison of results.

8.7 SUMMARY AND CONCLUSIONS

This chapter has considered the extent to which research findings from the

literature on I.T., unemployment, and the individual are applicable to the findings of the evaluation of SPRITE. It has been argued that differences in levels of analysis, (ie: individual or collective), inhibit the application of the literature to these findings.

This chapter has also reviewed the extent to which SPRITE achieved its' aims and objectives and provided a list of recommendations for other organisations and groups that seeks to set up similar projects. Therefore this chapter provides feedback that will be useful for practitioners. An important aspect of SPRITE moving towards the achievement of its' aims was the input from the action research process. The next chapter looks in detail at the role of action research within the project as a whole and offers some insights into the role of feedback within the development of SPRITE.

CHAPTER 9

EVALUATION OF THE ACTION RESEARCH METHODOLOGY

9.1 INTRODUCTION

The aim of this chapter is to review aspects of the action research methodology within the SPRITE project. In Chapter 3 it was suggested that an action research perspective was the most appropriate in which to set the evaluation of SPRITE as this perspective would enable the evaluation to comment on the way the project was developing by providing feedback. In order to consider the impact that the action research framework had on the SPRITE project, this chapter will address a number of issues. Firstly three feedback loops that were identified as a way of feeding back evaluation findings into the project will be described. The focus of the discussion will be the utility of these three different loops and an evaluation of the extent to which they can be incorporated into the action research model. The discussion will then consider the overall focus of the evaluation in the light of some of the issues about action research that were raised in the literature review in chapter 2.3. The chapter concludes with some general comments about action research derived from the experience of conducting the SPRITE evaluation.

9.2 THE FEEDBACK LOOPS

Within the action research process, three feedback loops were identified:

The Operational Loop

The Strategic Loop

The Policy-making Loop

These will now be described. The purpose of the operational loop was to feed back information at a day to day level within the centres. In practice this was a continual process with feedback being directed to the SPRITE workers. This generally occurred through talking with them during and after centre visits, or at the regular meetings we had to discuss the progress of the project. Much of the information fed back was descriptive and informal. Within these discussions we would negotiate our understandings of situations from the basis of our interpretation of events. We would then consider ways of dealing with any problems that emerged where necessary.

The information in this feedback loop was used to make decisions about the daily implementation of the project. One example refers to the nature of training. Users would often make comments to me about the nature of SPRITE training such as the pace at which it was progressing. I would then pass these comments on to the project workers. This example highlights one of the perceptions that SPRITE users had about my role, that of a go-between between themselves and the project workers. It was at this level that I had the most contact with the SPRITE users. During the first set of interviews with users, one of the questions in the interview schedule referred to what they thought the impact of the evaluation had been within their centre. It is interesting that the majority of responses to this question referred to my role as the evaluator. This role was perceived by users in a number of ways. For example:

" Well you're a spokesperson aren't you, anything that needs to be known about SPRITE, you'll let them know, so in a way it's a good thing isn't it..."

In this case the function of the evaluator is seen as a go-between. There

were a number of different functions that users thought the evaluation had.

As one commented:

" Well it's important to evaluate, it's no good going along at the same level, you've got to get better and if you're an independent person saying 'Oh what did you do?' then we're not slacking all the time. I mean we could sit here to our heart's content, but as long as you know that somebody is going to evaluate it then you may as well do the best job you can..."

Here the evaluation role is almost one of social control! In a few cases it was difficult for people to work out what the evaluation actually was, for example:

" I don't actually know what you do, it's difficult to know when you come down to our centre, what actual feedback you give them, it's not known to people in the centres..."

This quote raises the important question of the extent to which users understood the purpose of the evaluation. As a result of having an evaluator on the project the word 'evaluation' came into common usage in all areas of SPRITE, however the definition of evaluation tended to be associated with any work that I did, rather than clearly addressing the academic meaning of the word. Although this usage included the academic role, it was extended to include other aspects of my work, for example working with women. To the majority of regular users however, feedback was viewed as the most important aspect of the evaluator's role. For example:

" Well it's good 'cos you're nowt to do with SPRITE, or I don't think you are, I mean you're not on anyone's side so after all this lot (meaning the interviews) you'll be able to work out what's common with everybody, you can say to them all 'if you did so and so and so it'll help in the long run'"

The other image of my role that emerged from the interviews was the idea of the evaluator as "fixer", noticing when things were going wrong:

" If something is going wrong then hopefully you can say 'well if you steer it this way a bit it'll be alright'. I think you're pretty good at doing things like that, maybe it's your university background, I don't know..."

Therefore it was at the operational level that I had most contact with the users and where the majority of informal feedback took place. Feedback at this level was usually acted upon quite quickly. Examples of interventions at this level can be found in the centre case studies in chapter 6.

The second level of feedback was at the strategic level of the project. Feedback here was used to make medium-term reports on the project that enabled strategic decisions to be made. This feedback would often take the form of written documents that were provided to the management committee of the project. Examples of these can be found in Chapter 5, for example the two project reviews, and the criteria for the selection of future centres. Additionally an evaluation report was given verbally to each meeting of the management committee and therefore, although the audience included some of the people who had received feedback about the project at the operational level, such as project users and workers, it also included the managers of the project. This feedback emerged from a careful analysis of all the data collected within the project over a given period, for example from interviews and the notes made from participant observation.

The interventions that are described within the three centre case studies are a result of feedback at this level. Each was planned to address problems within the project that needed solving for the long-term. Each was also the result of agreement from the management committee. Therefore this feedback loop provided the link between the day to day implementation of the project and the management of the project.

The third feedback loop was at the policy-making level. The aim of this loop was to provide general lessons and information about the results of SPRITE. Feedback at this level is directed towards the project funding bodies. Some of this feedback has already been given. For example in April 1988, some of the SPRITE users and myself provided a presentation to officers from the city council about issues that had emerged within the project as a whole. We presented the information in the form of a play which gave us the opportunity to put forward users' opinions about how they wanted to see SPRITE continued in a manner that was accessible and amusing to the audience. Therefore the presentation focused on our collective recommendations as a result of the research, combined with their experience.

Most of the feedback from this loop has still to be given. At time of writing, the final report on SPRITE for Sheffield City Council and the European Social Fund has not yet been written. The aim of that report is to provide guidelines to funding bodies for the establishment of future projects similar to SPRITE, as well as to describe how the funding for the project was spent. Therefore feedback at this level can be characterised as being in a formal style and directed towards funding bodies.

These feedback loops did not exist in isolation but rather information from one loop fed into the next loop. The interventions described in the case studies can illustrate this process. At the Space where, at the operational level, it was identified that there were no women involved with the project, feedback from meetings that I had with users and local community

workers led to a decision at the strategic level about setting up women-only classes. When the impact of this intervention was evaluated, this information was fed into the policy-making level. For example, the recommendations for future projects in the last chapter recommended that all centres in which a project worked should have creche facilities. Additionally a project such as SPRITE should have a female worker. These recommendations will be fed into the final report of the project that will go to the funding bodies.

At Open Door the identification of political problems between groups at the operational level led to a decision at the strategic level to fund a programme of development work. The evaluation of that action led to the recommendation at the policy-making level that a project such as SPRITE needs to work with existing groups and fully negotiate its entry into a centre.

At SADACCA, feedback at the operational level about the reasons users were not using the SPRITE sessions was fed into the strategic level where the decision was taken to liase with a local college to arrange some formal training for SADACCA users. At the policy-making level, one of the recommendations is that an organisation like SPRITE has strong links with other local educational institutions so that courses can be developed that are suitable to the needs of unwaged people. These examples illustrate ways in which the loops feed into each other.

In describing how feedback was used at each of these three levels it is possible to provide a general analysis of the nature of feedback in action

research. The ways in which feedback can be characterised at each of these levels is shown in Figure 9.1

FIGURE 9.1

CHARACTERISTICS OF THE THREE FEEDBACK LOOPS

<u>CHARACTERISTICS</u>			
	<u>STAKEHOLDERS</u>	<u>MEDIUM</u>	<u>TIME SPAN</u>
<u>LOOP</u>			
OPERATIONAL	Users/project workers CLIENTS	Verbal/ Informal	Short-term Continual
STRATEGIC	Management committee SERVICE PROVIDERS	Verbal/ Written Formal	Medium-term Regular
POLICY-MAKING	Funding Organisations SERVICE ORGANISATION	Written Formal	Long-term Occasional/ Final

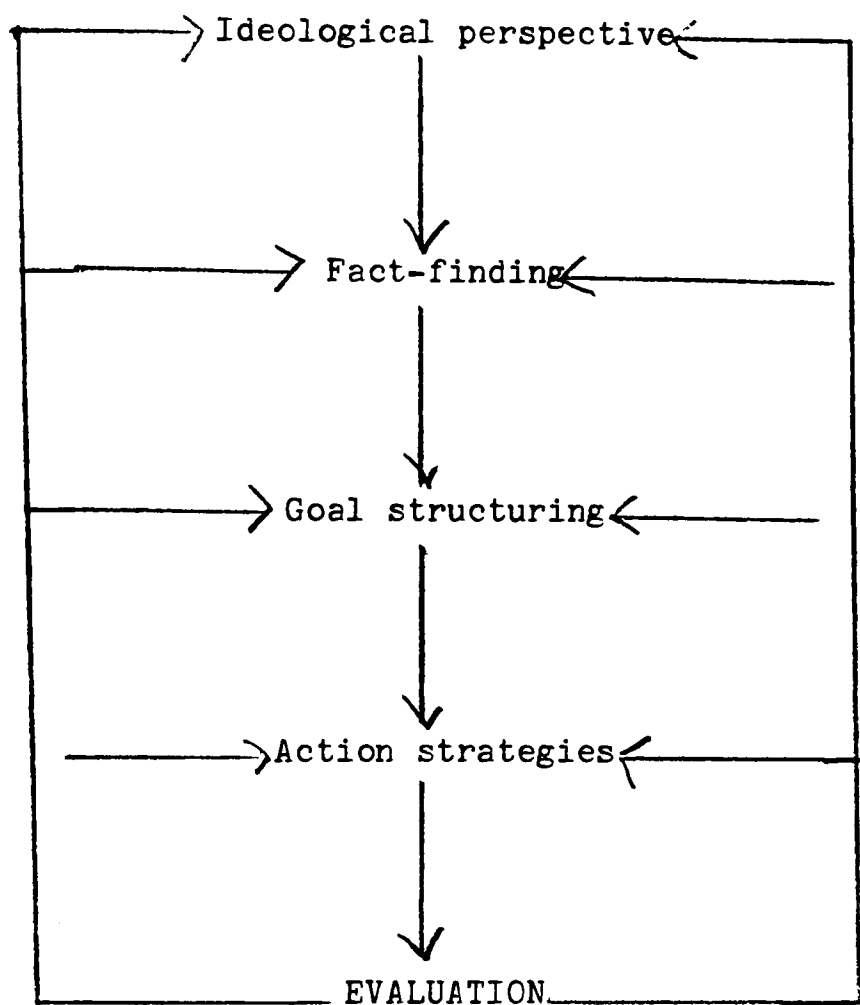
Within Figure 9.1, the differences in feedback at the three levels are characterised in terms of the stakeholder groups to which the feedback is addressed, the medium of communication that is used to convey the feedback, the interval between the occasions on which feedback is provided, and the time span of a single iteration of the feedback loop. This framework assumes that the findings of action research will be utilised in practice and provides suggestions about appropriate ways in which to conceptualise the feedback process. Therefore the framework should be useful to other action research programmes. In order to clarify the framework, it needs to be viewed in the context of the literature on action research that was described in chapter 2.4 and the evaluation framework described in chapter 3.4. The next section of this chapter examines the process of evaluating SPRITE in the light of the literature on action research.

9.3 THE ACTION RESEARCH MODEL

In chapter 3.4 Lewin's model of action research was put forward as the model on which the evaluation would be based. The model is shown again in Figure 9.2.

FIGURE 9.2

THE ACTION RESEARCH MODEL

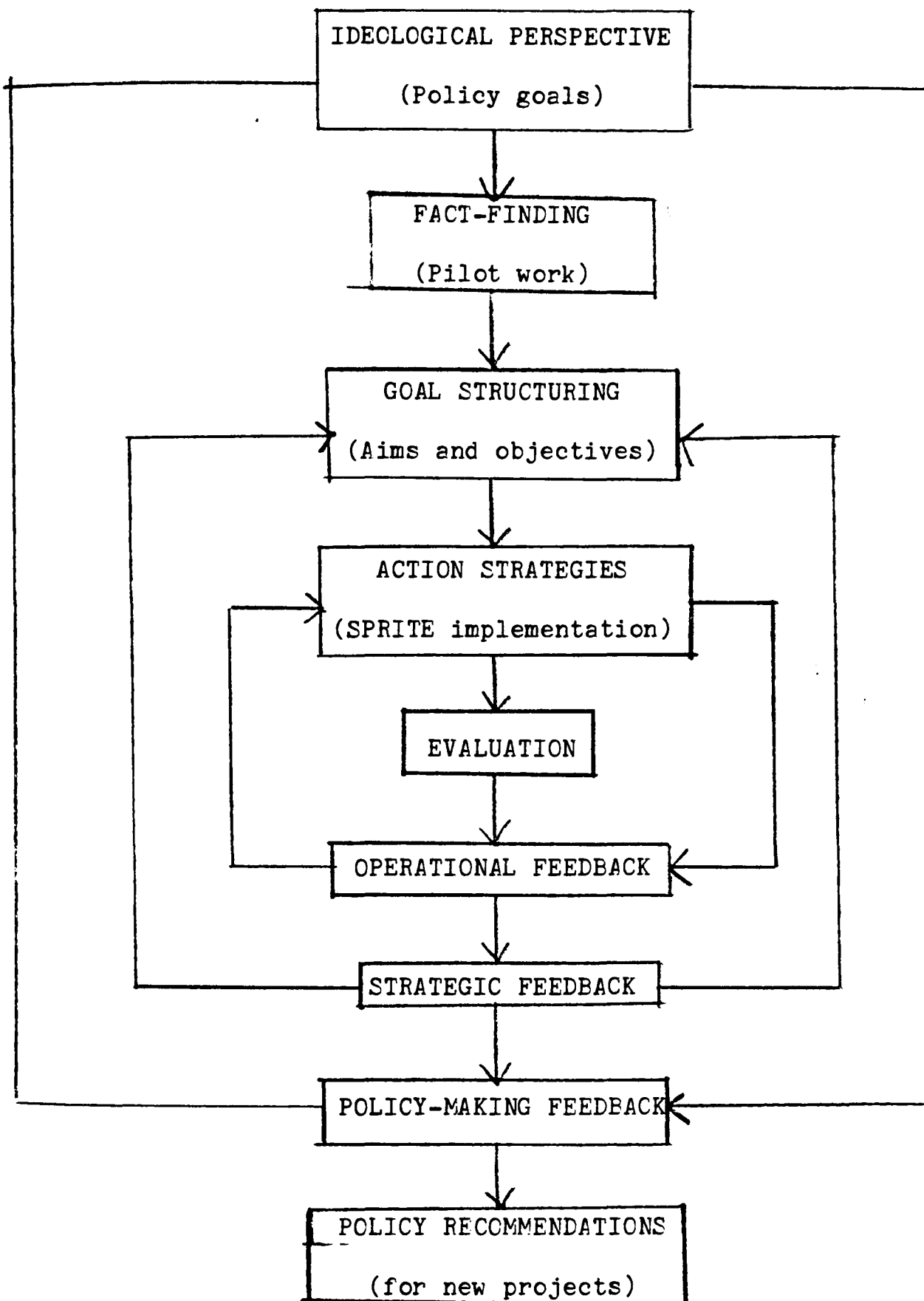


The emphasis of this model is that feedback from the evaluation stage makes action research a cyclical process. With SPRITE, the ideological perspective was the idea that wageless people should have access to I.T., a view described in Chapter 1. The pilot work which stemmed from the ideological perspective was the fact-finding stage, and the goal

structuring and action strategies represent the implementation of the project. The framework of feedback loops described in the last section, if applied to Lewin's model, can extend it in a number of ways. If the various types of feedback are mapped onto this model, it shows what kind of feedback is appropriate at each stage. It also suggests a stage where the circular process will eventually stop, when the policy-making loop has been completed. There is also a recognition that after the first stage of evaluation, feedback will be taking place at more than one level. Figure 9.3 illustrates this process.

FIGURE 9.3

A MODEL OF FEEDBACK DURING ACTION RESEARCH



The combined model presupposes that information from action research is cumulative, that is, information at the operational level will always be fed in to the strategic level. This stage of the model is an iterative process that can happen countless times. The accumulation of all this information forms the basis for the policy recommendations that occur at the end of the research. The model also suggests that particular forms of feedback are relevant to particular stages of the evaluation process. Information from the policy-making loop for example, will enable a review of the original ideological perspective within which the project was set.

Additionally, whilst Lewin's model suggests that action research is circular, a consideration of the different types of feedback allows an understanding of how his model can be applied to a project of fixed length. Although in some cases policy recommendations may be made during the lifetime of a project, in most cases, as with SPRITE, the production of policy recommendations is left to the end of a project when all the data has been collected and analysed.

Lewin's model proved very useful as a starting point for a framework for providing feedback throughout the evaluation. It also provided a mechanism for the utilization of research findings which were fed back into the process of goal structuring and the development of action strategies. In chapter 2.4(i) the utilization of findings from evaluation research was discussed. Legge (1985) has argued that the utilization of findings within evaluation research has become an important crisis. One of the barriers to utilisation is uncertainty about to whom the findings of action research are directed, and how the receivers will use those results. As Patton

(1978) suggests, research findings are often ignored in programme decision-making. The extent to which action has occurred within SPRITE as a result of feedback at the operational and strategic levels is clear (for example within the case studies), however it is likely to be the policy-making level where the utilization of research findings will be questioned.

A fuller understanding of this argument comes from locating the discussion in that of the stakeholder perspective (Fitter 1987), as described in chapter 2.4(ii). The SPRITE evaluation advocated the interests of one of the stakeholder groups as primary (the users). Other stakeholder groups (such as the project workers and the management committee) perceived the users' interests as an important priority and goal of the project. It is therefore understandable that feedback at the operational and strategic levels was acted upon. However one stakeholder group, the project funders, appear to have a different perspective. With the European Social Fund it is difficult to see what their interests in the project are, as they were not directly involved with the first two feedback loops. Rather, they will be given a report at the end of the project about the results of the evaluation. It will then be up to them how they deal with the feedback. It is unclear whether they will use the results for the development of SPRITE or other related projects.

The other funding body, Sheffield City Council's DEED, were involved with the feedback process at the strategic level as they had representatives on the project management committee. As their current priority is rationalization of resources, their interests are likely to conflict with

other stakeholder groups. The results of the evaluation which suggest that the project is beneficial, and should be continued, will need to be reconciled with their strategic plans. However, because DEED are part of the strategic feedback loop there is considerable pressure on them to reconcile potentially conflicting perspectives. The difference between inclusion (DEED), and exclusion (ESF), in the strategic loop is a vital factor in the influence that evaluation findings will have at the policy-making level.

Therefore, when suggesting that evaluation research findings are often ignored, it is important to point out which stakeholder groups ignore findings as this will be different in different cases. Is it the funders of the project? Those who implement the project? Or those on the receiving end? To understand the crisis in the utilization of evaluation research findings, an understanding of the particular stakeholder groups and their interests is necessary.

Before making some conclusions about the action research process within SPRITE it is worth addressing some of the criticisms of action research that were levelled in Chapter 2.4(iii). The first common criticism emerges from the role of the action researcher and suggests that action research findings are not objective because the researcher is involved in the planning and implementation of the action, as well as the evaluation. Within chapter 2.4(iii) I questioned whether action research programmes could ever be objective in that they are operating in a political environment where knowledge is socially constructed. After spending two years conducting action research, I would argue that findings can never be

objective, as the researcher has a stake in the project as a whole. This stake may not necessarily be identified as the success of the project in question, but at a more basic level, the researcher will be concerned about the collection and interpretation of high-quality data from the project, and the subsequent use of that data.

Rather than addressing the question of objectivity, one can fairly address the question of the researcher's involvement with a project. Rather than dismissing the interpretations of a participant researcher as biased, it is more fruitful to show the extent and manner in which the researcher influences the project. I was involved in SPRITE as a participant, and as a researcher right from the start. Rather than saying that this means my interpretations are biased, what I have aimed to do is to show the extent to which I influenced the project. The major interventions that I made into the project have been described, together with the results from the evaluation of those interventions. Therefore the role of the action researcher, and its impact on the project, have been carefully described with the aim of highlighting my input. It is important then that the action research role becomes analysed as part of the research findings. In line with the arguments put forward in chapter 2.4(iii), I would suggest that having an action researcher participating within the project ensured that the methods used were sensitive to the people who were essentially the 'subjects' within the study: the SPRITE users. Without their trust, the results of this evaluation would have been qualitatively poor. Therefore I would argue that as long as an action researcher can describe his/her input into a programme and analyse the implications of that input there is only the same threat of bias as in any other research method.

The other criticism of action research described in chapter 2.4(iii) refers to the applicability of findings and generalisation. To counteract the criticism that the results of action research are not generalisable I would argue that the results of this study are not aimed to be generalisable to the population at large. Rather, they give insights into the processes that enable the development of a community project, and allow the generalisability of these findings to other community projects, and more specifically, to those projects that seek to provide resources to people at a collective level. The supporting and inhibiting factors and the recommendations produced in the last chapter are useful for this purpose. Rather than seeking to generalise to the population at large, the results of this study, like most action research, have produced recommendations that are not achieved by some statistical analysis but rather by the understanding of processes and their effects. It is through this understanding of context, process and effect that the applicability of findings to other contexts can be judged.

Additionally the results and conclusions about action research that are put forward in this chapter can be generalized to similar projects within the community where action research is taking place. The framework for feedback may also be generalisable to organisational development programmes.

There is an additional aspect of the action research process of SPRITE that is worth mentioning. Recently there has been increasing concern within the unemployment literature about what can be construed as an ethical dilemma: the extent to which the researcher 'takes' information from his/her

subjects compared to the extent to which they 'give' something back in return (Fryer, 1986). The use of action research within SPRITE has allowed the 'subjects', that is the SPRITE users and workers, to benefit from the research findings. By feeding back information, the project has been able change in positive ways in line with achieving its' aims and objectives. Therefore the information or data, that in other approaches to research is 'owned' by the researcher, has been owned and used collectively by those involved with SPRITE, as well as the researcher.

9.4 SUMMARY AND CONCLUSIONS

The aim of this chapter has been to describe some of the issues that have arisen from the use of the action research framework as a basis for the SPRITE evaluation. The chapter has produced a framework for examining the nature of feedback within action research and has argued that this framework will be useful for the analysis of feedback within other action research projects. This framework when incorporated into Lewin's model also demonstrates the process of action research and provides an understanding of how the iterative process can end with the provision of feedback in the policy-making loop. The chapter has discussed some of the issues about action research that were described in chapter 2.4(iii) and has addressed some of the criticisms that have been made about the methodological approach.

In conclusion, the setting of the SPRITE evaluation in the action research tradition has proved fruitful. The emphasis on feedback in particular has enabled the project to change as a result of the study of the processes by

which it has developed. Therefore the methodology has contributed to the success of the SPRITE project, as well as providing a useful context in which to set the research.

CHAPTER 10

CONCLUSIONS

10.1 INTRODUCTION

The aim of this chapter is to present the conclusions of the research. Firstly, it is worth making a general comment about the nature of the research within this thesis. Rather than starting with hypotheses to test, the research has focused on the evaluation of a project which has the distinction of being the first of its' kind in Europe. The major conclusions from such an evaluation will therefore serve to make practical recommendations, as well as making comments about the applicability of the psychological literature to the research findings. In presenting conclusions, this chapter will consider four specific areas which have formed the basis for the research. The first area is the research questions, that is, what are the major findings from the research? As action research has the twin aims of informing theory, whilst making practical recommendations, the second area considered is the academic conclusions from the research, and the third area the practical conclusions. Finally conclusions are made about the action research framework.

10.2 THE RESEARCH QUESTIONS

10.2(1) RESEARCH QUESTION ONE

Research question one asked about the effects that the implementation of

SPRITE had on the organisational dynamics of the community centres.

Although this research question has been addressed for each centre within the case studies, some general conclusions can be made. It is clear that within the centres SPRITE had an impact on organisational dynamics (chapters 6 and 7). This impact is particularly evident in the implications that involvement with the project had for the centre user groups. The use of a new centre resource and the development of technical skills has, in some cases, empowered groups. This empowerment has altered the stakeholder relationships within the community centres, as one would predict it would with any other organisation. The 'disclosing tablet' metaphor is useful here. The introduction of a new computing resource into a community centre can highlight issues that may not have been previously recognised, for example tensions that may exist between groups.

The different results of the implementation of SPRITE within the three case studies would suggest that a project like SPRITE does not have a uniform effect on the organisations it enters. Rather, a whole range of factors will affect the impact that SPRITE has on a centre's organisational dynamics. The most appropriate conclusion from this question is that SPRITE had a definite impact on the organisational dynamics of each centre and that that impact very much depended on how the various stakeholder groups within a centre reacted to SPRITE.

10.2 (ii) RESEARCH QUESTION TWO

Research question two asked: What effects does the centre's organisation have on the implementation and outcomes of the project? Again, as the case

studies and the cross-site analysis in chapter 7 suggest, aspects of a centre's organisation ranging from structure to user group identity, are crucial in explaining the differential impact that SPRITE had within the centres.

Within chapter 7.4, a list was provided of the organisational factors that emerged from the data as important in explaining the differential impact of SPRITE within the centres. SPRITE had to continually adapt during implementation as a result of these organisational factors. Research findings suggest that community centres cannot be treated as static environments, rather aspects of a centre's organisation will change and adapt as a result of input from an organisation like SPRITE. Therefore any analysis of a centre's organisation needs to be an ongoing task. Clearly an organisation like SPRITE cannot be seen as independent of the context in which it is set, and therefore has to be flexible in responding to the centre in which it works.

8.2(iii) RESEARCH QUESTION THREE

The third research question asked how does having access to the project and its' resources influence individuals? This research question has been answered within chapters 5 and 6 where it was noted that the regular users of SPRITE reported the development of communication, organisational, and technical skills, and a number of psychological benefits as a result of their involvement with the project. SPRITE encouraged people to develop confidence in themselves, and to make new social contacts. The reasons for these developments were discussed in chapters 5 and 6.

In examining the effect that SPRITE had on individuals one important question needs to be addressed. Could similar benefits have been gained through any other form of intervention? If SPRITE had been about the community use of video, for example, would the same positive outcomes for individuals have occurred? The aspects of SPRITE that were important to users were described in chapter 5. The opportunity to meet people and develop useful skills were the most important aspects of the project. The emphasis of informal training provided in a local setting that could be adapted to suit an individual's and groups needs, was perceived as crucial. There is no reason why a project that encaptures these aspects whilst focusing on another application, such as video, could not produce the same outcomes for individuals. The technology itself was not as important as the social environment around that technology. However, it was the opportunity to learn about the technology that originally attracted people to SPRITE. In the light of the comments in chapter 2.2(ii) about the popularity of computers within popular culture, one could argue that the focus of such a project would need to be something equally attractive, yet equally inaccessible to wageless people.

10.2(iv) RESEARCH QUESTION 4

Research question 4 asked to what extent can, and do, individuals have influence on the project. The extent to which centre users influenced the development of SPRITE within their own centre was described within the case studies. Mechanisms for users to take a more active role within decision-making as a whole were described in chapter 5. Clearly it was

easier for users to have a say in the project within their own particular centre, rather than in the project as a whole. The major conclusion from the research with regard to this question is that users did have an impact on the project, and that the involvement of users in the decision-making process made SPRITE more responsive to their needs. This was also facilitated by the action research process. Thus the users are a valuable resource for the project provided they are treated as such.

10.2 (v) RESEARCH QUESTION FIVE

Research question five asked to what extent SPRITE was successful in achieving its' aims and objectives. This research question formed the basis of chapter 8 which included practical recommendations for similar projects. In conclusion, the evidence within the case studies suggests that within the first two years of the project, considerable headway was made in the achievement of aims and objectives. The discussions about the future of the project also suggested that an awareness of the areas in which SPRITE was particularly successful helped in the definition of future priorities. The main inhibitor to SPRITE was the lack of resources in terms of personnel and finance.

10.2 (vi) RESEARCH QUESTION SIX

This question asked about the wider implications of the establishment of the project. Apart from the general implication of demonstrating that IT can be used by unwaged people to further their own ends, two other implications are important. Firstly, a network of community centres has

developed as a result of the project. Although these centres are not electronically linked, centre users know people at the different centres and during the fieldwork period visited other centres regularly. This network also extended beyond the centres where the project was located in that the project provided advice to a number of computer-using community groups within South Yorkshire. This would suggest that there is a need for a co-ordinating organisation to advise Sheffield voluntary and community groups on computer use.

Secondly SPRITE encouraged the idea that I.T. products could be useful to unwaged and community groups. In practice a number of projects developed where existing software was adapted for community needs. A number of SPRITE users who had developed impressive computer skills were concerned with adapting existing packages to suit their needs and the needs of other community groups. Therefore an important conclusion from the research is that community computing is useful to groups of unwaged people. Software can be adapted to suit their needs, if the necessary skills, and awareness of those needs, are available.

10.3 ACADEMIC CONCLUSIONS

At the beginning of the literature review in chapter 2 it was suggested that there was no one body of academic literature that could inform all the issues within this research. Therefore three aspects of the psychological literature were described and have been referred to and developed within the thesis. Although the research here has not 'tested' any theories in the positivistic sense, its' merits lie in the examination of which aspects of

the literature reviewed are relevant to gaining insights into the data. To that extent theories or models that have been commented upon are those that have been appropriate and useful to data interpretation.

The fact that this research has been based at a collective level of analysis has inhibited the application of a lot of the literature reviewed within the section of 'IT, unemployment, and the individual'. A lot of that literature has emerged from large-scale quantitative surveys based on statistically validated scales. Within this study however, the focus has been on small groups that work together in community centres to further their collective aims. In this context, it has been argued that statistical validation of results is inappropriate. Some of the research into the psychologically harmful effects of unemployment has shown itself to be useful in explaining some of the data, for example what individuals gain from their involvement with SPRITE (see centre case studies and chapter 8). However, in the light of this research, one could argue that further research is necessary to understand the psychological effects of collective community responses to unemployment. In particular the recognition that different groups among the unwaged had different demands of SPRITE is important. The user group at the Space, for example, wanted to do something constructive to offset the boredom of unemployment, whereas the user group at Woodthorpe wanted to develop marketable skills. This would suggest that generalisations from this sample to a general population of unemployed people would be inappropriate. Although SPRITE aimed to facilitate access to the technology of the future, rather than aiming to alleviate the ills of unemployment, involvement with the project did have psychological benefits for the users involved. Additionally, for this sample of SPRITE

users it is evident that attitudes to technology changed, as a result of access to and use of that technology. Regular users of the project also reported that their self-esteem and confidence had increased as a result of their involvement with the project. It is important however, that these benefits were often ascribed to the collective achievements of a SPRITE user group, rather than the development of individual technical skills. Again, these findings would suggest that a collective level of analysis is important, and more relevant to this research than the individualistic approaches typically employed by researchers within the area of unemployment (Hartley and Fryer, 1984).

The literature on I.T. and the organisation has provided useful insights into the research findings. The argument that has emerged within the thesis is that an analysis of the organisational characteristics of community centres is useful in diagnosing problems within the implementation of a project like SPRITE. It has also aided an understanding of the project's successes and failures. The organisational literature is clearly applicable to community groups and the issues that emerge around the organisational change involved with the implementation of an I.T. resource are similar to those in other types of organisations. A note of caution has been expressed however, about the need to maintain an awareness of the fundamental differences in orientation between such organisations. These differences clearly limit the generalisability and applicability of research findings.

A recommendation from this research is that organisations within the voluntary and community sectors can clearly learn from the organisational literature. Though any area of academic research may be greeted with

distrust by community activists, clearly insights into organisational processes can be useful in understanding the day to day operation of voluntary organisations. The application of the literature to such organisations needs to be dealt with in a manner that is sensitive and accessible to practitioners. Although this process is already beginning, with the emergence of such texts as 'Understanding voluntary organizations" (Handy, 1988), many opportunities could emerge within this area for occupational psychologists to develop their techniques of organisational analysis. This development would enhance the academic discipline, as well as the performance of voluntary organisations.

10.4 PRACTICAL CONCLUSIONS

One of the aims of this research is to provide practical recommendations for policy-makers and practitioners involved in community projects. The action research process itself has enabled the regular feedback of results from the research to the practitioners and the policy-makers involved with SPRITE. Therefore practical recommendations have been part of the process of the research. Chapter 8 produced a set of policy recommendations for practitioners interested in setting up similar projects to SPRITE. These arose from an analysis of the research data. Rather than repeating those recommendations here, they can be treated as the practical outcomes of the research.

10.5 THE ACTION RESEARCH FRAMEWORK

The third angle of the research has examined action research as a methodology. From this research lessons can be learned about the process of action research. Within this research the role of the researcher has been highlighted in relation to a number of issues. It has been argued that a participant researcher can produce high quality data as a result of the trust gained from the 'subjects' of the research. Additionally, the experience of SPRITE would suggest that feedback is crucial in ensuring that a project operating in such a complex environment achieves its' results. Some of the difficulties of conducting action research have also been discussed. The 'textbook' problem of being used as a resource of the project, in this case as an additional worker, is one of those problems. This is particularly pertinent to being a participant researcher in an organisation of limited resources. The importance of being aware of the different stakes that groups have within a project and its research programme has also been highlighted. The identification with one particular stakeholder group: the users, has shown itself to be useful in that it enables a clarification of the role of the researcher. Within future research programmes this position could be developed. For example, in an organisational intervention that requires an analysis of the relationships between three stakeholder groups, it would be useful, if resources allowed, to have a researcher allocated to each of those groups. This would facilitate the trust by each group in the researcher and thus increase the quality of the data collected. This process could also promote a greater understanding of the relevant issues at stake and lead to carefully designed interventions. Data collected from each of the groups could then

be negotiated between the three researchers.

Chapter 9.3 described a framework for analysing the role of feedback within action research. This framework emerged from the process of evaluating SPRITE, but could be equally useful to the evaluation of other projects, or Organisational Development (O.D.) interventions for example. The same can be said for the model of action research in Figure 9.3. which highlights what forms of feedback are useful at what stages of a project. An alternative approach has also been taken to the problem of the utilization of evaluation research findings. It has been suggested that a distinction has to be made about which stakeholder groups are involved in the process of feedback at each level. The involvement of policy-makers in particular feedback loops can lead to them being more responsive to research findings. Although the model is based on this data, it could be useful to the evaluation of other projects more generally, or within the field of O.D. and consultancy work.

In conclusion action research has been shown to be an extremely useful technique for evaluating programmes. Indeed the results of this research would suggest that the methodology can enable research findings to be 'owned' and used by other groups besides the researcher, and therefore be used to facilitate the process of empowerment.

10.6 SUMMARY AND CONCLUSIONS

This chapter has focused on the major conclusions that have been drawn from the data in three areas: academic, practical, and methodological. The

research has shown that the evaluation of a community project can raise many issues, some of which are not generally considered to be within the traditional remit of occupational or organisational psychologists. The strength of this research is that, as well as being of considerable practical use to one particular community organisation within Sheffield, and providing guidelines for future projects of a similar nature, it has also provided insights into the strengths and limitations of the psychological literature when applied to issues of great relevance to 1980's Britain. It has described and analysed the attempts of unwaged people to come to grips with, and use to their benefit, the technology of the future. It has also highlighted a new area of study where occupational psychologists have much to contribute: the community or voluntary organisation. Finally, the research has focused on a methodological tradition which although devised forty years ago, has much to offer the academic or practitioner in the late 1980's.

POSTSCRIPT

JULY 1989

This postscript briefly describes developments within SPRITE after the fieldwork ended. The discussions that started in the summer of 1987 about the future funding of SPRITE became considerably prolonged. In the summer of 1988, a decision was made by DEED that SPRITE would become part of Tritec, which would then be attached to one of Sheffield's new Tertiary Colleges. This decision was made without consultation with the SPRITE management committee or the project users. Both groups had considerable misgivings about the operation of SPRITE within the Tertiary system. It was unclear whether SPRITE would be able to continue in a form that was essential for its' effective operation, for example having a user committee or providing informal training. The management committee believed however, that as they had no choice in the matter, it was important to negotiate the best deal possible for SPRITE under Tritec and Tertiary. It was recognised that there would be considerable benefit arising from the project securing stable long-term funding. The project workers and representatives from the W.E.A. have worked hard to ensure that the the guidelines for the operation of Tritec have represented the user's and the project's interests. As a result, the role of SPRITE within Tritec is now looking much more optimistic.

SPRITE continued to develop at a fast pace increasing its' links with local community groups. The project became well-established as a consultancy service for local groups interested in computers, as well as continuing with its' work in the centres. Although the Open Door centre closed, SADACCA and the Space are still thriving community centres with well-used computer facilities. In the other centres, exciting developments are happening. The Woodthorpe group for example, made a successful bid for Urban Programme funding of £18,000. They have spent the money on new equipment and are involved in a number of courses ranging from a City and Guilds course in Information Technology, to a 'Computers for the Terrified' course for new members of their group. Many of the original centres no longer require the same degree of support they once did, while some are receiving support from other agencies.

The central workshop has proved successful as the location for a range of activities aimed at both individuals and groups. Many local groups and organisations drop in to use the facilities and ask for advice about computer applications. Work with groups of people with disabilities has become an increasingly important part of SPRITE's work. Additionally the new programme that began in the workshop in April 1989 covers a wide range of computer-related activities including Systems Analysis, Computer Office Skills, Desk-top publishing for beginners, Operating Systems, and a training course for Disability Campaign groups. Requests are also being made for more formal training courses which reflects the changing needs of SPRITE users. Applications have also been made to the E.S.F. for the funding of two new projects to provide SPRITE with 50% E.S.F. funding again. The new proposals are for 'Training for Trainers' and 'Training for Technicians', and build on the successes of SPRITE so far.

A number of the original users within the project now have permanent jobs

in computing. Most of these are concerned with teaching computing skills or supervising community computing projects. Three meaningful relationships (two of which started on Northern College weekends), have blossomed! The SPRITE project has been responsible for two marriages so far!

Despite its rapid development SPRITE has remained small and informal enough for the project to be accessible to unwaged individuals and community groups. Therein lies its' success.

REFERENCES

- Aldrich, H.E. (1979) Organizations and their environments. New Jersey: Prentice Hall Inc.
- Anderson, R.W. and Lipsey, M.W. (1978) "Energy conservation and attitudes toward technology". Public Opinion Quarterly. 42, 17-30.
- Argyris, C. (1973) "Personality and organization theory re-visited". Administrative Science Quarterly. 18, 2, 141-167.
- Bedeian, A.G. (1980) Organizations: Theory and Analysis. Illinois: The Dryden Press.
- Becker, H. and Geer, B. (1970) "Participant observation and interviewing: A comparison". In W. Filstead (ed.) Qualitative methodology. Chicago: Markham.
- Bereano, P., Bose, C. and Arnold, E. (1985) "Kitchen technology and the liberation of women from housework". In W Faulkner and E. Arnold (eds.) Smothered by invention: technology in women's lives. London: Pluto Press.
- Bevan, E.D. (1988) "The task for a new professionalism" in B. Glastonbury, W. La Mendola and S. Toole (eds.) Information Technology in the Human Services. Chichester: Wiley.
- Bjorn-Anderson, N. (1986) "Implementation of office systems". In A.V. Stuart and R. Hirscheim (eds.) Office Systems. North-Holland: Amsterdam.
- Blackler, F. and Shimmin, S. (1984) Applying psychology in organizations. New Essential Psychology Series. London: Methuen and Co.
- Blain, I. (1964) Structure in management. London: National Institute for Industrial Psychology.
- Braithwaite, A. and Garcia, S. (1985) "Depression in the young unemployed and those on youth opportunities schemes". British Journal of Medical Psychology. 58, 67-74.
- Bostock, S. and Seifert, R. (1983) "Introducing a micro-computer into Adult Education classes". Adult Education. 55, 4.
- Braverman, H. (1974) Labor and monopoly capital. New York: Monthly Review Press.
- Breakwell, G.M., Harrison, B. and Propper, C. (1984) "Explaining the psychological effects of unemployment for young people: The importance of specific situational factors". British Journal of Guidance and Counselling. 12, 132-140.
- Breakwell, G.M., Fife-Schaw, C. and Lee, T. (1985) "Survey of student attitudes to technology". Science and Public Policy, 12, 337-340.

- Briar, K. H. (1977) "The effect of long-term unemployment on workers and their families". Dissertation Abstracts International. (March) 37 (9-A): 6062.
- Brookfield, S. (1983) Adult Learners, Adult Education and the community. Milton Keynes: Open University Press.
- Buchanan, D. and Huczynski, A. (1985) Organizational Behaviour: An introductory text. New Jersey: Prentice-Hall Inc.
- Burnes, B. and Fitter, M. J. (1987) "Control of advanced manufacturing technology: supervision without supervisors?" In T.D. Wall, C.W. Clegg and N.J. Kemp (eds.) The Human Side of Advanced Manufacturing Technology. Chichester: Wiley.
- Burns, T. and Stalker, G.M. (1961) The management of innovation. London: Tavistock Publications.
- Buss, T.F., Stevens, R.F. and Waldron, J. (1983) Mass Unemployment. Beverly Hills: Sage.
- Campbell, D.T. and Stanley, J.C. (1966) Experimental and quasi-experimental designs for research. Chicago: Rand McNally.
- Chein, I., Cook, S. and Harding, J. (1948) "The field of action research". American Psychologist, 3, 43-50.
- Child, J. (1972) "Organizational structure, environment and performance: the role of strategic choice". Sociology, 6, 1-22.
- Child, J. (1984) Organization: A guide to theory and practice. Harper Row.
- Clegg, C.W., Kemp, N.J. and Wall, T.D. (1984) "New technology: choice, control and skills". In G.C. van de Veer, M.J. Tauber and T.R.G. Green (eds.) Readings on cognitive ergonomics: Mind and Computers. Berlin: Springer Verlag.
- Clark, P.A. (1972) Action research and Organisational Change. Harper Row.
- Coch, L. and French, J.R.P. (1948) "Overcoming resistance to change". Human Relations, 1, 512-532.
- Cohn, R.M. (1978) "The effect of employment status change on self-attitudes". Social Psychology, 41, 81-93.
- Community Information Project (1985) At the touch of a button: A survey of computer-based local community information services. London: C.I.P.
- Cooley, M. (1984) "Problems of automation". In T. Lupton (ed.) Proceedings of the 1st International Conference on Human Factors in Manufacturing. Amsterdam: North Holland.
- Cruickshank, P.J. (1984) "Computers in medicine: patients' attitudes". Journal of the Royal College of General Practitioners, 34, 77-80.

Darwin, J., Fitter, M.J., Fryer, D. and Smith, L. (1985) "Developing I.T. in the community with unwaged groups". Paper presented to the Working Conference on the development and use of computer-based systems and tools. Aarhus, Denmark. August 19-23.

Denzin, N.K. (1970) The research act in sociology: a theoretical introduction to sociological methods. London: Butterworths.

Downing, H. (1980) "Word processors and the oppression of women". in T. Forester (ed.) The micro-electronics revolution. Oxford: Basil Blackwell Ltd.

Emery, F.E., and Trist, E.L. (1965) "The causal texture of organizational environments". Human Relations 18, 21-32.

Etzioni, A. and Nunn, C. (1974) "The public appreciation of science in contemporary America". Daedalus, 191-205.

Filstead, W.J. (1978) "Qualitative methods: a needed perspective in evaluation research". In T.D. Cook and C.S. Reichardt (eds.) Qualitative and quantitative methods in evaluation research. Beverly Hills: Sage.

Fineman, S. (1983) White-collar Unemployment. Chichester: Wiley.

Fink, A. and Kosecoff, J. (1985) How to conduct surveys: a step by step guide. Beverly Hills: Sage.

Fitter, M.J. (1987) "The development and use of IT in healthcare". in F. Blackler and D. Osborne (eds.) IT and people: designing for the future. Leicester: British Psychological Society.

Fitter, M.J. and Garber, B. (1988) "General Practice at the crossroads" in R. Westacott and R.V.H. Jones (eds.) Information Handling in General Practice: Challenges for the future. London: Croom Helm.

Forester, T. (1985) The Information Technology revolution. Oxford: Basil Blackwell.

Fox, A. (1973) "Industrial Relations: A social critique of pluralist ideology". In J. Child (ed.) Man and Organization. London: Allen and Unwin.

French, W. (1969) "Organizational Development: Objectives, assumptions and strategies". California Management Review, 12, 23-34.

French, W.L., and Bell Jr. C.H. (1984) Organization development: Behavioural science interventions for organization improvement. 3rd. edition. New Jersey: Prentice-Hall Inc.

Fryer, D.M. (1986) "Employment Deprivation and personal agency during unemployment: A critical discussion of Jahoda's explanation of the psychological effects of unemployment". Social Behaviour, 1, 3-23.

Fryer, D.M. and Payne, R.L. (1984) "Pro-activity in unemployment: Findings

and implications". Leisure studies, 3, 273-295.

Gatti, A. (1937) "La disoccupazione come crisi psicologica". Quoted in Eisenberg, P. and Lazarfeld, P.F. (1938) "The psychological effects of unemployment". Psychological Bulletin, 35, 358-90.

Gerver, E. (1986) Humanizing Technology: Computers in community use and adult education. New York and London: Plenum Press.

Glaser, B. and Strauss, A.L. (1967) The discovery of grounded theory. Chicago: Aldine.

Glastonbury, B., La Mendola, W. and Toole, S. (1988) Information Technology in the Human Services. Chichester: John Wiley.

Goffman, E. (1959) Presentation of the self in everyday life. New York: Doubleday and Company Inc.

Goldberg, D. (1972) Manual for the General Health Questionnaire. Windsor, Berks.: NFER.

Handy, C. (1976) Understanding Organizations. Harmondsworth: Penguin Books.

Handy, C. (1988) Understanding Voluntary Organizations. Harmondsworth: Penguin Books.

Harre, R. and Secord, P.F. (1972) The explanation of social behaviour. Oxford: Basil Blackwell.

Harrison, R. (1972) "Understanding your organizations character". Harvard Business Review. May-June, 119-128.

Hartley, J. (1984) "Industrial Relations psychology". In M. Grunenberg and T. Wall (eds.) Social Psychology and Organizational Behaviour. Chichester: Wiley.

Hartley, J.F. and Fryer, D.M. (1984) "The psychology of unemployment: a critical appraisal". In G Stephenson and J Davis (eds.) Progress in Applied Social Psychology Volume 2. Chichester: Wiley.

Hartley, J. and Kelly, J. (1986) "Psychology and Industrial Relations: from conflict to co-operation?" Journal of Occupational Psychology, 59, 161-176.

Hasenfeld, Y. (1972) "People-Processing Organizations: An exchange approach". American Sociological Review, 37, 256-263.

Hepworth, S.J. (1980) "Moderating factors of the psychological impact of unemployment". Journal of Occupational Psychology, 53, 139-145.

Hogg, M.A. and Abrams, D. (1988) Social identifications: A social psychology of intergroup relations and group processes. New York: Routledge.

Huws, U. (1982) Your job in the eighties: a woman's guide to new

technology. London: Pluto Press.

Ianni, F.A.J. and Orr, M.T. (1979) "Towards a rapprochement of quantitative and qualitative methodologies". In T.D. Cook and C.S. Reichardt Qualitative and quantitative methods in evaluation research. Beverly Hills: Sage.

Jahoda, M. (1982) Employment and unemployment: a social-psychological analysis Cambridge: University Press.

Jahoda, M. (1987) "Unemployed men at work". In D.M. Fryer and P. Ullah (eds.) Unemployed People: social and psychological perspectives. Milton Keynes: Open University Press.

Jahoda, M., Lazarfeld, P.F. and Ziesel, H. (1933) Marienthal: The sociography of an unemployed community. (English translation, 1972.) London: Tavistock Publications.

Kelly, G.A. (1955) The psychology of personal constructs. New York: Norton.

Kemp, N.J. (1987) "Attitudes to Information Technology". In F. Blackler and D. Osborne (eds.) Information Technology and people: designing for the future. Leicester: British Psychological Society.

Ketterer, R.F., Price, R.H., and Politser, P.E. (1980) "The action research paradigm" in R.H. Price and P.E. Politser (eds.) Evaluation and action in the social environment. New York: Academic Press.

Kotter, J.P. and Schlesinger, L.A. (1979) "Choosing strategies for change". Harvard Business Review. 57, 2, 106-114.

La Porte, T.R. and Metlay, D. (1975) "Public attitudes toward present and future technologies". Social studies of science. 5, 373-378.

Lawrence, P.R. and Lorsch, J.W. (1967) Organization and environment. Boston: Harvard Business School.

Leavitt, H.J. (1965) "Applied organizational change in industry: structural, technological and humanistic approaches". In J.G. March (ed.) Handbook of Organizations. Chicago: Rand McNally.

Legge, K. (1984) Evaluating planned organizational change. London: Academic Press.

Levi, L., Brenner, S., Hall, E.M., Hjelm, R., Salovaara, H., Arnetz, B. and Pettersson, I. "The psychological and biochemical impacts of unemployment in Sweden". International Journal of mental health. 13, 18-34.

Lewin, K. (1947) "Group decision and social change". In T.M. Newcomb and E.L. Hartley (eds.) Readings in Social Psychology. New York: Holt, Reinhart and Winston.

Lewin, K. (1951) Field Theory in Social Science. New York: Harper Row.

Liem, R. and Liem, J. (1978) "Social class and mental illness re-considered: The role of economic stress and social support". Journal of Health and Social Behaviour. 19, 139-156.

Linn, P. (1985) "Micro-computers in education: living and dead labour. In T. Solomonides and L. Levidow (eds.) Compulsive Technology: Computers as culture. London: Free Association Books.

Lorsch, J.W. (1970) "Introduction to the structural design of organizations". In G.W. Dalton, P.R. Lawrence, and J.W. Lorsch (eds.) Organizational structure and design. Homewood: Richard Irwin Inc.

Marsh, N. and Jarrett, M. (1985) Computers in voluntary groups: five case studies. London: National Council for Voluntary Organisations.

Mead, G.H. (1932) Mind, self and society. Chicago: University of Chicago Press.

Metzendorf, D. (1988) "An urgent need: Equal access of computers amongst the poor". In B. Glastonbury, W. La Mendola, and S. Toole (eds.) Information Technology in the human services. Chichester: Wiley.

Miles, R.H. (1980) Macro-organizational behaviour. USA: Scott, Foresman and Company.

Miles, M.B. and Huberman, A.M. (1984) Qualitative data analysis: A sourcebook of new methods. Beverly Hills: Sage.

Miller, E.J. and Rice, E.K. (1967) Systems of organization: The control of task and sentient boundaries. London: Tavistock Publications.

Moran, T.P. (1981) "Guest Editor's introduction: An applied psychology of the user". ACM Computing Surveys. 13, 1-12.

Morgall, J. (1983) "Typing our way to freedom: Is it true that new office technology can liberate women?" Behaviour and Information Technology. 2, 3, 215-226.

Morgan, G. (1986) Images of organization. Beverly Hills: Sage.

Moscovici, S. (1981) "On social representations". In J.P. Forgas (ed.) Social Cognition: Perspectives on everyday understanding. London: Academic Press.

Moscovici, S. and Hewstone, M. (1983) "Social representations and social explanations: from the naive to the amateur scientist". In M. Hewstone (ed.) Attribution Theory: Social and Functional extensions. Oxford: Basil Blackwell.

Newton, K. (1975) "Voluntary associations in a British city". Journal of voluntary action research. 4, 43-62.

Nowotny, H. (1982) "The information society: Its' impact on the home, local community and marginal groups" In N. Bjorn-Anderson, M. Earl, O. Holst and

E. Mumford (eds.) Information Society: For richer, For poorer. Amsterdam: North Holland Publishing Company.

Oppenheim, A.N. (1983) Questionnaire design and attitude measurement. London: Heinemann.

Papert, S. (1980) Mindstorms: children, computers and powerful ideas. Brighton: Harvester Press.

Patton, M.Q. (1978) Utilization focussed evaluation. Beverly Hills: Sage.

Patton, M.Q. (1980) Qualitative evaluation methods. Beverly Hills: Sage.

Patton, M.Q. (1987) How to use qualitative methods in evaluation. Beverly Hills: Sage.

Pennings, J. (1975) "The relevance of the structural-contingency model for organizational effectiveness". Administrative Science Quarterly. 20, 393-410.

Politser, P.E. and Pattison, E.M. (1980) "Community groups: an empirical taxonomy for evaluation and intervention". In R.H. Price and P.E. Politser (eds.) Evaluation and action in the social environment. New York: Academic Press.

Pugh, D.E. and Hickson, D.J. (1968) "The comparative study of organizations". In D. Pym (ed.) Industrial society. Harmondsworth: Penguin books.

Reichardt, C.S. and Cook, T.D. (1978) "Beyond qualitative versus quantitative methods". In T.D. Cook and C.S. Reichardt (eds.) Qualitative and quantitative methods in evaluation research. Beverly Hills: Sage.

Rich, R.F. (1979) "Emerging issues for evaluators and evaluation users". In Datta, L.E. and Perloff, R. (eds.) Improving evaluations. Beverly Hills: Sage.

Roberts, H. (1979) Community development: learning and action. Toronto: University of Toronto Press.

Rossi, P. (1969) "Practice, method and theory in evaluating social-action programs". In J.L. Sandquist (ed.) On fighting poverty, perspectives from experience. New York: Basic books.

Rossi, P.H. and Williams, W. (1972) Evaluating social programs: Theory, practice and politics. New York: Seminar Press.

Ryan, J. and Sheridan, G. (1987) Computers in non-commercial organisations. London: Micros in small organisations project.

Salaman, G. (1980) "Classification of organisations and organisational structure: the main elements and inter-relationships". In G. Salaman and K. Thompson (eds.) Control and ideology in organizations. Milton Keynes: Open University Press.

Sandford, N. (1976) "Whatever happened to action research?". In A.W. Clark (ed.) Experimenting with organizational life: the action research approach. London: Plenum Press.

Sandford, N. (1981) "A model of action research". In P. Reason and J. Rowan (eds.) Human inquiry: a sourcebook of new paradigm research. Chichester: Wiley.

Schneiderman, B. (1980) Software Psychology. Cambridge, MA.

Sheffield City Council Department of Employment and Economic Development (1987) Sheffield unemployed and drop-in centres: a guide to the centres for unemployed people in Sheffield. Sheffield: DEED.

Sieber, S. (1973) "The integration of fieldwork and survey methods". American Journal of Sociology. 28, 1335-1359.

Sjoberg, G. and Nett, R. (1966) A methodology for social research. New York: Harper and Row.

Smith, L., Fryer, D. and Fitter, M.J. (1985) Short interim report on the study of the computing needs of wageless people in Sheffield. SAPU memo no. 676.

Softley, E. (1984) "Word processing: new opportunities for women office workers?" in W. Faulkner and E. Arnold (eds.) Smothered by invention: technology in women's lives. London: Pluto Press.

Stafford, E.M. (1982) "The impact of the Youth Opportunities Programme on young people's employment prospects and psychological well-being". British Journal of guidance and counselling. 10, 12-21.

Swinbourne, P. (1981) "The psychological impact of unemployment on managerial and professional staff". Journal of Occupational Psychology. 54, 47-64.

Tajfel, H. (1972) "Social categorization", English manuscript of "La categorisation sociale" in S. Moscovici (ed.) Introduction a la psychologie sociale. Vol. 1. Paris: Larousse.

Taviss, I. (1972) "A survey of popular attitudes toward technology". Technology and culture. 13, 606.

Thompson, J. (1867) Organizations in action. New York: McGraw-Hill Book Company.

Trist, E.L., Higgin, G.W., Murray, H. and Pollock, A.B. (1963) Organizational choice: capabilities of groups at the coal face under changing technologies. London: Tavistock Publications.

Turkle, S. (1984) The second self: computers and the human spirit. London: Granada.

Sandford, N. (1976) "Whatever happened to action research?". In A.W. Clark (ed.) Experimenting with organizational life: the action research approach. London: Plenum Press.

Sandford, N. (1981) "A model of action research". In P. Reason and J. Rowan (eds.) Human inquiry: a sourcebook of new paradigm research. Chichester: Wiley.

Schneiderman, B. (1980) Software Psychology. Cambridge, MA.

Sheffield City Council Department of Employment and Economic Development (1987) Sheffield unemployed and drop-in centres: a guide to the centres for unemployed people in Sheffield. Sheffield: DEED.

Sieber, S. (1973) "The integration of fieldwork and survey methods". American Journal of Sociology. 28, 1335-1359.

Sjoberg, G. and Nett, R. (1966) A methodology for social research. New York: Harper and Row.

Smith, L., Fryer, D. and Fitter, M.J. (1985) Short interim report on the study of the computing needs of wageless people in Sheffield. SAPU memo no. 676.

Softley, E. (1984) "Word processing: new opportunities for women office workers?" in W. Faulkner and E. Arnold (eds.) Smothered by invention: technology in women's lives. London: Pluto Press.

Stafford, E.M. (1982) "The impact of the Youth Opportunities Programme on young people's employment prospects and psychological well-being". British Journal of guidance and counselling. 10, 12-21.

Swinbourne, P. (1981) "The psychological impact of unemployment on managerial and professional staff". Journal of Occupational Psychology. 54, 47-64.

Tajfel, H. (1972) "Social categorization", English manuscript of "La categorisation sociale" in S. Moscovici (ed.) Introduction a la psychologie sociale. Vol. 1. Paris: Larousse.

Taviss, I. (1972) "A survey of popular attitudes toward technology". Technology and culture. 13, 606.

Thompson, J. (1867) Organizations in action. New York: McGraw-Hill Book Company.

Trist, E.L., Higgin, G.W., Murray, H. and Pollock, A.B. (1963) Organizational choice: capabilities of groups at the coal face under changing technologies. London: Tavistock Publications.

Turkle, S. (1984) The second self: computers and the human spirit. London: Granada.

Turkle, S. (1987) "Computers and the human spirit". In R. Finnegan, G. Salaman, and K. Thompson (eds.) Information Technology and social issues: a reader. Great Britain: Hodder and Stoughton.

Vassiliou, Y. and Matthias, J. "Query languages - a taxonomy". In Y. Vassiliou (ed.) Human factors and interactive computer systems. New Jersey: Ablex Publishing Corporation.

Wall, T.D., Clegg, C.W. and Kemp, N.J. (1987) The Human Side of Advanced Manufacturing Technology. Chichester: Wiley.

Warr, P.B. (1978) "A study of psychological well-being". British Journal of Psychology. 69, 111-121.

Warr, P.B. (1982) "Psychological aspects of employment and unemployment". Psychological Medicine. 12, 7-11.

Warr, P.B. (1986) "A vitamin model of jobs and mental health". In G. Debus and H.W. Schiroiff (eds.) The psychology of work and organization. Amsterdam: North-Holland.

Warr, P.B. (1987) Work, unemployment and mental health. London: Oxford University Press.

Warr, P.B. and Jackson, P. (1983) "Self-esteem and unemployment amongst young workers". Le Travail humain. 46,2.

Warr, P.B., Banks, M.H. and Ullah, P. (1985) "The experience of unemployment amongst young black and white urban teenagers". British Journal of Psychology. 76, 75-87.

Warren, R. (1973) "The social context of programme evaluation research". Paper presented at Ohio State University Symposium on Evaluation in Human Services Programmes. June 1973.

Webber, M.M. (1964) "The urban place and the non-place urban realm". In M.M. Webber, J.W. Wykman, D.L. Foley, A.Z. Guttenberg, W.L.C. Wheaton, and C.B. Wurster (eds.) Explorations into urban structure. Pennsylvania: University Press.

Weber, M. (1947) "On bureaucracy" In A.M. Henderson and T. Parsons (eds.) The theory of social and economic. New York: O.U. Press.

Weick, K.E. (1979) The social psychology of organizing. Reading: Addison-Wesley.

Weilenham, A. (1980) Evaluation and social change. Paris: UNESCO.

Weiss, C.H. (1972) Evaluation research. Englewood Cliffs: Prentice-Hall Inc.

Weiss, C.H. (1975) "Evaluation research in the political context". In E.L. Struening and M. Guttentag (eds.) Handbook of evaluation research, volume 1. Beverly Hills: Sage.

Winfield, I. (1981) "Psychology and centres for the unemployed: challenge or chimera?" Bulletin of the British Psychological Society. 34, 353-355.

Wirth, L. (1964) "Towards a definition of the local community". In P. Worsley (ed.) Modern Sociology: Introductory readings. Harmondsworth: Penguin Books.

Woodward, J. (1965) Industrial organization: Theory and practice. London: Oxford University Press.

Wurzburg, G. (1979) "What limits the impact of evaluations on federal policy?" In L.E. Datta and R. Perloff (eds.) Improving Evaluations. Beverly Hills: Sage.

GUIDE TO THE APPENDICES

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- APPENDIX V Questionnaire number 2 for SPRITE users
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the diary about SPRITE at Open Door)
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committee.

PROGRAMMES FROM WEEKENDS AT NORTHERN COLLEGE

FRIDAY, 27TH JUNE to SUNDAY, 29TH JUNE 1996

SESSIONS

1. Friday PM

Arrive at College
5.00-5.30 Meal
Evening - Introduction to College

2. Saturday 9.30am-10.45am

The SPRITE Project so far in your Centre

Each Centre to discuss this in their own group.

Try to identify:-

- (1) How you think it has gone so far, and how you have benefited.
- (2) Where you think it might have been done differently or better.
- (3) What things you think you want to see in the future in your Centre.

Sessions to be run by:-

Open Door

SADACCA

Park

Mike

Stanley

James

Steve

Ted

Cyril

3. Saturday 11.15am-12.30pm

The SPRITE Project so far - The Future

A discussion to examine ideas from session 2 involve all three centres.

- (1) Consider Project so far, good and bad points and future ideas.
- (2) Consider joint achievements and shared problems and targets.
- (3) Consider the ways of forming projects involving more than one centre and ways of exchanging information.

Sessions to be run by:-

Mike, Stanley, James, Steve, Ted, Cyril

- to include input from session 2.

4. Saturday 1.30pm-2.45pm

Group Dynamics with SPRITE Project

A session to be run by Northern College staff looking at the special problems of group work in community centres and ways to tackle this work.

Session to be run by:-

Colin, Mike Cyril.

5. Saturday 3.15pm-4.30pm

Workshops Session

Groups to form based on interest subjects.
Up to FOUR groups can be catered for.
Subjects can be either work covered so far
or new areas, e.g. word processing, graphics, etc. so.

SUGGESTIONS PLEASE!

Groups to be run by:-

Ted, Steve, Mike, Cyril assisted by Stanley, James, Kath, Lesley.

6. Sunday (9.30am-10.30am)
(11.00am-12.00pm)

DIVIDE INTO TWO GROUPS

Group I to do Session A 9.30am-10.30am
Session B 11.00am-12.00pm

Group II to do Session A 9.30am-10.30am
Session B 11.30am-12.00pm

SESSION A

Systems Analysis

So you think the Town Hall doesn't plan well enough?
How would you help someone plan a system?
You might be able to do it better!

Session to be run by:-

Bruce, Dave, Janet.

SESSION B

Workshops - Something New

This should try to look at something new.
Some ideas are, Artificial Intelligence
Logo, Text handling programs (adventure games).

We need SUGGESTIONS

Groups to be run by:-

Steve, Ted, whoever.

7. Sunday 1.30pm-2.30pm

Course Review

How the weekend has gone.
Ideas for future groups first weekend?
Ideas for other weekends?
Final discussion about the SPRITE Project's future.

Session to be run by:-

Colin, Ted, Steve, whoever.



sheffield People's Resource for Information Technology

Enterprise Workshops,
Nursery Street,
SHEFFIELD
S3 8GG
Sheffield 750349

NORTHERN COLLEGE WEEKEND 6TH-8TH FEBRUARY 1987

1. Getting There and Back

SPRITE will arrange transport from the following rendezvous points. Please allow us latitude on the times.

SPRITE, Enterprise Workshops, Nursery Street, Sheffield S3 8GG
at 4.00pm on Friday 6th February 1987

OPEN DOOR, Above Co-op, Birley Moor Road, Frecheville, Sheffield 12
at 3.45pm on Friday 6th February 1987

WOODTHORPE SCHOOL, Woodthorpe Road, Sheffield 13
at 4.00pm on Friday 6th February 1987

Anyone who has a special travel requirement e.g. not leaving until Saturday morning, contact us as soon as possible.

2. About the Weekend

An outline programme is attached.

Fundamentally you won't need any specialised knowledge. We do expect, however, that the people that come will work hard to make the weekend a success and also be prepared to make a contribution to SPRITE in the future.

The work of the weekend will start on Friday night with introductions all round and a look at Northern College's computer room.

On Saturday morning we will start with a 'Review of SPRITE', an exchange of views on how well the Project is working in the existing centres. We expect a lively discussion. Ideas that emerge can be taken forward through the rest of the weekend.

The second session on Saturday morning is entitled 'Politics, computing and unemployment'. Jan Burrows from SCCAU (Sheffield Co-ordinating Centre Against Unemployment) will introduce the session by talking about the work of the Centre. Then with the aid of Dave Hakkem and Ray Hearne we hope to make some concrete plans about how SCCAU can work with SPRITE in the future and also to identify some broader objectives relating to the theme of the workshop.

Saturday afternoon will be devoted to a kind of 'question time' chaired by Sheena Clark (a local politician) and involving representatives from Computer Services, Education, F. & C.S., the Department of Employment and the Libraries. From this we can all gain an idea of how these agencies

see their role in relation to community centres and how collaboration between them and SPRITE can be achieved in the future. It will also be a good point to open a debate on the long term future of SPRITE itself.

On Saturday evening the Technical Manager of ATARI computing will demonstrate Desktop Publishing and networking on the ATARI 520. This session has been organised through our ATARI dealer, MICROPRAXIS. As everyone from the afternoon's discussion will still be present this should provide the stimulus for some discussion in the bar afterwards. We hope that the weighty implications of all this will not prevent everyone having a good time at the late night social event to follow.

We have intentionally left the first Sunday session open for the moment. We anticipate that a number of small group workshops might be appropriate. Your suggestions are welcome.

The weekend will finish with two sessions on future plans for SPRITE. These will be run by Keith Jackson from Northern College.

Finally, if you have any comments or criticisms of this programme let us know. We feel that this structure will enable you all to help in the planning of SPRITE's future and also to raise issues which may be of concern to you e.g. The Role of Women within the project or the quality of training SPRITE provides.

3. Other Details

The College should send you a booklet about its short course information giving you all the details you need to know such as what to do on arrival, the arrangements for children and where the bar is etc. etc.

If there is anything else you need to know ask one of us.

Lesley Buttery
Ted Baldwin
Cathy Cassell
Steve Jackson

NORTHERN COLLEGE WEEKEND
6th - 8th February 1987

BUCE
SOC 734440
① 734381

Development of Community Computing in Sheffield

Friday

5.30pm Evening meal
7.00pm - 8.00pm Intro to College and to weekend
8.00pm - 9.00pm Northern College and Community computing

Saturday

8.30am Breakfast
→ 9.30am - 10.45am Review of SPRITE
10.45am - 11.15am Coffee Break
→ 11.15am - 12.30pm Politics, Computing and Unemployment.
12.30pm - 1.30pm Lunch
→ 1.30pm - 3.15pm Community Computing and the Local Authority
3.15pm - 3.45pm Tea Break
→ 3.30pm - 5.00pm Community Computing and the Local Authority cont'd.
5.30pm Evening Meal
6.30pm - 8.00pm Demonstration by ATARI

Sunday

8.30am Breakfast
9.30am - 10.30am Workshops - topics arising from Review Session
10.30am - 11.00am Coffee Break
→ 11.00am - 12.00noon Future Plans for SPRITE
12.00noon - 1.00pm Lunch
→ 1.00pm - 2.00pm Future Plans
2.00pm - 3.00pm Course Review

Programme subject to alteration

Enterprise Workshops,
Nursery Street,
SHEFFIELD
S3 8GG
Sheffield 750349

NORTHERN COLLEGE WEEKEND 10TH - 12TH JULY 1987

1. Getting there and back

SPRITE will arrange transport to Northern College on Friday 10th July 1987. Please assemble at the SPRITE office at Enterprise Workshops, Nursery Street, Sheffield S3 8GG at 4.00pm on that day. If you cannot make it for the arranged time please contact us and let us know your alternative arrangements.

2. About the Weekend

An outline programme is attached.

Two criticisms were made of the last weekend we ran in February. Firstly, that the programme was too full and secondly that there was not enough practical computing included. Accordingly we have relaxed the timetable to give everyone a chance of enjoying the (hopefully) hot weather and focussed a lot of work around practical computing.

The introductory sessions on Friday night include a visit to the computer room which is particularly designed for anyone with no experience of the ATARI computer which we will be using throughout the weekend.

Saturday starts with a 'Review of SPRITE' in which we will discuss the progress of the project in the individual centres and try to work out some future directions.

The rest of the day is taken up with workshops for which you will be divided into groups of ten. The topics to be covered are spreadsheets, publicity and skill sharing.

The recreational and social activities in the evening will cater to all tastes; those not inclined to participate in outdoor games for instances, will find plenty of company in the bar.

On Sunday there will be two workshops in the morning, one on Data bases and one on group work. The weekend will be rounded off with perhaps the most important session of all, a discussion on "The Future of SPRITE" run by Keith Jackson from Northern College.

3. Other Details

You will receive a booklet about Northern College on Friday when you get to the above assembly point.

If there is anything else you need to know ask one of us.

Lesley Buttery
Ted Baldwin
Steve Jackson
Cathy Cassell

10TH - 12TH JULY 1985

Group Development and Practical Computing

Friday

5.30pm - Evening meal
7.00pm - 8.00pm Introduction to College and Weekend
8.00pm - 9.00pm Introduction to the Computer Room

Saturday

8.30am Breakfast
9.30am - 10.30am Review of SPRITE
10.30am - 11.00am Coffee Break
11.00am - 12.15pm Workshop Groups
12.15pm - 1.15pm Lunch
1.15pm - 2.30pm Workshop groups
2.30pm - 3.00pm Tea
3.00pm - 4.15pm Workshop groups
5.30pm Evening meal
7.00pm Tour of grounds - recreational activities

Sunday

8.30am Breakfast
~~9.30am~~ 9.30am - 10.30am Workshop groups
10.30am - 11.00am Coffee Break
11.00am - 12.00pm Workshop groups
12.00pm - 1.00pm Lunch
1.30pm - 2.30pm Future of SPRITE
2.30pm - 3.00pm Course Review

APPENDIX II

INTERVIEW SCHEDULE: PROJECT OFFICERS

1. What do you see to be the aims of the project?
2. How would you like to see the project operating in six months time?
3. What do you feel SPRITE has achieved so far?
4. What do you feel are the biggest constraints in the development of the project?
5. What aspects of SPRITE have contributed most to its' success.
6. What role do you think the evaluation plays within the project?
7. Is there anything else you'd like to say about SPRITE or its' development?

APPENDIX III

INTERVIEW SCHEDULE: PROJECT USERS

1. What do you see to be the aims of your centre?
- 1a. How do you see SPRITE fitting into these aims?
- 1b. What do you think the other groups in the centre think of SPRITE?
2. Are there any problems to do with SPRITE operating here?
political?
relationships with other groups?
3. How would you like to see the SPRITE project developing here in the future?
projects for the centre?
involving more people?
more/different skills?
4. Have you had any contact with any of the other centres that are involved with the SPRITE project?
- 4a. How would you like to see these links developing?
5. Do you feel that you have gained anything personally by taking part in the SPRITE project?
employability?
new skills?
6. What do you find the most enjoyable aspects of being part of SPRITE?
- 6a. Has being involved with SPRITE created any problems for you?
7. How much say do you feel you have had in the way the SPRITE project has operated here?
- 7a. How much say have other users had?
deciding what is taught in the sessions?
representation on committees?
8. What effect, if any, do you feel that the evaluation has had on the project in your centre?
9. What do you hope to be doing in a years time?
- 9a. Has SPRITE influenced your thinking in this respect?
10. Is there anything else you would like to say about SPRITE, your involvement, or its presence here in your centre?

QUESTIONNAIRE NUMBER ONE FOR SPRITE USERS

The first few questions are about any experience of computers or technology you might have had. Have you ever used any of the following:

1 Typewriter YES / NO

If YES then ...

Have you ever had any formal training e.g. typing course?

What experience have you had?

2 Computer YES / NO

If YES then ...

Have you ever had any formal training?

What experience have you had?

What do you use the computer for?

3 Home Computer YES / NO

If YES then ...

What kind of computer is it?

These questions in the final section refer to the Centre and the SPRITE project.

1 Do you use this Centre often?

2 What other facilities do you use in the Centre?
.....

3 How did you hear about the SPRITE project?
.....

4 What do you feel you will gain from being involved in the SPRITE project?
.....
.....

5 What benefits do you think the SPRITE project will have for your Centre?
.....
.....

6 Can you see any problems arising from the SPRITE project being based in your
Centre?
.....
.....

7 Finally about yourself:
Female / Male Age: Under 20; 20-30; 30-40; 40-50; over 50

8 How would you describe your employment status, for example, unemployed,
part-time worker, housewife, etc?
.....

Thanking you for your co-operation.

APPENDIX V

QUESTIONNAIRE NUMBER TWO FOR SPRITE USERS

We are interested in finding out what SPRITE users find useful about the project.

Listed below are a number of things that users have said are important to them. Please circle the appropriate number in each row so that we know which are most important to **you**. This will help the management committee decide on the future direction that SPRITE should take.

HOW IMPORTANT IS:	Not at all	A bit	Fairly	A lot	Extremely
1. Being aware of what a computer can do	1	2	3	4	5
2. Gaining skills in computer use	1	2	3	4	5
3. Gaining organisational skills e.g. meetings, organising events	1	2	3	4	5
4. Meeting new or different people	1	2	3	4	5
5. Passing on skills about computers	1	2	3	4	5
6. Using a computer for the benefit of the community	1	2	3	4	5
7. Using a computer to make money	1	2	3	4	5
8. Developing new computer applications that are useful to the community	1	2	3	4	5
9. Developing new computer applications to make money	1	2	3	4	5
10. Getting formal qualifications in computing	1	2	3	4	5
11. Getting a paid job using computers	1	2	3	4	5
12. Getting some other sort of paid job	1	2	3	4	5
During your involvement with SPRITE how important has it been as a part of your life?	1	2	3	4	5

How long have you been involved with the SPRITE project?

less than 3 months between 6 months and a year
between 3 months and 6 months more than a year

Which Centre do you use?

How often do you use SPRITE at YOUR CENTRE?

twice a week or more once a month or more
once a week less often than this

How often do you use SPRITE at the SPRITE OFFICE?

twice a week or more once a month or more
once a week less often than this

Finally, about yourself -

Are you? male or female

What is your age? under 20 ... 20-30 ... 30-40 ... 40-50 ... over 50 ...

How would you describe your employment status?

unemployed part-time worker housewife
other (please describe)
.....
.....

THANK YOU FOR YOUR CO-OPERATION

APPENDIX VI

EXAMPLES OF 'THE SPRITE ROUNDER'

SPRITE AT THE SPACE

The first mystical appearance of SPRITE, was one dark and windy night. It was the night of the "Living" Ted. It all started when Tony and Steven went to the first public meeting of THE SPACE. The approach was subtle but very inviting; things were promised, that materialised gradually. We were now under the spell of the mystical ones, Ted and Steve. The minds of the users were now transformed. We now know how to use the keyboard not just the joystick. We now get involved with the following:

DATABASES
WORD PROCESSING
GRAPHIC DESIGN
PRODUCING POSTERS
PROGRAMMING

TIMES

SPRITE PROJECT Mondays 10 - 3
COMPUTER CLUB Fridays 10 - 4

OPEN DOOR

Open Door is a drop-in centre, about 5 miles south east of Sheffield, above the Frecheville Co-op.

The centre consists of a friendly coffee bar serving meals at lunchtimes. Two separate rooms used for Adult Education. Good printing and duplicating facilities, and a creche for anyone using the centre.

Open Door is linked to SPRITE by the computer room which has six computers, it has a good user group with classes on Tuesdays, Wednesdays and a computer club on Thursdays. For more information just give us a call.

Articles wanted for the next issue of
THE SPRITE ROUNDER

SADACCA (Sheffield and District
Afro-Caribbean
Community
Association)

SADACCA has a number of work shops, which includes silk screen, graphic art and a very well set out computer room.

Sadacca also has a social side which includes the canteen/cafeteria, and bar. The center is well situated near the center of the city and is well used by the Afro Caribbean Community.

WOODTHORPE COMMUNICATIONS 2000

We came together as a group in October 1986 as a result of the Office Skills class being full.

We approached a number of organisations and applied for various grants, including Urban Aid, which at the moment is still going through its long process.

Sprite was one of the organisations we approached and they provided us initially with three BBC keyboards and are now in the process of updating it.

We have also received a small grant from the Womens Employment Forum with which we hope to employ a tutor for a few weeks.

In the future we are hoping to expand the group and involve more people and community groups.

On Tuesday 7th April 1987 we are having an Open Day at Woodthorpe School from 10 am to 3 pm for anyone who is interested in our project to come along and see us.



ROUNDER

NEWS FROM AROUND THE CENTRES



EDITORIAL

As this is the first publication of THE SPRITE ROUNDER we thought we should perhaps explain ourselves to you. The Rounder is aimed at anyone interested in computing and we will try to keep you informed of everything remotely concerned with computers and "new technology." This, of course works both ways and we hope you will feel able to write to us with ideas, suggestions and any problems you may have.

S.P.R.I.T.E (Sheffield Peoples Resource for Information Technology) is a city wide concern and is aimed at bringing previously inaccessible technology to the man and woman in the street. The Sprite Rounder is produced by the users of Sprite who are not professionals, and it shows you what ordinary people can do. If you have any comments or would like to know more about Sprite contact your local centre. They are all listed below.

THE EDITORS.

SADACCA 48 The Wicker.
PHONE 753479

THE SPACE Park Library,
Duke Street.
PHONE 21820

FORUM Volsolve House,
14-16 West Bar Green.
PHONE 755679

OPEN DOOR Above Co-op,
Birley Moor Road.
PHONE 643536

WOODTHORPE Woodthorpe School,
Woodthorpe Road.
PHONE 644423

FORUM of People with Disabilities.

Forum is a democratically controlled campaigning body set up to insure that people are not prevented from taking a full part in life, by their disabilities. We serve all disabled people on a city wide basis and anyone with any form of disability can join us. Virtually all people with any form of disability can use computers. We have news for you, we claim our right to play our full part in life.

INCLUDE US BACK IN !!!

Contact : Alden Chadwick.

Development officer.

Introducing MIKE ROE

AGE - 22 I.Q - ?

LIKES - THE SUN
CROSSROADS
BARBICAN
SPECTRUMS

HATES - REAL ALE
EASTENDERS
COMPUTERS
DAILY MIRROR
READERS

KNOWN TO BOTH HIS
FRIENDS AS Mr. RIGHT
HE'S NEVER WRONG.



SADACCA DROP IN

Thursday 1.30-4.00

On Thursday afternoons SADACCA runs a drop in for any one who wishes to use a machine for their own personal use ie college students who have home work to do.

SADACCA OFFICE SKILLS

FRIDAY 1.30-4.00

We run sessions in word processing and mail merge techniques. We are also hoping to start running a session in creating data bases, along side the word processing class on the same day. Presently the only work we do in data bases is purely introductory.

WOODTHORPE COMMUNICATIONS 2000 July 2 1987

At the Woodthorpe Group we have received 150 pounds grant from Womens Forum to employ a tutor for 8 weeks. Mrs Wade has given us a crash course in how to use databases, word-processors, spreadsheets and graphics.

As a group we have been invited to Womens Technology Training Workshop in the hope that they can be of some help to us in the future. Two of our group have already been accepted on a full time course starting September 1987.

We are having discussions at the moment about which would be the best way to open the group to new members.

Skill Sharing Questionnaire

A skill sharing questionnaire is to be sent to each SPRITE user. The questionnaire will ask people what skills they feel they have that they can share with other people in SPRITE and also which skills they would like to learn.

At the last Northern College weekend we collected this information from all the users who were there (except for those who didn't wake up on the Saturday morning!!) This is now on a database and in the near future we will be able to introduce the new SPRITE computer dating system which will match users with certain skills with others who would like to acquire those skills.

So if you're interested in taking part make sure you get your chance by filling in the questionnaire!

USER COMMITTEE

We are in the process of setting up a User Committee, to give us a stronger voice throughout the SPRITE project. We hope to involve other users from the centres, not just the management representatives. There are many ways in which we could help to improve SPRITE. We could give advice on how to arrange their timetable better, ie. to spend more time in the new centres and not in the more developed centres this would benefit the new users. We hope to improve our relationship with the workers and the advisory and management committees.

We hope to arrange the first meeting of the committee sometime in August.

MY SPRITE PLACEMENT OR HOW TO SURVIVE IN BYDS OF OFFICE AND LIVE TO TELL THE TALE I

1. Diet or think thin.
2. Never volunteer to make tea or coffee.
3. Be flexible, in body and mind.
4. Be tidy no one else is!

Seriously though folks! I have enjoyed every minute of my placement and I would like to thank the SPRITE users, and SPRITE workers for making my placement so enjoyable.

JULIE
(Trainee Womens Technology Workshop)

WOMEN WANTED

The EARL MARSHAL YOUTH CENTRE is looking for women project workers. Experience in BASIC computing an advantage, but not necessary.

For further details PHONE
653777

or contact your local JOB CENTRE

SPRITE ROUNDER

NEWS FROM AROUND THE CENTRES

SPRITE ON THE MOVE

AN INTERVIEW WITH TED BALDWIN

Q. When will SPRITE be moving premises.

A. During the first week of August hopefully. We will be moving to the 'TRITECH' site on Thomas Street.

Q. Why are SPRITE moving.

A. The move will give us a more spacious workshop, giving better and easier access especially to disabled people. We hope to extend the 'drop in' to attract more people not just SPACE users. We hope to offer workshops, day schools and more flexibility. We will have closer links with ITEC and the womens workshop. We hope to get more people involved in the running of SPRITE and it's activities. The involvement with the other agencies on site will give us more collaboration this is important because of government cuts etc.

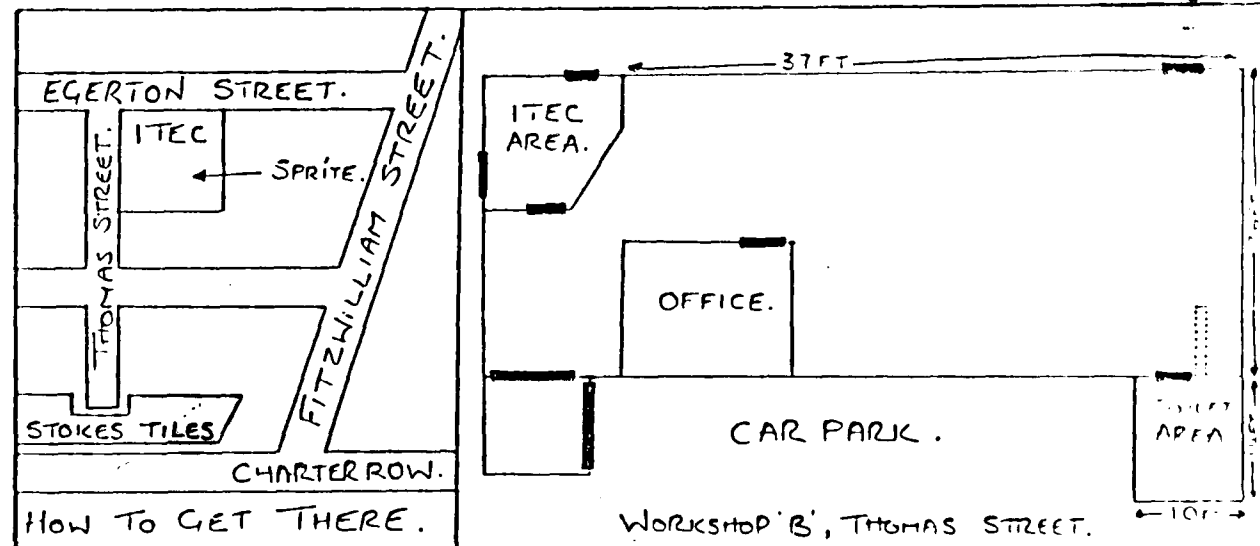
Q. Why did you originally move to the Enterprise Workshop.

A. At the time we were a small organisation, with not many users, and a lot of space. Also security was a minor problem.

Q. Have you enjoyed the time at Enterprise Workshop.

A. We have enjoyed our time there and found the people very friendly and very helpful. We have forged valuable links with MICROPRAXIS who are situated in the workshops.

SPRITES NEW PREMISES



Any items for inclusion in THE SPRITE ROUNDER please send via the SPRITE workers or your user group representative. HELP WANTED thursday mornings to help with the Sprite Rounder time 10.00 to 11.00am at SADACCA. SO COME ON DOWN THE TIME IS RIGHT.

group based in Sheffield & around the North
area. We work mainly to share skills in
design, layout and printing by providing
individuals and members of organisations
such as self-help groups access to all kinds
of printing equipment at cost price.

At the time of writing we are taking bookings
for Tuesdays and Wednesdays (10am-
4pm) when users with prepared artwork can
be helped to print their own publicity etc. If
anyone needs help with preparing artwork
for printing there is a Drop-in on Tuesdays
where we offer advice on design and layout.

Printaid's involvement with SPRITE began in
late February and the Atari 520St arrived at
the end of May. It didn't take us long to
master the Neochrome and Printmaster
packages and once we had we made the
equipment available to our users. We have
just received Publishing Partner and once
we have learned how to use this properly
we will be passing these skills on to our
users as well so that whole pages of layout
can be done at one time on the computer
saving a lot of time.

Another recent development is the opening
of the upstairs of Uppertorpe Library where
we voluntarily run a silk-screen drop-in. If
you would like to know anything about
silk-screen printing or would just like to give
it a try, call in on Wednesday between 10am
and 4pm.

FREE TO A GOOD HOME

1 Blue Jacket

Only one previous owner. Slightly used. Good with kids.
Both sleeves intact. elbows slightly grass stained
(Northern College weekends)

For further details see Ned Ballam
or Phone 750349.

**October 16th at
Thomas Street**

The Open day, is open to users from
10:00am and if you would like to help
and have not sent your form to Lesley
ring her on 750349.

At 2:00pm the Lord Mayor Cllr Peter
Horton will be in attendance. So if you
would like your friends and relatives to
see what you get up to at SPRITE,
then why not bring them along from
1:00pm onwards

YOU ARE CORDIALLY INVITED.

STOP PRESS

SHOCK HORROR - TED TO WED

*Girls all over Sheffield were in tears, as
the announcement that the legendary Ted
Baldwin was to marry filtered down to the
masses. Calls to The Samaritans
increased by 50%. A spokesman said 'we
have never worked so hard, Who is this
man?'. The only trouble is 'the jacket' will
have to be replaced by a Moss Bros. suit
for the big day. Has Ballam finally been
laid to rest? Will we recognise the new
Ted Baldwin? Can a leopard change it's
spots? Is Ted a reformed Character?*

*Ted was heard to say 'I am not marrying
just for money, I love her as well'*

*The Staff and readers wish the happy
couple our CONGRATULATIONS.*

From our Club Reporter

NEWS FROM AROUND THE CENTRES

CATH GOES BIG TIME

As you may know we are losing our 'incredible
evaluator' Cath has decided to get a proper job. So
the editorial team decided to get their own back and
interview her.

Q. Where are you going to work?

A. I am going to teach Communications Studies at
Sheffield Poly.

Q. Will you still be in contact with SPRITE?

A. I hope to remain in contact with SPRITE and visit
the 'workers' every other wednesday and to spend
every friday working on research.

Q. Have you had a good time with SPRITE?

A. I've really enjoyed working with SPRITE and met
lots of nice people. I think it's a good project.

Q. What is the result of the evaluation at the present
time?

A. There are a lot of things the evaluation has told us,
the how individual people have valued from
SPRITE and how SPRITE should develop from a
user perspective.

Cath will be sadly missed by the workers and the
project users alike.

AU REVOIR

RICHARD AT WORK

Since joining the Earl Marshal Computer Team
most of my time has been taken up by showing
little bugger's (sorry angels) how to use a
computer. Due to Earl Marshal school being
closed during the summer holidays (kids get too
many these days) a wandering band of lunatics
have been following us from library to library.
Most of the time all the kids are wanting is to play
games, but after a while they have to do some
programming so that they can get some more
games to play. No computer knowledge is
required to join the computer team (How do you
think I got in?), but it does help. So join the Earl
Marshal Computer Team now.

DBASE II Course

Open to all SPRITE users

By special arrangement with
SPRITE, Granville College are
running a course on the Database
programming language DBASE II

The course will consist of 20
three hour sessions and will begin
on Monday 26th October at 1.00.

For more information contact
Ted Baldwin at SPRITE on
750349.

**FURTHER ADVENTURES OF
MIKE ROE**

MIKE: A BOTTLE OF PARACETAMOLS A
CHEMIST. AN HEADACHE SIR.
MIKE: NO A SPRITE WEEKEND



Any items for inclusion in THE SPRITE ROUNDER, please send to
SPRITE Headquarters at Thomas Street or send them via your
representative. But if you would like to help produce THE ROUNDER
come to Sprite on Thursday mornings. We need your help!

NEWS FROM THE CENTRES.

Darnall Music Factory.

DMF Records, have their second L.P. out at the moment, and our reviewer says "It's better than the first one". They have also been doing P.A. work for both the Kelvin Carnival and the S.O.S Anne Frank Against Racism concert at the Nelson Mandela Building (Saturday 23rd July). The concert was a great success. Work is still going on to build the new 16 track studio, and we hope to be invited to the opening.

Standhouse.

Is now closed for the summer break.

Woodthorpe.

Woodthorpe is now closed for the summer, but will be re-opening in September in their new rooms and with new equipment.

Firth Park.

The work on the new FPLUG room is to start in the near future, with the help of the libraries who will be also purchasing more software and hardware.

SADACCA.

Changes are to take place in the near future when the MSC funding is reviewed. See next issue for more details.



HAVING RODENT PROBLEMS?

Don't send for Rentokill, send for us the MOUSEBUSTERS.



RING 323116 and ask for PRINTAID.

SPACE TRIP to LONDON

Saturday 17th September

The trip to London is for the Personal Computer Show at Earls Court, or you can just go to sightsee or shop.

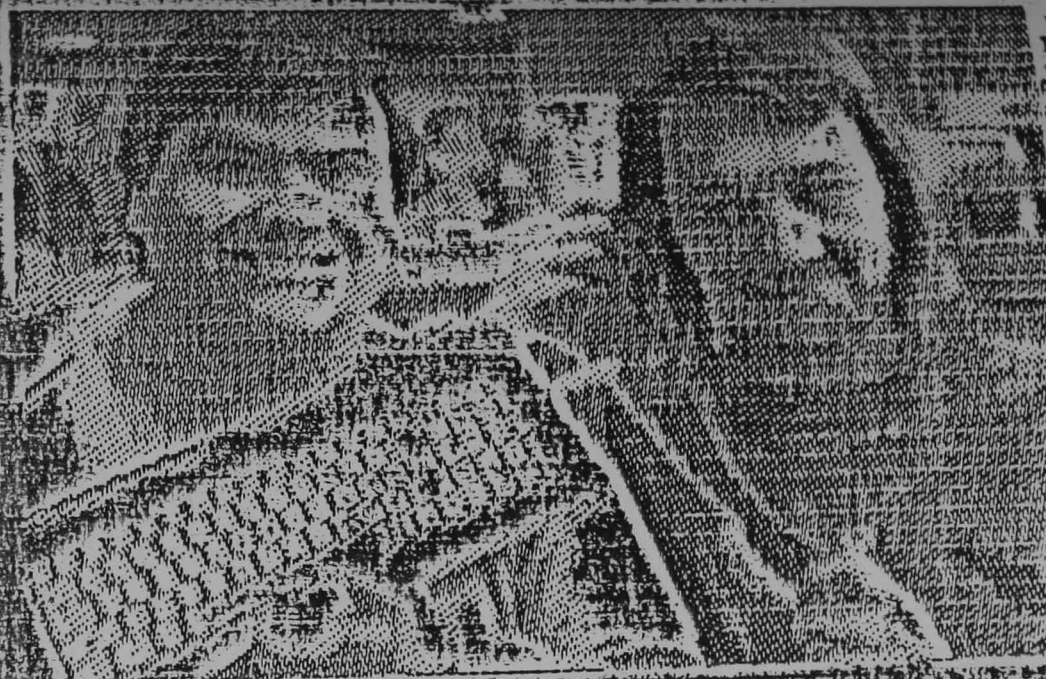
The price of £6 is for coach fare only.

So book early to save disappointment.

For further details Ring 'BIG STEVE' on 750349 (Wednesdays) or SPACE 759465 (Mondays and Fridays).

THE SPRITE ROUNDUP

THE NEW IMPROVED SUMMER EDITION



THE EDITORIAL TEAM GO MAD ON THE AMSTRAD 8256

As you can see we are now using the Anstrad 8256 to produce the SPRITE ROUNDUP.

This is to help more centres send in items for the issues of the magazine, as most centres have access to Anstrads we can now receive articles on LOCOSCRIP.

For details on how to send them ring us Wednesdays at SPRITE.

The SPACE move back home

The SPACE COMPUTER CLUB has now moved back to the Park Library, and left the SPRITE workshops a quieter place. We would like to thank the SPRITE workers for all the hassle we have given them in the last six months. All SPRITE users are welcome to come and visit us in our new computer room, on a Monday. The Space was re-opened by DAVID BLUNKETT MP, and all the groups were on hand to give displays on the day of Saturday the 2nd July. The computer club now has 2 Atari Computers, 1 Commodore 64 and 1 Anstrad PCW (one promised for later by E. BALDWIN). We have also been promised an AMX mouse and Masterscan which we hope

NEWS FROM FORUM.

Our SPRITE informer tells us that FORUM are holding Monday drop-ins for users. For more details ring Sue Crowder on 755679. We also have been told that there has been a change at the top, the FORUM has a new chairperson, in the shape of Jack Crowder.

If any of this information is wrong blame the SPRITE MOLE.

FOR SALE

VIVITAR 35mm COMPACT CAMERA with Autowind and Revind Built in flash and DX coding. Still under guarantee and easy to use

only £25

CONTACT TOMY HILL (SPACE)

APPENDIX VII

EXAMPLE OF A TIME-ORDERED MATRIX: OPEN DCOR

OCTOBER 1986

NOVEMBER 1986

DECEMBER 1986

JANUARY 1987

FEBRUARY 1987

MARCH 1987

CONTENT OF
SPRITE
SESSIONS

Only 3 people turn up to graphics project. Same for database project. Discussion with users about how to improve publicity/ get people in

Numbers declining all the time, 2 people at database session. Discussions about publicity

Badly attended sessions

Start work with SPG. Introduction to computing applications. Development work begins

Sessions now happening with SPG, women, computer club. More people coming to Ted's projects session

Work with the secretary of tr. man. comm. Work with SPG and computer club going strong

INDIVIDUALS

Lots of resentment about G. in the centre. G. resents C. Open Door AGM boycotted by some SPRITE users. C, K, and S all busy with their families. K. and C. doing computer 0 level

G. resigns from all SPRITE committees

E. and C. are becoming involved

Workers suggest they are concerned about C. becoming involved with SPRITE

J. is very negative about computer club. C. is keen but unpopular with the other SPRITE users.

FACTORS
SUPPORTING
DEVELOPMENT

Women's sessions going well. Workers suggest that they try and develop SPRITE at Open Door. Idea emerges about teaching the man. com. about computers.

People are getting jobs, eg K,K, and G. Decided to talk to man. com. about it all after christmas.

Dev. work begins with SPG and E. Session for man. com. on computer use. Women's sessions funded again. T. and S. from Space running games afternoon.

More people attending now. Steve starts SPG sessions. Club is going well.

One of the C. workers says that the dev work is going well and that he will carry it on. User meeting takes place. A.E. worker to plan day schools

FACTORS
IMPEDING
DEVELOPMENT

Room presents difficulties - is hard to teach on different machines. Graphics project dropped due to lack of interest. Database project dropped. Problems with finding appropriate DTP software. People from the W.E.A. sessions are not coming into the project as a whole

Mouse nicked

Negative discussions about workers at Northern College. More a collection of individuals than a group.

Room is a mess need someone keep it in order.

LINKS WITH
OTHER
CENTRES

C. working at the Space. T. and S. working at Open Door.

Second Northern College weekend.

MISCELLANEOUS

Real political problems emerging. We mis-interpreted group identity etc.

Users suggest they need: more worker help, groups from the local area to become involved and systematic worksheets.

ALL TIME LOW

Facility is now being used all day Tuesday, and Wednesday and Thursday afternoons

	APRIL 1986	MAY 1986	JUNE 1986	JULY 1986	AUG. 1986	SEPT. 1986
CONTENT OF SPRITE SESSIONS	First sessions begin, well-attended but no regular equipment	Demos. of graphics/wp. and programming. Also on the women's day. About 15 people attend. Equipment installed.	Space and SADACCA visit. Sessions continue with introduction to various packages.	Introductory sessions continue. Discussions about forming a computer club.	Quiet because of tr. holiday	Individual work with S. and A. Only 8 people regularly. Discussions about projects graphics/ data-database for creche.
INDIVIDUALS	G. now on SPRITE man. committee	K. and G. volunteer to supervise computer room. G.'s attitude makes him unpopular with other users and workers. K. and S. tell me about problems with hostile husbands.	G. is clearly centre of the group.		G. away all summer J. falls out with workers over computer room supervision	G. is very fed up with Open Door, creates difficulties with him being the user rep. on the man. comm. C. and H. start C level computing.
FACTORS SUPPORTING DEVELOPMENT	Open day is successful. Suggested course for equipment supervisors. Lots of ideas about what users want to learn.	Users all very positive. WTTW placement in the computer room - works well.	Northern College weekend. WTTW placement still there.	Introduction of a games afternoon	Summer measures funding. Tommy from the Space in to set up a computer club.	W.E.A. funding for intro. to programming session.

FACTORS IMPEDING DEVELOPMENT	Workers worried about the arrival of the computers - how will they affect their jobs? Also concerned about equipment supervision. Communication problems between G. and the centre	G. argues with other users about women's day	Game-playing becomes an issue. SPRITE users unhappy about it	Workers concerned that the rel. between SPRITE and the centre has never been clarified. Also concerned about access to room and about the group raising their own funds through jumble sale. Game-playing happening regularly.	Problems with room supervision	S. gets admin. workers job. SPRITE users very angry. Difficult atmosphere in the centre.
LINKS WITH OTHER CENTRES	Space and SADACCA users help with open day				T. from Space helping with computer club	

MISCELLANEOUS

APRIL 1987

MAY 1987

JUNE 1987

JULY 1987

AUGUST 1987

SEPTEMBER 1987

CONTENT OF
SPRITE
SESSIONS

SPG going well
About five
people attending
Ted's projects
session. All
working on
different things.

SPG going on by
themselves without
SPRITE support.

Day schools take
place. Projects
session
frustrating cos
they're all doing
individual things

See SG minutes
of 2nd July

Only two people
regularly attending

INDIVIDUALS

E., R. and W. all
in Ted's session.

E. and W. still
involved. After
N.C. weekend, C.
decides to use
Forum instead of
Open Door.

FACTORS
SUPPORTING
DEVELOPMENT

Planning day schools.
S. finishes his
Information Screen
women's sessions
to continue for
10 weeks after Easter

Day schools being
organised

Northern College Users happy for us
to move out. A.E. will
provide introductory
classes on the BECs.

FACTORS
IMPEDING
DEVELOPMENT

Workers suggest that
computer club isn't
very accessible to
new people, not very
good at building
groups. Still no worker
support.

Day schools go
badly, no new
people attend,
everyone is very
disappointed. SPG
are looking for
another centre. They
feel they are not
getting support from
Open Door.

General view
that we should
pull out. A.E. and
the computer club
can use the BECs

LINKS
WITH OTHER
CENTRES

Third Northern
College weekend.

MISCELLANEOUS

Perhaps we should
take some of the
equipment out?

APPENDIX VIII

DOCUMENTS PRESENTED TO THE SPRITE MANAGEMENT COMMITTEE

<u>Date of document</u>	<u>Document title</u>
October 1985	Information Technology and the wageless: Criteria for selecting the centres
March 1986	SPRITE Project: Aims and Objectives
July 1986	SPRITE at Northern College
September 1986	SPRITE Project Review
March 1987	SPRITE Project Review
June 1987	A profile of SPRITE users