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# THE USE OF OCCUPATIONAL INFORMATION TO IMPROVE VOCATIONAL OPPORTUNITIES FOR VISUALLY DISABLED PEOPLE

by

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# Acknowledgements

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# Abstract

This research considers how occupational information can be used to improve vocational opportunities for visually disabled people.

The literature shows that despite the disadvantage they experience in the labour market visually disabled people of working age can achieve economic independence. An examination of models of support and intervention shows that the potential uses of occupational information throughout assessment and rehabilitation are not fully recognised in the UK. A study of tools used in vocational rehabilitation highlights the lack of instruments for use with visually disabled people. Literature is used to guide design of a new job analysis instrument for use with visually disabled people. The literature on organisational change provides guidance on the introduction of the new instrument.

The job analysis instrument is tested and then adapted for use as a multi-purpose assessment instrument, for both job analysis and assessment of individuals, in order to facilitate job matching. To ensure that the instrument meets the needs of potential users the occupational information and vocational support needs of visually disabled people, employers and service providers are investigated.

Analysis of potential user requirements highlights the limitations of job analysis as an approach to improving the vocational opportunities for visually disabled people so a vocational information system, based on the Internet, is designed. The system comprises a number of elements, namely a multi-purpose assessment instrument, occupational and vocational databases and a job matching service. One element, a vocational information database is already operational.

The effects of organisational change in employer and service provider organisations are found to exert significant influence over vocational opportunities of disabled people and can present as barriers. Joint working to develop the vocational information system is recommended and this could assist with breaking down the barriers that exist between these groups.

## Abbreviations

AOMP – Australian Occupational Matching Programme
APDOT - Advisory Panel for the Dictionary of Occupational Titles
ASCO – Australian Standard Classification of Occupations
CAB - Citizens' Advice Bureau
CEG – careers education and guidance
DDA - Disability Discrimination Act
DEA - Disability Employment Adviser
DfEE – Department for Education and Employment
DoH – Department of Health
DOT – Dictionary of Occupational Titles
EDTU - Employment Development and Technology Unit
ENTA - Employment Needs Training Association
ERC - Employment Rehabilitation Centre
ES – Employment Service
ESSN – Employment and Student Support Network
FE – Further education
FEFC – Further Education Funding Council
GMD - Joint Medical Council [in the Netherlands]
GROW - Gateway to Researching Opportunities for Work
HE – Higher education
HESA - Higher Education Statistical Agency
JCF – Job Content Factors [used in the ASCO]
ILO – International Labour Organisation
LEA - Labour Expert Analyst
LFS – Labour Force Survey
LSD - Labour Structures Documentation database [used in the Netherlands]
M-pAI – Multi-purpose Assessment Instrument
NATFHE - National Association of Teachers in Further and Higher Education
NWB - National Westminster Bank
PACT – Placement, Assessment and Counselling Team
PRS –Personal Reader Scheme
QCA – Qualifications and Curriculum Authority
RDS – Regional Disability Service
RNIB – Royal National Institute for the Blind
SIC – Standard Industrial Classification
SOC - Standard Occupational Classification
SPS – Supported Placement Scheme
TAPS - Training Access Point
TC – Technical Consultant
EC- Employment Consultant
TEC – Training and Enterprise Council
TLO - Telephone Liaison Officer
UCAS – University and Colleges Advisory Service
WHO – World Health Organisation

# Introduction and overview

## 1. Introduction

In the early 1990s there was great concern amongst organisations of and for blind people about increasing unemployment in manufacturing industry, which had traditionally offered jobs to visually disabled people in repetitive machine work. At the same time service industries were becoming a more important source of work and visually disabled people were beginning to obtain jobs in this sector. Service providers were keen to identify a job, replicated in sufficient numbers, to offer opportunity to the growing number of unemployed visually disabled people with manual skills (RNIB, 1991). Thus the research began with an investigation into the employment opportunities for visually disabled people with manual skills (hence the focus upon manual skills when gathering data from employers). However, it soon became clear that although service provider organisations wanted to provide assistance to visually disabled people the line of investigation they advocated indicated an ignorance of the changes taking place in the nature of work and in the type of service required by visually disabled people. Before focusing upon particular opportunities it is necessary to consider individuals aspirations, employer practice and the information needs of all those concerned with vocational rehabilitation. With this understanding it may be possible to improve vocational opportunities for visually disabled people.

This thesis seeks to examine the occupational information and vocational support needs of all those concerned with vocational rehabilitation (visually disabled people, employers and service providers) by considering the question:

How can occupational information be used to improve vocational opportunities for visually disabled people?

In order to answer this question a number of objectives were set:

- Examine current vocational opportunities for visually disabled people and the models of support applied to assist them to progress through the system of vocational provision.

- Examine how occupational information is gathered and used by vocational service providers and how this is incorporated into vocational service provision to visually disabled people.

- Consider the occupational information and vocational support needs of those involved in the vocational rehabilitation process (visually disabled people, employers, service provider agencies).

- Formulate and test a model for the use of occupational information to improve vocational opportunities for visually disabled people based on these information needs and relevant literature.

- Comment on the value of occupational information as an approach to improving vocational opportunities for visually disabled people, suggesting any revisions,

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additions or alternative approaches to the current use of occupational information in vocational service provision.

- Comment on the application of findings to improve vocational opportunities for other groups of people.

The study began with a review of the literature and progressed through development of a methodology to data collection. Data was analysed and conclusions were drawn leading to a proposal to design and test a model for the use of occupational information to improve vocational opportunities for visually disabled people. A new job analysis instrument operating within a vocational information system was designed. The instrument has been tested by returning to subjects. Their feedback was used to refine the instrument and inform the design of the vocational information system. One element of the vocational information system model, a vocational information database, was developed, tested and is now operational.

Rather than simply find out more about the use of occupational information in vocational service provision this research has sought to change the situation. Throughout the work it has been necessary to respond to the needs of subjects, be they practitioners in the service provider sector, visually disabled people with needs which necessitated the development of certain services or employers seeking assistance with the redeployment of large numbers of disabled employees. This research fits the literature definition of action research (Cohen and Manion, 1989).

## 2. Overview

In Chapter 1 the literature is reviewed to define the population under investigation, namely visually disabled people of working age, by comparing a variety of data sources. Chapter 2 examines education and employment opportunities for visually disabled people. It considers developments in legislation and vocational provision, the role of new technology in providing visually disabled people with access to opportunities and the relative disadvantage they experience in the labour market. Chapter 3 compares the role that occupational information plays in a variety of models of vocational service provision for visually disabled people in the UK and the Netherlands. Literature on job analysis, an approach to gathering occupational data, is reviewed in Chapter 4. One of the primary uses of job analysis is job matching, which uses criteria to match job profiles with the aptitude profile of an individual, so Chapter 4 also considers the assessment of individuals and a number of job matching systems. It concludes by highlighting the lack of assessment instruments and job analysis methodologies that are suitable for and provide relevant information to visually disabled people and recommends development of a job analysis instrument for use with this group. Chapter 5 considers the literature on organisational change theory in order to provide a theoretical framework to guide the implementation of new approaches to the use of occupational information within these organisations and to describe the experience of working with individuals and teams in service provider and employer organisations.

Chapters 6, 7 and 8 present the methodology adopted to gather data on the occupational information and vocational support needs of disabled people, employers and service providers respectively. Chapter 6 describes a survey of visually disabled college and university graduates based on the use of a telephone questionnaire and focus group

discussions. In addition interviews with residents of a rehabilitation centre and students at a specialist training college are described. Chapter 7 outlines the data collection methods used to obtain information from service providers in the UK and the Netherlands. These include a review of documentation, semi-structured individual interviews, group discussions, telephone interviews and observation. Chapter 8 describes the two stage survey of employers beginning with a postal survey of employers to gather data on disabled workers in general and jobs undertaken by visually disabled people. Employers' awareness of the support available to them was examined by asking about their awareness of aids to employment, job accommodation options and sources of specialist advice. The second stage of the survey is a series of follow up visits to provide an opportunity to examine some responses in more detail. It was agreed that staff from the Royal National Institute for the Blind (RNIB) Employment Network would carry out these follow up visits, enabling vocational rehabilitation practitioners to evaluate the job analysis instrument and to gather more detailed occupational information at first hand. Chapter 9 describes the method adopted for development of the job analysis instrument for use with visually disabled people. The job analysis instrument is tested by practitioners during follow up visits to employers and also in a programme to redeploy 130 visually disabled telephonists whose role was becoming obsolete due to the introduction of new technology. A model for collecting and disseminating occupational information, a vocational information system, is developed based upon use of this job analysis instrument. It includes other elements to address the issues identified as important by potential users (disabled people, employers and service providers) through the examination of their occupational information and vocational support needs. The method for the development and implementation of one of these elements, a vocational information database, is described. Chapter 10 outlines the method used to consider the impact of organisational change upon improving jobs for visually

disabled people and describes the examination of organisational change in both a service provider and an employer organisation.

The results of the investigation of occupational information and vocational support needs are given in Chapters 11,12 and 13. Chapter 11 provides an  analysis of the quantitative and qualitative data gathered from visually disabled individuals. Respondents called for independent access to relevant information to assist them to make decisions as they progress through education, training and into the labour market. Chapter 12 presents the findings from interviews with service providers. In the UK there was little use of occupational information and only a limited understanding of the labour market. Examination of vocational service provision in the Netherlands revealed a sophisticated system based upon a multi-disciplinary approach, structured staff development and the application of nationally recognised job analysis and vocational assessment tools. The results of the survey of employers are described in Chapter 13. The postal questionnaire revealed a number of issues which acted as barriers to the employment of visually disabled people. When these were further examined in follow up visits it became clear that employers are unsure about the support rehabilitation professionals can offer them and many are simply unaware of any support. Approximately 20 follow up visits were carried out and these gave a useful opportunity to test the job analysis instrument. The exercise showed that the job analysis instrument, used to gather occupational data about the requirements of jobs, could offer useful information to visually disabled people, but also that reliance on job analysis alone to improve vocational opportunities had some limitations.

Chapter 14 offers a critique of various job analysis and job matching methods as they relate to disabled people and comments on the extent to which they are useful in improving

opportunities. After critical examination it is clear that none of the existing methods examined could practically be utilised by RNIB staff working in the field of vocational rehabilitation. So the literature was used to develop a new job analysis instrument for testing by RNIB Employment Consultants during follow up visits to employers. Chapter 14 also examines the redeployment programme within National Westminster Bank. A programme of vocational and technical assessments, job analysis, job matching, awareness training, technical development and job accommodation testing was designed to achieve staff redeployment. This exercise confirmed that job analysis alone is not sufficient to improve vocational opportunities for visually disabled people. The need for a vocational information system is established and progress to its implementation is described in terms of the development of one element of the system, namely the vocational information database. Chapter 15 describes the impact of organisational change as a specific barrier to employment opportunities for disabled people. Organisational change theory is applied in order to understand the reaction of service providers and employers to the introduction of new working methods.

Chapter 16 draws together the findings of the examination of occupational information and vocational support needs of potential users of the vocational information system. The need for greater recognition of the role that occupational and vocational information can play in improving opportunities for disabled people by disabled people themselves, providers of vocational services and employers is highlighted. Chapter 17 presents an evaluation of the occupational information based approach to improving opportunities for visually disabled people. Lessons from the redeployment programme with National Westminster Bank and the implementation of the vocational information database are discussed. A model for redeployment is presented and some issues related to

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service provision to disabled people are outlined for consideration. The vocational

information system model for the use of occupational information to improve vocational

opportunities for visually disabled people is presented. The model is based upon

widespread adoption of the job analysis instrument to provide data for a database of

occupational information about jobs. The job analysis instrument is adapted for joint use

as an individual assessment instrument to facilitate job matching. The other elements of

the vocational information system are databases of job accommodation data, vocational

information such as adaptive equipment, training courses and support services and a job

matching service. A phased implementation of the system is proposed to suit available

resources and the wider application of the model is discussed, along with suggestions for

further development. Chapter 18 discusses the reaction of large organisations to the

introduction of new theories and practices and considers the influence of change in the wider

voluntary sector. Recommendations are made to facilitate the management of change to

introduce a quality improvement model in the voluntary sector. Chapter 19 summarises the

contribution to knowledge, considers how the research objectives have been satisfied

and suggests limitations of the research.

**Notes on Tables**

All tables give figures as number of respondents. Not all questions were appropriate to

all respondents and in some case respondents chose not to answer particular questions.

The total count is provided and/or number of missing responses is shown where

appropriate. Percentages have been rounded up to the nearest whole number: 0.5% is

rounded up. As a result some of the tables may not total 100%.

**Literature Review**

# Chapter 1. Defining the visually disabled population

## 1.1 Introduction

Defining the disabled population is fraught with difficulty due to variation in accepted

terminology and definitions, conflicting data sources and political sensitivity leading to

non-disclosure. Indeed some would argue against the exercise itself, preferring to define

disability in terms of environmental barriers. Hence, this section begins with a

description of different models of disability to explore implications for this research. This

is followed by a comparison of the available sources of data estimating prevalence of

disability and visual disability, and the participation in post-16 education and economic

activity of these two populations.

## 1.2 Models and definitions of disability

In 1980 the World Health Organisation (WHO, 1980) proposed a conceptual framework

for the consequences of diseases or accidents by defining common terms. Impairment is

any loss or abnormality of psychological, physiological, or anatomical structure or

function. Disability is any restriction or lack (resulting from impairment) of ability to

perform an activity in the manner or within the range considered normal for a human

being. Handicap is a disadvantage for a given individual resulting from an impairment or

a disability that limits or prevents the fulfilment of a role that is normal (depending on age, sex and social and cultural factors) for that individual. Thus a blind person has an impairment of vision which will lead to activity restriction (a seeing disability). If he is disadvantaged due to his disability, for example, he experiences difficulty reading the disability has led to a handicap.

Some authors have criticised the WHO definitions (e.g. Schuntermann, 1996), pointing to the ambiguity of some of the terms. Indeed there is a growing debate within the disability movement regarding the models and terminology used to describe disability. Until recently the medical model, which uses medical criteria to classify an individual's impairment, was widely used by practitioners to assess the need for intervention to assist a person to adjust to their disability. However some have argued that the medical model sees the disabled person as a problem (e.g. Finklestein, 1980; Oliver, 1992; Dalley 1991; Rieser, 1994), affording too much control to 'non-disabled professionals' over the lives of disabled people. These authors prefer to use the social model of disability, which is based on the premise that disability can be tackled by restructuring the environment and society rather than seeking to minimise a limitation due to impairment. Researchers adopting one model or the other are likely to take quite different approaches. Those following the medical model might count the number of disabled people and make an assessment of the services they require. Those following the social model might consider barriers created by society by asking disabled people how to make existing services more accessible. Authors promoting the social model believe that medically determined categories of disability can offer only a limited guide to appropriate service provision because people with different disabilities may experience similar handicaps, therefore an estimate of the number of disabled people is not appropriate (Stevenson and Sutton,

1982; Abberley 1992; Oliver 1992; Bochel and Bochel, 1994). Others believe that policy makers do require information about basic medical conditions and the variety of inherent disabilities in order to target services appropriately (Gallagher and Moynihan, 1992; Low, 1993; Low, 1994).

This thesis does not exclusively adopt the social model of disability, not least because there is a lack of tested methodology for research based upon this approach (Bochel and Bochel, 1994). It does begin with an attempt to estimate the working age visually disabled population in the belief that this information is useful both in lobbying for change and securing funding. However the author recognises that if recommendations are to have a lasting impact they must be embraced by disabled people themselves and to this end the views of disabled people are a key part of the research.

## 1.3 Prevalence of disability

There are a variety of data sources on the prevalence of disability in the population. The Census of Population of Great Britain (1991), relying on self-declaration, asked respondents whether they had any long-term illness, health problem or handicap, that limited their daily activities or the work they could do. This gave an estimate of almost 2 million people. The Department for Health and Social Security commissioned the OPCS Disability Survey (Martin, Meltzer and Elliot, 1988) to inform service and benefit planning. Survey questions were based upon the WHO definitions of disability, handicap and impairment. The results give an estimate for the number of adults in Britain with one or more disabilities as just over 6 million. Incidence of disability was found to increase with age; almost 70% of disabled adults were aged 60 or over and visual disability was

more age related than any other disability. Meager, Evans and Dench (1996) applied the prevalence rates of disability from the 1988 OPCS Survey to calculate more up to date estimates of the disabled population. They estimated that in 1995 there were nearly 1.8 million people aged between 16 and 59 in England with a disability and another 4 million aged 60 and over. In winter 1998/9 the Labour Force Survey (LFS) (Sly, Thair and Risdon, 1999) estimated that there were 6.4 million people of working age with a long term health problem or disability. The SCPR Employment and Handicap Survey (Prescott-Clarke, 1990) was commissioned by the Employment Service to estimate the number of people eligible for registration as disabled for employment purposes under the 1944 Disabled Persons (Employment) Act. The report notes that the criteria for registration under the1944 Act are abstract since the final decision rests with staff at local Jobcentre, so occupational handicap and eligibility for registration do not necessarily correlate with being registered. The findings state that 3.8% of the population of Great Britain, or 1,272,000 people, are occupationally handicapped and economically active. Table 1 compares data from the sources described above.

| Source (year) | Age group | No. disabled people |
|---|---|---|
| OPCS (1995) | 16 - 59 | 1,759,000 |
| SCPR (1990) | 16 - 64 | 1,272,000* |
| LFS (1998/9) | 16–59 (female)/64(male) | 6,229,000 |
| Census (1991) | 16 – 59 | 1,959,000 |

* This is the figure for the economically active population only, with a broader definition than the other studies

Table 1. Comparison of estimates of people with disabilities, living in private households in Great Britain

The discrepancy between estimates of the number of disabled people of working age cannot be explained simply by the different age groupings and years of collection. The

Labour Force Survey gives a much higher estimate than other sources. This is probably due to the definition of disability used in the LFS (based upon the 1995 Disability Discrimination Act) which asks respondents whether they have any health problems or disabilities that limit their ability to carry out normal day-to-day activities. SCPR, with the focus upon occupational handicap, used tighter criteria to identify their sample. The comparison overall shows that estimates of the number of people of working age who have a disability vary according to the source and that each source defines disability differently to suit the intended purpose of the data. Occupational handicap and disability are not necessarily the same thing.

**1.3.1 Prevalence of visual disability**

The World Health Organisation (WHO, 1980) bases its definitions of visual impairment upon visual acuity, that is the power possessed by the eye to distinguish form. A Snellen chart, used to test acuity is calibrated such that a person with normal sight can see certain letters at set distances. The classic definition of blindness is a visual acuity of 6/60 or less (in the better eye, with optimal correction). This means that a blind person must be 6 meters from the Snellen chart in order to see something that a person with normal sight would see at 60 meters. When visual acuity is less than 1/60 the subject's ability to count fingers at varying distances is tested. For those with very little sight their vision may be recorded as finger movements only or light perception only. Equally a person may be considered 'blind' if the field of vision is so restricted that only a very limited area can be seen at one time (the widest field of vision subtends to an angle of no larger than 20 degrees).

In Britain the Department of Health adopts the definition of blindness given in the 1948

National Assistance Act, which states that a person may be registered as blind if he or

she is 'so blind as to be unable to perform any work for which eyesight is essential'. This

definition stems from concern for the livelihood and welfare of soldiers blinded in the

Second World War. However it has become customary to base registration upon

numerical measurement and in practice the cut off point is a visual acuity of 3/60

(Snellen) after optimal correction (Tobin, 1995). In order to register as blind or partially

sighted an individual must first undergo examination by a Consultant Ophthalmologist

who completes a medical certification. The individual can then approach the local

authority and ask to be registered according to the information given on the medical

certificate. Since 1979 the Department of Health (DoH) has collated registration figures

maintained by local authority Social Service Departments and publishes a report of the

findings every three years. Although there is no statutory definition of partial sight the

Department of Health (1997) does give guidelines based on visual acuity and visual

field. Some professionals in the field of visual impairment have commented that the

present definitions of blindness and partial sight used for registration purposes in the UK

are unsatisfactory. For example, Cullinan (1977) found that the prominence of distance

vision acuity in testing leads to the exclusion of those with a near vision problem.

There are three sources of information about the visually disabled population:

registration statistics; population survey data; and records of agencies such as voluntary

bodies and Social Service Departments. Agency records give details of those in receipt

of services but are not necessarily an accurate indication of prevalence. The review of

data from registration statistics and published surveys shows that these also fail to give a

consistent indication of prevalence. The latest DoH reports for England give information

up to and including 1997: the total number of people registered as blind is 158,590; the total number registered as partially sighted is 138,180 (Department of Health, 1997). There is a dramatic increase in registration with age, particularly amongst those over 75 years with 68.47 % of those registered blind and 67.95 % of those registered partially sighted in this age group. The Department of Health (1997) states that although registration of blindness is voluntary it is a pre-condition for the receipt of certain financial benefits and claims that this gives greater credibility to the 'Register of the Blind' than to the 'Register of the Partially Sighted'. However the DoH does concede that the reliability is compromised by confusion over the review of records and the fact that some social service concessions are freely available and so urges caution when interpreting registration data. Brennan and Knox (1973) concluded that the DoH Register should not be used for social research or health services planning and policy development since it is not sufficiently accurate. However, the register does provide regularly updated information that is not readily available elsewhere.

In the OPCS survey the severity of 'seeing disability' was measured by asking respondents to carry out certain tasks and allocating a severity rating depending on the ease with which they completed these tasks. The scale of severity ranged from 'has difficulty seeing to read ordinary newspaper print' (lowest severity score) to 'cannot see by the light where the windows are' (highest severity score). The total with a seeing disability is given as 1.7 million, with 293,000 aged between16 and 59 years. The scope of the severity rating used is very broad and some people included would not be eligible for registration as a blind or partially sighted person with the DoH. Meager et al. (1996) used 1988 OPCS data to calculate a more up to date estimate of the number of people with a visual disability in the working age population, arriving at a total of 263,000, in 1995. In the same year the Labour Force Survey estimated that there were 123,168

people with difficulties in seeing that caused problems in carrying out their work (Sly and Duxbury, 1995). The SCPR survey published in 1990 reported that 7% of their sample, equivalent to 89,040 people, had a 'difficulty in seeing'. Table 2 compares these figures.

| Source (year) | Age group | No. visually disabled people |
|---|---|---|
| OPCS (1995) | 16 – 59 | 263,000 |
| SCPR (1990) | 16 – 64 | 89,040 |
| LFS (1995) | 16 – 59 (female) / 64 (male) | 123,168 |
| DoH Register (1997) | 18 – 64 | 52,050 (England only) |
| RNIB (1991) | 16 – 59 | 80,000 |

Table 2. Comparison of estimates of working age people with a visual disability, living in private households in Great Britain

General disability surveys such as the OPCS and SCPR studies give the overall picture for people with disabilities with some basic demographic details of particular disabilities. Regional associations for the blind maintained comprehensive data on visually disabled people in employment until 1970, when the Government took over and published official figures. From 1977 policy changes led to reduced information collection and details of employment were no longer collected. The RNIB Survey (Bruce, McKennell and Walker, 1991) was the first source of detailed data on visually disabled people for two decades. The RNIB survey estimates that the number of blind and partially sighted adults eligible for registration living in private households in Great Britain is 757,000, with 80,000 aged between 16 and 59 years.

identifying 'seeing difficulties'. OPCS applied a severity rating to measure the level of difficulty and respondents with a mild difficulty were included. The LFS relied on self-reporting of respondents, without any testing. Although SCPR and RNIB based the definition of their sample on different registration criteria they give similar estimates of the number of visually disabled people of working age. SCPR is concerned with occupational handicap and therefore is likely to have included some whose sight loss does limit their work but is not severe enough for registration as partially sighted. Registration as a method of estimating the number of blind and partially sighted people gives the lowest estimate, although this figure applies only to England whereas the other sources apply to Great Britain. The RNIB survey (Bruce et al., 1991) suggests that for those aged between 16 and 59 years only 60% of those eligible to register as blind and 25% of those eligible to register as partially sighted do so.

In conclusion estimating the prevalence of visual disability amongst the working age population is fraught with difficulties. Problems are caused by variations in age, categories used in data sets and in the criteria used to determine whether or not an individual has a visual disability. There are differing definitions of blindness and partial sight and this is highlighted by the variety of terminology found in surveys reviewed. Information is gathered on the basis of different definitions from a variety of sources including medical records, official figures and self-reports of visual difficulties. This makes the comparison or combining of sources difficult and it is not surprising that the estimates of prevalence of visual disability vary enormously between the sources examined. Despite argument from the disability movement that data based on the medical model, like these reviewed here, do not give a picture of need (Oliver, 1992; Finklestein, 1980) this information is used to plan services and allocate resources.

Clearly planning based on registration figures may lead to services with insufficient resources to meet demand.

## 1.3.2 Demographic data for students with disabilities

Estimating and understanding the visually disabled student population can provide information on numbers, characteristics and needs of visually disabled young people who will be seeking employment in the next two to three years and thus aid service planning in a wider arena. A recent report (Meager et al., 1996), estimated that there are 126,500 students with disabilities and/or learning difficulties, which represents approximately 5.5% of the enrolled student population. In addition the report estimated the number of potential students with disabilities, who might apply to colleges in the survey sample if these colleges could meet their needs. When the actual number of disabled students enrolled in responding colleges is compared with the estimated number of additional potential students - 26,055 and 23,872 respectively - the level of failure of colleges to meet the needs of this population becomes apparent.

Meager et al. (1996) found that of the disabled students enrolled in the sample colleges, 49.2% were female. Whilst this may indicate an under representation when compared with the overall enrolled student population, in which 54.6% were female, it is acknowledged that within statutory education boys are three times more likely than girls to be identified as having 'special educational needs' (Tomlinson, 1982). Meager et al. also found that disabled students who studied part time were more likely to be female whereas those who studied full time were more likely to be male. They noted that the age distribution of students with disabilities and/or learning difficulties corresponded

very closely to that of the overall enrolled student population, but there was a strong correlation between age and mode of attendance, and that the percentage of part timers increased with age. The report also comments that white students were over represented within the disabled group (79.8), relative to the non-disabled group (72.8%). The report does break down the disabled student population in mainstream colleges by disability and estimated that 2,678 (3.5%) students have a visual disability, of whom just over half were receiving learning support of some description. It also notes a further 1,800 visually disabled students funded by the Further Education Funding Council in specialist colleges. This suggests that there are just under 4,500 visually disabled students who need additional support. Statistics on higher education are available from the Higher Education Statistical Agency (HESA, 1997). In 1995/6, based on 91% of the student population, HESA identified 21,200 first year students with a disability, 848 (4%) of whom are blind or partially sighted. This includes undergraduate, postgraduate and Open University students who declare themselves as having disabilities. Assuming a zero drop out rate and a three-year period of study this suggests 2,544 visually disabled students in higher education. An additional assumption that the missing 9% of the HESA sample have the same ratio of visually disabled students leads to a figure of 2,796 visually disabled students in higher education.

The University and Colleges Advisory Service (UCAS) base their data on enrolment forms that invite students to identify themselves as having a disability. For the three year period 1994 to 1996, again assuming a zero drop out rate UCAS statistics report that there are 35,855 disabled students in higher education, but UCAS does not provide a breakdown by nature of disability (UCAS, 1996). If the 4% ratio found by HESA is applied to the UCAS figures an estimation of 1,434 visually disabled students can be

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derived but this does not include students enrolled with the Open University. The Open University's Office for Students with disabilities confirmed that in 1996 they had 5,662 students with disabilities enrolled and of these 742 (13.2%) identified themselves as having a visual disability. If this is added to estimation of the number of visually disabled students in higher education based on UCAS figures a total of 2176 is reached which is approximately 600 fewer than the estimation based on HESA statistics.

Using figures from Meager et al. (2600 + 1800) and either HESA (2796) or UCAS (2176) it is possible to estimate the number of visually disabled students within further and higher education as approximately 7000. Thus, assuming three-year courses, there are approximately 2,300 visually disabled graduates entering the labour market annually.

## 1.4 Economic activity of disabled people

OPCS found that 31% of disabled adults were working and 15% were unemployed (if those who are not actively seeking work are included) (Martin et al., 1988). At this time 10% of the general population who were economically active were unemployed. In the SCPR survey (Prescott-clarke, 1990) the 'economically active' population was made up of those in work and those wanting work, where wanting work had a broad definition and included people who wanted to work but had given up looking. It was found that 3.8% of the population of Great Britain were occupationally handicapped and economically active. This represents 1,272,000 people. Of the occupationally handicapped population it was estimated that 78% were working and 22% were 'wanting work'. The Labour Force Survey for winter 1998/99 (Sly et al., 1999) reported that the economic activity rate for disabled people of working age was currently 51 %

compared with 85% for non-disabled people, where economic activity was defined as employed or actively seeking work. It identified 73,000 economically active people who had 'difficulty in seeing', which is 2.6 % of all those identified as having a long-term health problem. The employment rate for economically active disabled people was 46 % compared with 74 % for non-disabled people. Table 3 compares numbers of employed people with and without disabilities given in these sources.

| Source (year) | Employed non-disabled population (% of non-disabled population) | Employed disabled population (% of disabled population, as defined by each study) | Employed visually disabled population (% of visually disabled population) |
|---|---|---|---|
| OPCS (1995) | | 1,130,000 (31) | |
| LFS (1998/99) | 26,466,000 (74) | 2,926,000 (46) | |
| RNIB (1991) | | | 22,750 (25) |

Table 3. Employment levels in the general population, disabled population and visually disabled population

Table 3 highlights the contrast between the LFS employment rate for the non-disabled population (74%), and that of disabled population (46%). In the RNIB survey the proportion of partially sighted people in employment was similar to that of the general disabled population, but only 17% of blind people had a job. The overall percentage of visually disabled people in work was 25%, which represents 22,000 people. This indicates that not only are visually disabled people less likely than the general population to have a job, they are also less likely than the general disabled population to be working. The RNIB Survey also noted that visually disabled people in employment were less likely to work in professional jobs (14%) than either the general population (34%) or the general disabled population (25%), and more likely to work in semi-skilled and unskilled jobs (36%) than the general disabled population (31%) and the general population (23%). However the RNIB Survey does demonstrate that blind people can

and do undertake paid employment and it also states that of the remaining blind population not working, 72% have worked at some stage during their lives and very often after the onset of their disability. Only 11% have never worked at all, giving such reasons as 'sight problems', 'other disabilities', and 'studying'. Conversely the RNIB Survey found that one third of visually disabled people lose their job during the first two years after onset of sight loss (confirming the OPCS finding, that the first six months after onset are a time of very high job loss) and that the vast majority of visually disabled people who lose their job remain unemployed for long periods; 88% of visually disabled respondents had been out of work for over one year and 55% for over five years. For 80% of the unemployed respondents to the RNIB survey the job they held at the time they began to experience sight loss was their last. At the time of the RNIB Survey 43% of the general unemployed population had not worked for more than a year indicating that visually disabled people are much more likely than the general population to become 'long term unemployed. Reasons given by disabled people for leaving their last job include being made redundant on medical grounds, pressure to resign and choosing to leave because of functional limitations due to disability (Martin et al., 1988; Borgia and Crowder, 1996).

In order to ascertain which factors have the greatest effect on economic activity OPCS used models describing possible relationships between variables in their analysis. It was found that whether or not people were working depended upon the severity of their disability, age, type of chosen occupation (manual or non-manual), qualifications and gender, in that order. In other words severity of disability is the most important factor in determining whether a person is likely to be in or out of work. When a similar analysis for unemployed disabled people (using the definition for unemployed as actively seeking work) was carried out severity of disability was again found to be the governing

factor, however those who would choose to work in a manual rather than non-manual occupation were significantly more likely to be unemployed. The LFS did not measure severity of disability but did note that 38% of disabled people of working age have no educational qualifications. The report suggests that educational qualifications may have a positive influence on economic activity since the proportion of economically active disabled people with no educational qualifications was found to be lower, at 29 %.

The SCPR figure of 987,00 (78%) employed disabled people has been excluded from Table 3 as the study's concern is with those who are occupationally handicapped and economically active and it uses different definitions from other studies. The 987,000 people comprise 78% of the economically active group, not of the total disabled population of working age. However, the definition of 'economically active' is much wider than in other studies including not only including those in work or seeking work, but those wanting it though not actually seeking it. The SCPR study was not just concerned with long-term limiting disability but whether this 'affected the kind of work that they could do' or 'would make it harder for them to get and keep another job'.

**Literature Review**

# Chapter 2. Education and employment opportunities for visually disabled people

## 2.1 Introduction

Provision for disabled people initially had a welfare emphasis and disability was not recognised as a political issue until the 1940s, when the Government considered it their duty to provide income support and rehabilitation to disabled veterans from the Second World War. Current Government thinking about disabled people is reflected in the 1995 Disability Discrimination Act (DDA) which legislates against discrimination due to disability in a range of areas including employment and provision of goods and services. Education is not covered by the DDA but there is debate about inclusion of disabled people in mainstream provision and discussion of the benefits and future of special education provision.

This chapter reviews the education, training and employment opportunities for disabled people with particular reference to visually disabled people. It seeks to examine factors influencing these opportunities including legislation, development of support provision, the rise in the disability movement and the advent of new technology.

## 2.2 A review of education and training opportunities for visually disabled people

The 1976 Education Act stated that all children with special educational needs should be educated in ordinary schools as far as practicable but the term 'educationally sub-normal' remained in law until the Education Act of 1981. In 1993 the 1981 Act was extended and the Tomlinson Committee, commissioned by the Further Education Funding Council (FEFC), responsible for allocating funds to the further education sector, claims that the Act of 1993 has led to a more sensitive and effective education for children with disabilities (FEFC, 1996). However, for disabled people, actually obtaining a place within the educational system may be an achievement in itself due to difficulties with funding (George, 1992) or lack of related support services (Siperstein, 1988). The Audit Commission/HMI Report (1992) claims that special education provision in schools is available mostly where parents have support from voluntary organisations or lawyers and indeed Talbot and Farbey (1997) point out that in the last thirty years 7 of the 17 non-maintained specialist schools for visually disabled children have closed. Tobin and Pitchers (1993) produced some guidelines for those providing educational services for blind children. They suggested that non-maintained special schools have a role in curriculum development and supporting LEAs to develop other services. Talbot and Farbey (1997) extend this idea and suggest that non-maintained special schools for blind children become resource centres for LEAs offering assessment and specialist careers guidance.

The further education sector has been slower than the school sector to develop provision for students with disabilities. In 1973 only 10 % of those leaving special

schools entered further education and a further 9% began special residential courses (FEFC, 1996). This began to change throughout the 1970s as youth unemployment rose dramatically and the newly formed Manpower Services Commission promoted a series of youth training schemes. Basic education courses were becoming more widely available and disabled people were able to take part. By requiring the FEFC to have regard to students with learning difficulties and/or disabilities, the Further and Higher Education Act of 1992 placed these students fully within the scope of further education. The FEFC is now seeking to focus on inclusion and on the capacity of the educational institution to understand and respond to individual learners' requirements so that the distinction between disabled and non-disabled students no longer has any relevance (FEFC, 1996). However, others are concerned about what might be lost in terms of specific support for individuals if the shift away from the technical understanding of disability is too great (Hegarty, 1993).

Despite the development of new approaches the implementation of change has been slow. Bradley, Dee and Wilenius (1994) found that evaluative research on the post-16 education of students with disabilities is rare particularly in the areas of assessment, guidance and support. Recent literature has noted the poor quality of special educational provision in the further education (FE) sector and lack of awareness amongst and training for staff (Butler, 1986; NIACE, 1992; FEFC, 1996). It notes a lack of knowledge amongst senior management and teachers and criticises those who demonstrate a lack of commitment to providing a quality service for students with disabilities (Bradley et al., 1994; FEFC, 1996; RNIB, 1996). Successful change is ultimately dependent upon changes in attitudes and practices of staff and will involve the effective dissemination of good practice and listening more to disabled students (Hurst,

1993; FEFC, 1996; Skill, 1996). Several authors offer guidelines regarding provision of education to disabled students (HMI, 1992;Tilstone and Upton, 1993; Bradley et al., 1994; NATFHE,1993; Skill,1996) and propose a variety of indicators for evaluating the quality of provision. Improvements in teacher training and research into what constitutes good practice in the field of teaching methodology are suggested as quality improvement strategies.

Disabled students find the process of assessment of their educational and support needs confusing (Skill, 1996), perhaps because assessment in FE has developed in an ad hoc fashion (Corbett, 1990; Bradley et al., 1994) leading to the use of a wide range of assessment techniques and a lack of evaluation of relative merits of these different methods. A multi-disciplinary approach to assessment is essential for the provision of appropriate opportunities for students with disabilities (Hegarty and Jowett, 1985), yet inter-agency co-operation is proving elusive as professionals debate the aims of assessment and who should be involved (Corbett, 1990; Corbett, 1993; Bradley et al., 1994). FEFC (1996) found that monitoring the achievements of disabled students is less common than for non-disabled students and some authors emphasise the need to involve students themselves in assessment and evaluation of programme effectiveness (Bradley et al., 1994).

There is general agreement that assessment should be carried out by skilled staff and that it should be the basis of determining support needs (Roberts, 1982; FEFC, 1996). Although the provision of effective support is essential in determining the quality of the experience of young people as they pass through education there has been little research in the field (Bradley et al., 1994). Issues of lack of funding, lack of staff training and lack

of understanding of accessibility problems often lead to partial solutions (Bradley and Hegarty, 1982; NATFHE, 1993; Bradley et al., 1994;Vincent, 1996). Support is not only concerned with learning need such as provision of equipment and materials but also with the contextual factors that allow students to attend college and to exercise choice (Skill, 1996; FEFC, 1997). The Tomlinson Report (FEFC, 1996) recommended that the FEFC should derive a statement of the generic support that students can expect in every college thus enabling the majority of disabled students to have their needs met without additional individualised support. However there needs to be recognition that if colleges are to meet this level of provision they may require funding for development of infrastructure.

Assessment can also be a key factor in easing the transition from school to further and or higher education, into employment or back to education (Roberts, 1982; Bradley et al., 1994; FEFC, 1996). However there is some confusion over the aim of transition programmes; it may be that success at work and success in other spheres of life depend upon the same capabilities (Kennedy, 1997). It appears that transition planning can be a significant predictor of participation in post-16 education for students with disabilities (Halpern, Yovanoff, Doren and Benz, 1995) but disabled students have commented that preparation for their transition from school to college and then into employment was inadequate (e.g. Jamison, 1995; Skill, 1996), noting particularly their need for accessible information about equipment, careers and training opportunities. For effective provision there needs to be an understanding of who is responsible for transition support at various stages but shortage of trained resources, fragmentation of statutory links between local education authorities and colleges and lack of communication between agencies does not promote collaboration in transition planning (HMI,1991;Bradley et

al., 1994; FEFC, 1996). It appears that individual lecturers are establishing their own contacts with external agencies in order to meet particular student needs (Bradley et al., 1994).

DfEE has recently published guidelines for improving careers education and guidance (CEG) (DfEE, 1995). These include implementation of CEG policies in schools and colleges, inclusion of CEG in the training curriculum for staff at all levels, service level agreements between schools and the careers service, measurable targets that ensure individual progression, input from parents, governors and employers and clearly defined senior management support for CEG. An evaluation of the effectiveness of CEG found that recipients had an increased chance of studying a vocational course, being in a job or scheme in which they received quality training or being satisfied with their job or scheme. However CEG made little difference to young people's chances of being unemployed at the age of 18, social factors and the local unemployment rate all had a greater influence (Howieson and Croxford, 1996). Provision of CEG to disabled students is seen as a tool for widening participation in education and training but the service is recognised as inadequate at present (Kennedy, 1997). Jamison (1995) found that CEG was commonly given by word of mouth to visually disabled students and others highlight a lack of accessible information (DfEE, 1996; Borgia and Crowder, 1996; FEFC, 1997), suggesting that publicity about potential sources of information and support are not reaching disabled people. The 1997 Education Act requires that all secondary schools and FE colleges provide access to a careers adviser working for a careers service and that students have access to materials providing careers guidance (Mellor, 1997). All provisions within the Act apply to pupils with disabilities, however the literature indicates that careers officers are often hampered in provision of CEG to

disabled students by lack of training and lack of information about other sources of support (Jamison, 1995; Brading, 1997).

Work experience is recognised as a valuable tool in the curriculum seeking to prepare students for employment (Dearing, 1997). By testing communication and problem solving skills the DfEE found that students who started off at a relative disadvantage made marked gains after a work experience placement (Weston, Christophers, Schagen and Lines, 1996). DfEE concluded that the placement filled a gap in their experience, helping them to catch up with other students. Disabled students have reported that work experience boosts confidence, clarifies their career aims and helps when applying for jobs (Jamison, 1995; Weston et al., 1996). Work experience has a crucial role in vocational integration (Reiter and Palnizy, 1996) providing consideration is given to preparation of trainees and of the work situation. the environment and staff (Kendrew, 1997). This has implications for co-ordinators of work experience placements.

The literature recognises that lack of funding is one of the major barriers to education and training for disabled people (Bradley et al., 1994; Meager et al., 1996; FEFC, 1997). Examples are given of inadequate support, discouraged applications and refused admissions. There is also concern that provision will focus upon particular groups of students whose needs are more easily met. Disabled students reported other specific barriers including inaccessible buildings and the attitude of other people (Borgia and Crowder, 1996). Some examples of good practice are documented (Smith, 1992; Borgia and Crowder, 1996) but the literature notes the lack of expertise amongst training providers and advisers working with disabled people, leading to inappropriate guidance and programmes offered at levels that do not necessarily match individual abilities.

FEFC (1997) is keen to alleviate the barriers to education faced by disabled people by encouraging dissemination of good practice and development of flexible services through partnerships between TECs, colleges and voluntary bodies.

## 2.3 A Review of Employment Opportunities for Visually Disabled People

### 2.3.1 Legislation and Government schemes

The Government first considered the issues of employment for blind people in the National Assistance Act of 1920, which required local authorities to register blind people who were unable to work. The Act licensed county councils to maintain workshops for the blind and led to the emergence of 60 workshops employing 4,500 people by 1939. These workshops provided employment for the majority of the 2,000 men blinded in the First World War who returned home to work (Chester, 1956). During the Second World War blind and partially sighted people unable to serve in the forces found work in open employment and at the end of the war people who had become disabled in action joined the labour market. The Government responded with the 1944 Disabled Persons (Employment) Act that required the establishment of a disabled persons' register maintained by the Government Employment Service at local Jobcentres and distinct from registers of disabled people held by Social Services. The Act defined disability within an employment context by stating that a disabled person is one who ' *is substantially handicapped in obtaining or keeping employment, or in undertaking work on his own account ... would be suited to his age, experience and qualification'*. It also stipulated a Quota Scheme requiring employers to employ a quota of three per cent disabled people.

The movement towards open employment received encouragement from the first study of industrial rehabilitation and resettlement provision for visually disabled people (Taylor Committee, 1951). It recognised the potential of blind people to do ordinary jobs but noted the limited prospects for people to get information about work in their preferred medium and concluded that workshop employment was still the normal goal of blind school leavers.

In 1962 the Ministry of Labour established posts for Blind Persons Training and Recruitment Officers (BPTO's and BPRO's) throughout Great Britain, thus organising a specialist support service on a national basis (Stewart Committee, 1962). It was agreed that these officers should concentrate placement in 'blue collar' work whereas placement officers of the RNIB should secure openings in commercial and professional occupations and undertake research into new fields of employment. In 1976 the Government concluded that successful integration of disabled people was dependent upon open employment opportunities (Snowdon Committee, 1976) and soon introduced the Fit For Work Award Scheme which has since been replaced by the Two Tick symbol. This symbol can be adopted voluntarily by companies who are committed to the employment of disabled people.

A substantial reorganisation of services for disabled people led to the establishment of the Disability Advisory Service (DAS) in 1984. DAS teams were set up to give a more directed emphasis to the task of assisting employers to meet statutory quota targets for the number of disabled employees, and assisting disabled people to get these jobs (DfE,1991) but under-resourcing and heavy caseloads prevented proactive approaches to employers (Newman, Wertheimer, Dromgoole and Statham,1990). As DAS teams

became established distinct provision for visually disabled people in the form of BPROs and BPTOs began to disappear; DAS officers were expected to deal with people with every disability. At this time there was also a fundamental change in the Government's approach to service provision. Previously the Government had assumed full responsibility for direct provision of support services to disabled people but now the role of voluntary organisations was recognised and a mixture of direct and contracted-out provision was advocated. Benefits for disabled people were also reviewed by the Department of Social Security in an attempt to ensure that people with disabilities had a financial incentive to work. Correspondingly, the role of employers also changed as the Government sought to pass on to them some of the responsibility they had previously assumed themselves. Several new schemes were established offering financial support to disabled workers and their employers for the adaptation of buildings or the purchase of extra equipment and salary subsidy for a trial period of work (DfE, 1991).

Despite these changes legislation was still dominated by the assumptions prompted by the return of wounded servicemen with physical disabilities at the end of the Second World War, with a focus upon rehabilitating the individual rather than modifying the work environment (Smith, Povall and Floyd, 1991). The quota system was discredited as evidence of its failure was published (Gooding, 1995). Encouraged by this new environment, organisations of and for disabled people began to mount organised campaigns seeking new legislation and civil rights for disabled people (Zarb, 1995) and in 1995 the passage of the Disability Discrimination Act (DDA) replaced the Quota System with directly enforceable legal rights for disabled people. Many regarded the DDA as a compromise (Scott-Parker, 1996), others considered it significant and far reaching (e.g. Yuille, 1996). The act defines a disabled person as anyone with '*a*

*physical or mental impairment that has a substantial and long-term adverse effect upon his ability to carry out normal day to day activities'*. The DDA does not cover education but under the sections related to employment it is illegal to treat someone less favourably because of their disability in relation to any aspect of recruitment, employment or dismissal. The term *'reasonable adjustment'* is used in the Act to describe steps that it is reasonable for an employer to take to reduce or remove physical features of the workplace or employment arrangements that cause a disabled employee or job applicant to be significantly disadvantaged in relation to others. Reasonable adjustment duties also apply in cases when an employee develops a disability and an employer may be expected to allow time off for assessment, providing job coaching or transfer individuals to a different post. DfEE (1996a) suggest that the starting point for considering adjustments should be the essential functions of the job and that the employer should ask the disabled individual for advice on the adjustments that suit them best. Communication between employer and disabled employee needs to be encouraged but it is important that employers are aware that disabled people, particularly those who are newly disabled, may not be aware of all the devices or support available and that expert help should be sought. Equally many employers will remain uncertain about the impact of the Act on their organisations until industrial tribunals give more detailed guidance on what it is 'reasonable' to require an employer to do (Balchin, 1996). Employers are likely to be concerned about the cost associated with reasonable adjustment. The Employers Forum (1997, 1997a) explain that the availability of financial assistance under the government funded Access To Work (ATW) scheme, which can part fund workplace adaptations for disabled people, could make 'reasonable' an adjustment that would otherwise be regarded as too costly for the employer. There are other programmes to assist disabled people into employment such as the New Deal for

Disabled People that provide a variety of support including training, mentoring and job coaching through a number of innovative schemes. Current provision for supported employment is not limited to sheltered workshops but includes the Supported Placement Scheme (SPS) that supports approximately 1,000 visually disabled people. SPS provides a wage subsidy to the employer if the productivity of a disabled worker is adversely affected due to occupational handicap, and aims to place disabled people into open employment (DfEE, 1997).

## 2.3.2 New technology

New technology has played a significant part in enabling disabled people to compete in the labour market and the phrase 'access technology' was coined to indicate the methods of adapting or designing equipment to allow a disabled person to effectively use it. Halliday (1992) chronicles the development of access technology for visually disabled people. It began in the 1970s with the Optacon, a device giving blind people access to print by converting it to a tactile signal. Since then a whole new industry has developed around the design, manufacture and supply of access technology devices. Blind and partially sighted users can now access computers either by magnification of the images on the screen or by the use of screen reading software. Screen reading software can be used in conjunction with either a speech synthesiser to give speech output or an electronic braille display giving braille output. There are many products based on these options but even when aids are available their full benefit may not be realised for many reasons. Riddle (1986) points out that computer technology is designed to orientate the user to a visual screen. A blind person must learn how to use two devices, the computer and their particular access system, then they must adapt this combination to the tasks

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that make up their job. Successful application can be hindered by lack of assessment, the high cost of specialist equipment, lack of suitably qualified trainers or funding to pay for training (Singleton, Debny and Papworth, 1979; Floyd, Cornes and Boeckenfoerde, 1993).

### 2.3.3 Job search and sources of advice

Jobcentres are generally well used by disabled people looking for work. According to OPCS (Martin et al., 1988)the majority (about 80%) do visit a Jobcentre but a much smaller percentage, about 20%, actually speak to specialist staff there. RNIB found that, unlike the disabled population in general, visually disabled people tend not use Jobcentres (Bruce et al., 1991). Although it estimated that 33,000 visually disabled people would like to work only 9% of unemployed partially sighted people and 5% of unemployed blind people visit Jobcentres regularly. This could be because Jobcentres are not fully accessible to visually disabled people since job vacancies tend to be printed on small notices, displayed on a wall. The proportion of visually disabled Jobcentre visitors receiving guidance from specialist staff was 18 %, and this confirms the OPCS finding of a low level of contact with specialist staff in Jobcentres. Most respondents to the RNIB survey were satisfied with the help they received from specialist advisers but one third expressed dissatisfaction because the adviser took no action or assumed the respondent to be too handicapped for work.

Of those who develop a disability while they are in employment the SCPR survey (Prescott-Clarke, 1990) found that over half asked for medical advice from their doctor and a quarter discussed the situation with their employer or trade union but only 5%

received any help or advice from the Employment Service (ES). However the SCPR survey concentrates on use of specific schemes rather than general advice given by ES staff and there is no indication of exactly what advice and practical support was offered to disabled individuals. RNIB (Bruce et al., 1991) reported that only 14% of respondents who experienced sight loss while in employment were given advice related to a job they were already doing. Job retention could be an important focus for service providers since the low level of work related support received could be a contributory factor to the high rate of failure to retain it. For example only 23% of respondents to the RNIB survey used adapted equipment at work and only 27% of OPCS respondents mentioned support from their employer such as redesigning the job, providing adaptations and special equipment, allowing different hours and modifying work conditions. Greater use of these provisions and support could increase chances of job retention. Often external advisers are called in when the individual has already lost their job and it is too late to carry out negotiations with the employer, to assess the need for special equipment or to consider redeployment opportunities. The fact that 40% of working age male respondents to the RNIB survey had worked for over five years since onset of sight loss indicates that there can be scope for negotiation with employers and RNIB stresses that early intervention offers the best hope for a positive solution.

## 2.3.4 Type of work undertaken by visually disabled people

Table 4 compares the types of work undertaken by disabled people, visually disabled people and the general population. It shows that 43% of disabled people work in non-manual occupations whereas only 32% of visually disabled people do so and this compares with 53% of the general population. Thus disabled people were more likely to

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be in manual occupations than the general population. For example, only 13% of disabled people were working in professional or managerial jobs compared with 20 % of the general population. In addition, the visually disabled population was more likely than both the general population and the general disabled population to be working in a manual capacity. So not only were visually disabled people less likely than the disabled population in general to have a job, if they did it is less likely to be of a professional nature.

| Type of work | General population (%) | All disabilities (%) | Visual disabilities (%) |
|---|---|---|---|
| Professional | 5 | 2 | 10 |
| Employer/managerial | 15 | 11 | 0 |
| Intermediate non-manual | 14 | 12 | 4 |
| Junior non-manual | 19 | 18 | 18 |
| TOTAL NON-MANUAL | 53 | 43 | 32 |
| Skilled manual and non-professional | 25 | 26 | 28 |
| Semi-skilled manual and personal services | 18 | 22 | 36 |
| Unskilled | 5 | 9 | |
| Not stated | | | 4 |
| TOTAL NON-PROFESSIONAL | 48 | 57 | 68 |

Table 4. Comparison of types of work undertaken by disabled people and the general population

Source: All data from RNIB Survey (Bruce et al., 1991) Table 17.7.B

**2.3.5 Barriers to Employment**

The attitude of others, particularly employers, work mates and members of the public has been reported as a significant barrier to employment for disabled people (Fry, 1986; Smith, 1992a; Prescott-Clarke, 1990; Kirchner, Johnson and Harkins, 1997; Tillsley,

1997). Some disabled people have reported that their low self esteem acts as a barrier (Balchin, 1996a). Employers concerns regarding the employment of disabled people are identified as health and safety issues, having adequate insurance, poor sickness records, terminating a disabled worker for unsatisfactory performance, the types of work their organisation could offer a disabled worker and dealing with changes in job requirements. (Honey, Meager and Williams, 1993; Kirchner et al., 1997). Practical barriers include lack of access and special equipment and travel limitations due to disability and unfamiliarity with surroundings leading to difficulties at interviews. Work practices such as the lack of flexibility in hours to allow hospital visits are also seen as a problem (Balchin, 1996b). Financial barriers include the lack of flexibility in the benefits system, lower pay for disabled workers compared with non-disabled colleagues in the same job and the cost of aids and equipment to prospective employers (Floyd, 1995; Borgia and Crowder, 1996).

The unfavourable economic climate, low levels of recruitment and lack of local work opportunities were cited as barriers to employment by both disabled respondents (Borgia and Crowder, 1996; Balchin, 1996a) and employers (Honey et al., 1993). Dench, Meager and Morris (1996) noted that employers held stereotypical views of the kind of jobs visually disabled people could do and this acted as a barrier to recruitment and retention of visually disabled people. Balchin (1996a) noted a lack of qualifications amongst long term unemployed disabled people but also found mixed views on the usefulness of training schemes. Adult Work schemes and Job clubs were regarded most highly by respondents, Youth Training and Restart schemes were regarded as least useful. The Youth Employment and Training Resource Unit (1992) condemned Youth Training for disabled people as an unmitigated disaster, claiming that disabled people received poor quality training, for jobs they did not want, in segregated circumstances.

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Disabled people also cited the lack of appropriate support and services particularly in job seeking, adjusting to disability and finding aids and adaptations (Borgia and Crowder, 1996; Kirchner et al., 1997). They highlighted the need for a single reference point offering information on special equipment, grants and funding, providing individuals and employers easy access to support services and a service to match job seekers with employers' requirements. Jamison (1995) reported that insufficient support remains a problem when disabled people start work and can result in a lack of appropriate facilities and relevant equipment in the workplace.

## 2.4 Conclusion

The previous chapter showed that the visually disabled population is heavily skewed towards the elderly, with 90% aged over 60 years. There is a requirement for an increase in resources to meet the needs of this group. However this chapter indicates the unmet support needs of visually disabled people aged between 16 and 59. The surveys reviewed point to the labour market disadvantage of visually disabled people. The visually disabled population is more likely than both the general population and the general disabled population to be unemployed. Visually disabled people in employment are more likely to be working in a manual capacity than either the general population or the general disabled population. Floyd et al. (1993) point out that the type of work an individual does remains highly significant in our society. They add that work not only gives economic independence but also psychological strength and social acceptance to the individual. This chapter has shown that with support visually disabled people of working age can achieve economic independence and therefore resources should be channelled into developing and implementing effective support mechanisms for this group.

**Literature Review**

# Chapter 3. Models of support and vocational rehabilitation services

## 3.1 Introduction

In order to investigate the current and potential role of occupational information in vocational service provision for disabled people it is necessary to have an understanding of the models of support and intervention commonly used. This chapter gives an overview of vocational service provision. The structure of statutory disability assessment and vocational rehabilitation is described with the various government schemes for disabled people of working age. Vocational services for visually disabled people are reviewed and current provision from RNIB is described. The effectiveness of rehabilitation is considered and the views of some disabled people regarding assessment and rehabilitation are given. Some new models of service delivery are presented. Literature describing disability assessment and rehabilitation provision in the United States and the Netherlands is also reviewed, since the concept and practice of vocational rehabilitation is well established in these two countries, and a comparison is made with the introduction and provision of Incapacity Benefit in the UK. A comparison of training and support available to rehabilitation practitioners in the UK and other countries raises the issue of professional development for practitioners in this country.

## 3.2 Development of models of support

Early examples of vocational rehabilitation followed a medical model based upon a concept of diagnosis and cure. Sheltered workshops offered treatment. The concept of rehabilitation was developed in the 1950s and '60s in the United States and Europe (Campbell, 1996). In the United States university level programmes were soon developed to train rehabilitation personnel and professional practitioners in vocational evaluation for people with disabilities. A professional association for vocational assessment personnel was established and by 1975 the Commission on Certification of Work Adjustment and Vocational Evaluation Specialists was in operation to certify professionals in the field. Practitioners benefit from degree level training, a professional organisation providing information exchange through local and national conferences, professional journals, and a national research and training centre (Pruitt, 1983). Floyd (1997) notes the embryonic Vocational Rehabilitation Association for professionals in the field of vocational rehabilitation in the UK. but this does not offer support to compare with that enjoyed by vocational rehabilitation professionals in the US.

Vocational rehabilitation is the systematic process for providing services to assist individuals to improve their work performance and work related behaviour (Pruitt, 1983). It is usually undertaken after medical and some social rehabilitation. The discipline of vocational assessment, that is an appraisal of an individual's work and training background, general functional capabilities, social and behavioural characteristics was developed. This was supported by the growth in the use of work simulation tasks in vocational evaluation, that is an appraisal of a person's work related characteristics (Wesolek and McFarlane, 1992) and the development of instruments to measure factors

like occupational interests, general intelligence and physical capacities. The use of computers in vocational evaluation has continued to grow and a variety of computer controlled work simulators are available.

Vocational rehabilitation in the UK has developed with an emphasis on voluntary codes of practice (Chaplin, Gillibrand and Nolte ,1993). Traditionally the state has been the main provider of rehabilitation but recently the Government Employment Service (ES) has developed procedures for referring individuals to non-statutory service providers with ES staff retaining responsibility for management of the overall rehabilitation programme for an individual. Employment Service provision for disabled people is now delivered by the Regional Disability Service (RDS), formerly called Placing, Assessment and Counselling Teams (PACTs), throughout the country. The Disability Employment Advisor (DEA), based at a local Jobcentre, is a member of this team and is responsible for assessing disabled individuals and co-ordinating provision of their vocational rehabilitation, training and job seeking support. The RDS also provides support and advice to employers on a range of disability issues and administers a number of schemes to assist disabled people and employers. These include Job Clubs to encourage people to develop and use their job search skills; Access To Work (ATW), a financial assistance programme, funded by ES, to contribute to the cost of special equipment, work place adaptations or support workers; and the Job Introduction Scheme, offering financial assistance to employers who employ or retain a disabled person for an agreed period of time, enabling the employer and employee to have a trial run.

### 3.2.1 Vocational services for visually disabled people

Assistance with work placement for visually disabled people has been available from local authorities, local societies for the blind and voluntary organisations for many years, provided on an ad hoc basis. Traditionally RNIB has offered support to visually disabled people seeking work in the commercial sector while ES has supported those seeking work in the manual sector. In 1986 ES and RNIB agreed that the ES should be invited to take on the primary task of seeking and securing placements locally for visually disabled people across all occupational groups. RNIB should retain responsibility for service provision in rehabilitation centres and should concentrate on research and development activities and on training ES staff (Lomas, 1986). Implementation was completed in 1993 and now RNIB Employment Network staff offer services to ES on a consultancy basis such that ES can choose to involve RNIB in direct service provision if required.

RNIB is the largest voluntary agency in the UK providing services for visually disabled people (Bell, 1990). It is one of the few traditional organisations for disabled people to draw some positive comments from the Disability Movement. Even more outspoken members acknowledge that RNIB has responded to their challenge to represent blind people by including more in its governing structure and RNIB is now regarded as close to becoming democratic and accountable to disabled people (NCVO, 1997). RNIB Education and Employment division supports two residential employment rehabilitation centres (ERCs), each accepting about 350 visually disabled people each year, two colleges providing further education and vocational training and a network of six multi-disciplinary vocational service teams based in cities around the country (Bell, 1990). A major divisional restructuring programme commenced in 1994 and aimed to bring together

education and employment services by merging the separate regional teams of Employment Consultants and Student Advisers. These teams, comprising employment and education specialists, technical officers and occupational psychologists, are collectively known as the Employment and Student Support Network (ESSN). The role of these individuals, particularly Employment Consultants, the function of the regional teams and Network as a whole are discussed in detail throughout this thesis so an overview of the structure of ESSN is given here. Figure 1 shows the ESSN organisational chart. The mission of RNIB Education and Employment Division is 'to support and enable blind and partially sighted people of working age to obtain, retain and advance in employment and to influence decision makers at all levels to promote and provide quality services on behalf of blind and partially sighted people of working age' (RNIB, 1995).

ESSN teams are located in London, Birmingham, Liverpool, Bristol and Edinburgh with satellite offices in Darlington and Glasgow. The number of staff at each location varies, as do posts within the teams. Each team has a Regional Manager who reports to the Network Manager, based at the divisional headquarters in London. The Network also employs matrix management for technical staff based in regional teams, who report to Regional Managers on a day to day basis and the manager of the Employment Development and Technology Unit (EDTU) for professional guidance (RNIB, 1997).
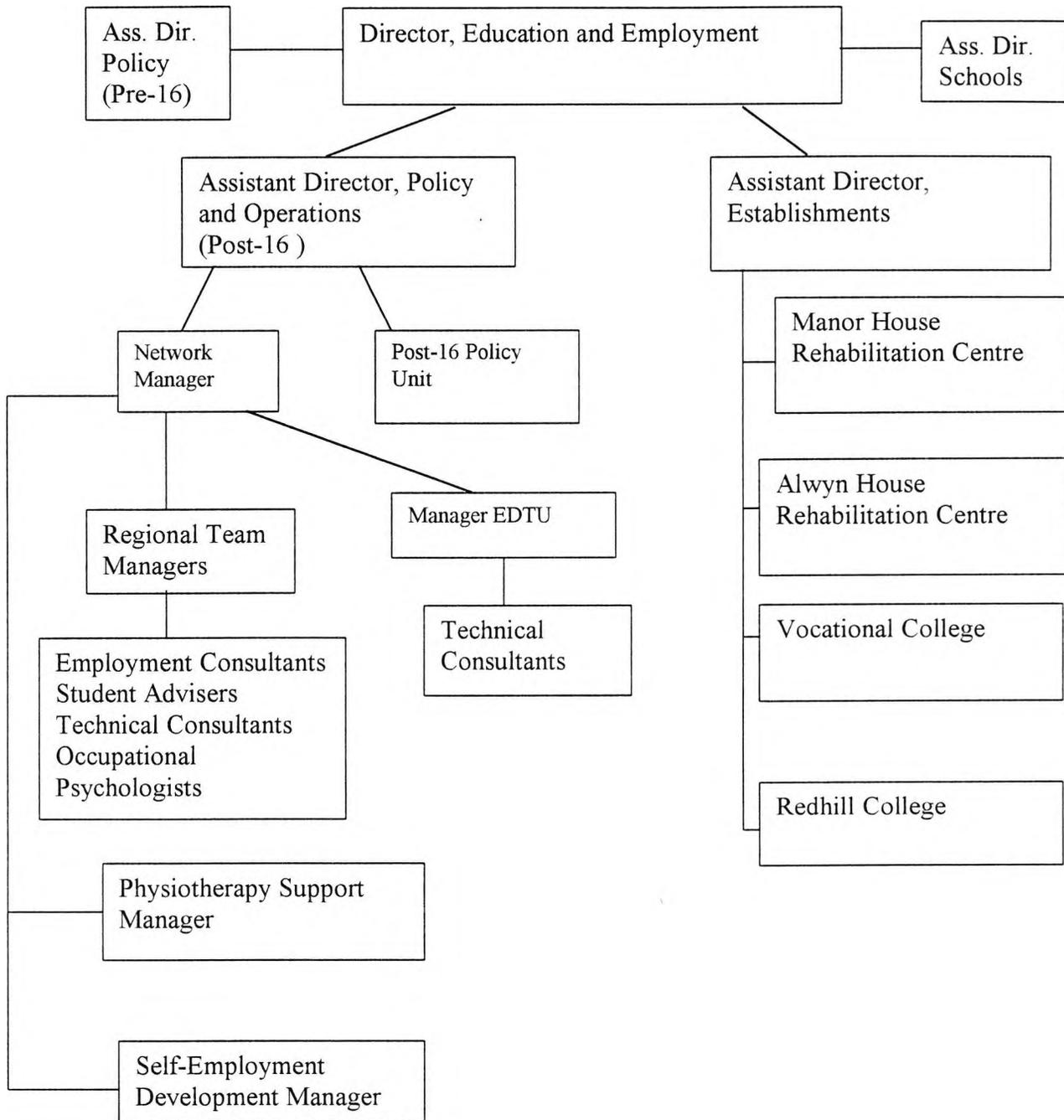
Figure 1. RNIB Employment Network organisational chart

Employment Consultant services include advice to visually disabled individuals and employers about training, retraining, self-employment, occupational assessment, equipment adaptations, access to the working environment and Government schemes to support disabled people in the workplace. Student Advisers and staff from the Physiotherapy Support Unit are able to advise both students and providers of post 16 education about accessible courses and materials, staff training and student assessment. Technical Consultants have in depth knowledge of technical access devices available to visually disabled people and can advise on appropriate equipment for individuals in their work setting and recommend relevant training (RNIB, 1997).

The job description for Employment Consultants (ECs) states that the essential tasks are to:

- provide advice and support to visually disabled people who wish to gain access to vocational assessment, rehabilitation and training;

- advise individuals and employers regarding the application of the Access to Work Scheme;

- provide career counselling;

- provide a consultancy service to the Employment Service and other specified customers offering a range of services such as assessment, advice, training;

- maintain an up to date knowledge of employment practices and labour market trends.

The job specification lists essential skills and abilities for an Employment Consultant as the ability to:

- gather, analyse and evaluate information;

- interview people from a range of backgrounds;

- listen to people and provide guidance and advocacy;

- negotiate and persuade;

- disseminate information using a variety of communication skills.

The typical job description of a vocational evaluator in the US (Miller and Rossi, 1988) was compared with the tasks listed in the job description for RNIB Employment Consultants. Vocational rehabilitation providers in the US have different specialities (e.g. vocational evaluator, work adjustment specialist, vocational rehabilitation counsellor), each with specific remits. RNIB Employment Consultants are expected to undertake a broader range of tasks than their US counterparts because vocational rehabilitation provision in the UK lacks the range of practitioners.

### 3.2.2 Disabled persons' view of rehabilitation service provision

Problems identified by disabled people with vocational rehabilitation provision include the lack of local provision in some areas, limited choice, poor assessment of their needs, inexperienced staff, lack of follow up services after rehabilitation and lack of awareness of services amongst disabled people. (Davey, Cornes and Aitken, 1993; Cash, 1997; Lakey and Simpkins, 1997). Campbell (1996) cites the demarcation in service provision between education, rehabilitation and employment as counterproductive for visually disabled individuals. The quality of support provided by ES staff has been criticised by disability organisations (RNIB and RADAR, 1995). They recommend that the ES staff should receive sufficient training, particularly in relation to assessment. Organisations also point to the delay experienced by some disabled people in getting the support they

need, suggesting this is largely due to understaffing and PACT recommending inappropriate support solutions. Lakey and Simpkins (1997) suggest that inappropriate referrals to DEAs are another cause of backlog in the system. They also highlight the use of inappropriate measures of programme effectiveness, such as placement outcome, that do not reflect rehabilitation objectives.

In response to criticisms from disabled people in the US a new model of vocational evaluation has emerged (Wesolek and McFarlane, 1982). The growing emphasis on the use of community-based assessment and training sites enables practitioners to take account of the interactive effects of personal, social and psychological factors that have an impact upon work related behaviour rather than appraise aspects of behaviour separately. Typically a disabled person has more control over the process and may select the assessment site they wish to attend and the tests and work samples they will complete. There are some potential difficulties with this new way of working. Wesolek and McFarlane point out that without pre-programme testing to screen out those least likely to benefit from programmes the limited resources of rehabilitation agencies may be over stretched. In addition, the relationship between the service provider and the referring agent needs to change to allow the disabled individual more involvement in the process.

### 3.3 Vocational rehabilitation in the Netherlands

In the Netherlands the concept of vocational rehabilitation and roles of professional rehabilitation practitioners are well established. Literature (Bockting and Hulsman 1990; De Jong, Herweijer and De Wildt, 1996) describes how legislation, payment of benefits

and insurance work together to support rehabilitation. National disability benefit and insurance for employees who develop a disability and become incapable of performing their current job are paid according to degree of disability. The degree of disability is determined by measuring an applicant's loss of earning capacity, that is the difference in income the person would be able to earn in a job assessed as now theoretically possible and the income from their last job. Disability assessments are carried out by staff of the independent Joint Medical Service (GMD). They assess what a person could theoretically do and match this to the requirements of jobs using a database of descriptions of occupations in the Dutch labour market. The demands of these jobs have been analysed and described using the same complex scheme as that used to measure the capacities of individuals. GMD staff are also responsible for provision of the statutory rehabilitation service to disabled people.

Originally the law recognised the potential discrepancy between theoretical and actual earning capacities. It instructed adjudicators to take into account the difficulty a disabled person might have in finding employment due to factors such as lack of job vacancies, reluctance of employers and difficulty with transport, thus introducing a 'labour market consideration'. However, in practice assessors assumed that poor employment opportunities resulted from discriminatory practise rather than degree of disability and treated partially disabled people as fully disabled for administrative purposes. Thus the number of persons in receipt of maximum disability benefits grew. Due to rising costs of these benefits the law was changed to ensure that incapacity assessment did not take into account whether an applicant would actually be able to get a job. Thus the remaining earning capacity became a legal concept rather than a description of actual circumstance, rendering labour market considerations relevant only to rehabilitation activities.

Disability assessment and rehabilitation activities are performed by GMD staff teams based at 30 regional offices. These teams are made up of a doctor, a Labour Expert and some teams also have a Labour Expert Analyst. Disability assessment begins with a medical assessment by a doctor who measures a claimant's residual physical and mental capacities and produces a capacity pattern based on consideration of twenty-eight factors, which include physical, sensory and cognitive characteristics such as sitting, walking, hearing, persuasive skills and technical ability. The individual is given a rating from 0 to 5 indicating how they perform each factor. The physician must determine the degree to which an activity is allowed and then find the tolerable frequency. For example the capacity pattern will indicate whether a person can lift a certain weight and how often they can lift it. Labour Expert Analysts use the same factors to describe jobs in their region. Consideration is given to physical demands, working conditions and psychological and social demands of the job, such as stress, teamwork or working alone and decision making. Information about required qualifications, salary and skill level of the job, details of the organisation and tasks is also collected. The Labour Expert Analyst visits work places to undertake interviews and measurements to gather the data. These data are coded and entered into a computerised database, which is linked across regions. This national database, describing occupations in terms of the 28 factors, is called the Labour Structures Documentation (LSD). At the LSD design stage GMD calculated that the optimum number of occupations to be analysed to give an accurate overview of the Dutch labour market and yet be cost effective was 550. They selected 550 job functions and each was analysed 16 times in various locations and the analysis results were entered into the database. In order to ensure that the LSD continues to reflect an adequate picture of national and regional labour markets new job analyses are

added continually; most information is updated annually and the maximum period between updates is 18 months. The LSD describes about 40% of all the occupations in the national labour market.

The Labour Expert compares an individual's capacity pattern with profiles of jobs on the LSD to obtain a print out of jobs that fit the claimant capacity pattern. The Labour Expert examines the match results and uses their expertise (personal experience and training) to decide whether the claimant does indeed meet the job requirements. The individual's preference for jobs is not relevant in this capacity matching process; the Labour Expert concentrates upon theoretical options. The salaries of the possible jobs identified are used to calculate the residual earning capacity. The Physician and Labour Expert discuss assessment results before reaching a conclusion and producing a report of the claimant's eligibility for benefit. Consideration is given to reasonable job adjustments and GMD must conduct an inquiry in advance if adaptations are judged as likely requirements. If the person could, theoretically, earn as much as their former wage in the job(s) identified there has been no impairment of earning capacity and there is no degree of disability. If the potential earnings are only half the former wage then the degree of disability is 50%. The degree of disability found determines the level of cash benefits to be paid. The Labour Expert is also concerned with the rehabilitation and placement of claimants. When the degree of disability has been established the Labour Expert will investigate possibilities of return to work, meet potential employers and advise on funding for work place adaptations.

GMD has a central administrative centre, which provides ongoing training for professional staff, edits professional journals and develops assessment instruments. The

standard qualification for labour experts is a degree in social studies but the GMD

provides training in rehabilitation and labour market assessment. All GMD assessment

staff receive training covering use of instruments, disability assessment and application

of central guidelines. New staff are formally linked with an experienced employee who

will act as their mentor during training and for several months afterwards. Professional

development courses are provided and each member of staff undertakes an average of

10 days training per year. This programme of ongoing training aims to ensure uniformity

in disability assessment amongst all staff and to maintain an adequate level of

professional knowledge.

There are also private rehabilitation service providers in the Netherlands (EEGA, 1997).

Those recognised by the Dutch Department of Social Affairs work on a consultancy

basis with GMD offering assessment, training, job search support and assistance with

job modifications.

## *3.4 A comparison between disability benefits in the UK and Netherlands*

Concern was expressed about the growing number of people claiming Invalidity Benefit

in the UK (Thompson, 1994). The Government was keen to find a more reliable way of

defining and assessing incapacity for work to check eligibility for such a benefit. A panel

of experts from various disciplines was brought together and commissioned to develop a

new medical test for incapacity for work. The resulting 'All Work Test', administered by

Benefits Agency Medical Service doctors is based upon ability to perform specified

activities such as walking, climbing stairs, sitting, standing and bending. Each activity

has a series of descriptions based on the severity scale developed by OPCS (Martin et

al., 1988) and the assessor will select the description which most closely matches the claimants level of ability. The new test of medical incapacity for work became effective in April 1995 and Incapacity Benefit for those eligible succeeded Invalidity Benefit. Some authors have commented that it was unrealistic to develop a test for incapacity without taking into account non-medical factors, such as age, skills and discrimination by employers, that affect opportunities for disabled people (Barrick, 1993; Thompson, 1994; Waterhouse, 1994).

Both the Dutch and British Government have expressed concern regarding the rise in the number of claimants and expenditure on disability benefits, calling for a better measure of incapacity for work. Both systems have taken a multidisciplinary approach to developing instruments to test eligibility and recognise the need for professional training for assessors. However the differences in the two systems are significant. The introduction of Incapacity Benefit and the All Work Test in the UK illustrate a lack of understanding of the value of occupational information in the process of assessment. The Dutch system has procedures for ensuring the occupational information is nationally relevant and up to date but the UK has no database of occupational information to link disability assessment with the labour market. The tasks forming the UK 'All Work Test' are not directly linked to the labour market but are arbitrary, work type activities. In addition the UK assessment is the responsibility of medical doctors working alone, without the wealth of occupational information enjoyed by their Dutch counterparts working in close partnership with Labour Experts. Disability assessment and rehabilitation are considered as separate services in both countries. However in the Netherlands the systems of disability assessment, benefit provision and vocational

rehabilitation operate in a complementary fashion resulting in seamless provision for disabled people.

The Dutch system recognises the need for ongoing training for practitioners in order to ensure uniformity of assessment and an adequate level of professional knowledge. In the UK the Benefit Agency does arrange training for doctors conducting disability assessments for Incapacity Benefit. The Employment Service provides some training for Disability Employment Advisers who are the often first contact for disabled job seekers. However, since rehabilitation provision lacks accepted standards the development of a systematic training programme is difficult. In addition, training provision, typically offered by voluntary and private sector rehabilitation providers, is likely to vary in quality in the absence of accreditation.

## 3.5 Conclusion

The Incapacity Benefit example suggests that the link between occupational information and assessment is weak in the UK and that the potential uses of occupational information throughout assessment and rehabilitation are not fully recognised. There is a need to investigate how occupational information is gathered, recorded and presented to disabled people throughout their assessment and rehabilitation and whether rehabilitation agencies possess and communicate reliable and current information. Further investigation is required to ascertain how the use of occupational information could be more widely integrated into the UK system of disability assessment and vocational rehabilitation. There is a need to look in more detail at specific tools and protocols used in disability assessment and vocational rehabilitation to assess their suitability for use

visually disabled people by service providers. In particular the Dutch system requires further investigation in order to consider potential application in the UK.

**Literature Review**


# Chapter 4. The role of occupational information in vocational service provision


## 4.1 Introduction


This chapter reviews a variety of ways in which occupational information is gathered and presented in the provision of a variety of services, both in the UK and other countries in the course of vocational service provision. Much of the occupational information available is gathered through job analysis so the concept of job analysis is examined and a number of general approaches reviewed. Job analysis is often used for job placement or to match job seekers with job vacancies. This process, called job matching is also examined. An overview of some job matching systems and their applications is given. Criticisms levied against job analysis and job matching systems plus suggestions for improvement are considered. Assessment of the individual is an integral part of job matching so vocational assessment systems for visually disabled people are considered. Gaps in vocational rehabilitation service provision are highlighted and the literature is summarised to offer some suggestions for the development of a vocational information system that could serve to plug the gaps.

## 4.2 Job Analysis

Job information is the basic data used by industry, government, private agencies, employee organisations, training colleges and job seekers for many human resource programmes such as selection, placement, rehabilitation, training and job evaluation (US Department of Labor, 1991). Job analysis is a systematic way of gathering and presenting job information, where a job is a group of tasks and a task is a discrete unit of work. A series of task statements can be used to describe a job and rate it according to various scales, allowing comparison of different jobs (Hesketh, Adams and Allworth, 1993). To obtain a complete analysis, the analyst should note what the worker does, how, why, where s/he does it and what skill is involved in doing it (Graves, 1986; ILO, 1984). The International Labour Organisation (ILO, 1984) recommends observation and interviews to evaluate work tasks and the resultant demands upon the worker, giving due consideration to equipment used, material handled, work environment, organisational and social aspects of the job, perception of information, responsibilities and working hours. Job analysis data can be used for classifying jobs, lobbying purposes, research and policy development, vocational guidance, work sample development, assessing worker performance, redesigning jobs, placement of new or existing staff, development of employment policy and job creation schemes (Thomas, Bowers, Batten and Reed, 1993). Job analysis data can also be used in conjunction with computers to create and update job banks and to match qualified individuals to appropriate jobs (Hesketh et al., 1993). However, some argue that job analysis alone will not yield sufficient information for a successful outcome in any of these areas because an individual's abilities must also be considered (Bradfield and Tucker, 1988). The ILO envisaged a single widely used job analysis system incorporating assessment of jobs and individuals, able to match the two

but this has not materialised. Systems for assessment of jobs and of individuals have developed separately and practitioners from different disciplines emphasise different aspects of the process resulting in a failure to use the same assessment criteria at each stage (Hesketh et al., 1993).

In recent years the concept of job analysis has been applied to rehabilitation and employment of people with disabilities to assist with work design, consideration of job requirements and working capacities, selection and training of disabled people (ILO, 1984). Practitioners such as occupational physicians and officers in voluntary and statutory organisations find the process and decision regarding assessment of a disabled person's ability to carry out certain jobs difficult due to lack of detailed information about job requirements, the individuals' condition and lack of training (Floyd, Chaplin, Espir and Kurtz, 1988; Thomas and Kyle, 1990; Chaplin, Edwards and Floyd, 1992). However voluntary organisations do have considerable information about the types of work opportunities open to their user groups (Hesketh et al., 1993).

Job analysis literature recommends a combination of observation and structured or informal interview with a range of staff to gather data about a job and notes the use of background research, existing documentation (though job descriptions may be out of date and workers may have difficulty identifying required skills) (Botterbusch, 1978; Westgate, 1986; US Department of Labor, 1991; Hesketh et al., 1993; Chaplin et al., 1992). Presentation of data in a standard format can be used to compare different jobs and work places and will aid ease of input if data is to be computerised so the use of checklists during interviews and observation is recommended (Chaplin et al., 1992). Some alternative suggestions for collection of occupational information include use of

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office-based analysts or panels of experts assisted by industrial advisers to analyse written job descriptions, job incumbents completing self- assessment questionnaires, direct mailing surveys, graduate students and government workers (Geyer and Hunter, 1992; Botterbusch, 1992; APDOT, 1992). The reliability and validity of these methods would need to be investigated before implementation.

### 4.2.1 General Approaches to Job Analysis

General approaches to job analysis tend to emphasise either the job or the individual and the focus is often dependent upon the expertise of the evaluator, for an example an ergonomist may concentrate on the environment while a psychologist may focus upon an individual's behaviour (Hesketh et al., 1993). A medical approach based upon health screening to identify disqualifying conditions is criticised for failing to recognise potential use of job adjustment and that individuals with the same condition are different (Watson and Cornes, 1985; Chaplin et al., 1992; Hesketh et al., 1993). The measurement of performance on a job to arrive at a recognised standard has also been linked with job analysis. Groups of workers may discuss certain events termed 'critical incidents' to define examples of good performance to provide a rating scale for future performance. However such incidents may be infrequent and difficult to observe. Measurement of mental and physical workloads can give an indication of the likely stress upon a worker thus allowing prediction of whether an individual will be able to manage a job but Chaplin et al. (1992) point out that little attention is given to the assessment of cognitive skills. Many practitioners in the UK favour a narrative approach to job analysis (Floyd et al., 1988) but there is no coherent, national approach to data collation so many organisations have their own limited libraries of narratives used by those who know they

are there. Although occupational physicians acknowledged their need for training in assessment of disabled people, most prefer to use unstructured interviews rather than any standardised system. They have expressed concern that factors particularly relevant for people with disabilities such as the existence of support in the work place, are not generally covered in job analysis systems (Chaplin et al., 1992; Sabousky, Flexer and Shell, 1993).

**4.2.2 Functional job analysis**

Some systems simply seek to classify jobs according to standard definitions and do not necessarily offer the opportunity for individual interaction. Such systems are termed functional job analysis systems and often make use of databases to store information.

**4.2.2.1 Dictionary of Occupational Titles (DOT)**

Probably the most widely implemented functional job analysis system is the American Dictionary of Occupational Titles (DOT) (US Department of Labor, 1991) which gives a unique code to each occupation. It was developed in 1940s by the US Department of Labor, has been revised several times since then and is now computerised. The DOT has many uses including planning and evaluating training programmes, vocational counselling, developing labour market information, and employment placement. Other systems like the Occupational Analysis System (OASYS) use the DOT in conjunction with individual profiling systems to offer computerised job matching facilities.

The DOT describes approximately 18,000 jobs from the US labour market using a series of factors. These include the worker's relationship to data, people and things; methods and techniques employed; machines, tools, equipment and work aids used; products and services; worker characteristics; qualifications and experience required; aptitudes; temperaments; physical demands; working environment. A narrative description of tasks is also given. Botterbusch (1992) describes use of the DOT to identify an appropriate job for an individual based on their interests, aptitudes and transferable skills. An adviser can than consider the physical demands associated with the occupation. If it appears that the individual can perform the demands of that job the adviser investigates relevant, specific positions in the local economy and if any vacancies are found the individual can make a job application.

Although the DOT forms the basis of many commercially available vocational evaluation tools it was not designed for use with disabled people. Criticisms of the DOT include poor quality job analysis, the inclusion of out of date occupational information, errors in data entry, the use of unusual sampling procedures to select occupations, lack of relevant details in the worker profile, such as transferable skills, and complex coding in data presentation (Botterbusch, 1982, 1986, 1986a, 1990,1992; Watters, 1985; APDOT, 1992; Geyer and Hunter, 1992). Some of these criticisms can be minimised by developing and implementing procedures to ensure consistency. Others require changes in the design of the system and a DOT advisory panel (APDOT, 1992) suggests principals for DOT design to ensure reliability, validity, accessibility and relevance. Not all reports about the DOT are so critical. Truthan (1993) concludes that definitions of worker characteristics in the latest, 1991, edition are much more useful to the rehabilitation industry.

### 4.2.2.2 The Australian Occupational Information System

Earl and Gormly (1990) describe a draft version of the Australian Standard Classification of Occupations (ASCO) which suggests that jobs can be described with narrative text, an occupational code and Job Content Factors (JCFs). These JCFs cover worker components measured according to the 38 factors used in the original Dutch disability assessment system; materials and equipment used; mental, physical and social activities; and work context which considers terms and conditions, environment and labour market size. The ASCO was never fully implemented due to reservations about cost and the validity of the JCF's. Reviews criticised the ASCO Dictionary and its computer based directory (Australian Occupational Matching Program or AOMP) for poor software design, lack of on-screen information, errors in job descriptions, lack of up to date labour market information and not enough information relevant for use with and by people with a disability (Earl and Gormly, 1990; Klugman, Grant, McGuigan and Lamberton, 1991).

The Australian Government was concerned about the number of people in receipt of long term disability benefits and commissioned research to develop guidelines and procedures for the placement of people with disabilities in employment and a check list for those assessing appropriate wage levels for disabled people. Klugman et al. (1991) recommend use of a new occupational directory, based on the ASCO framework, within a counselling context to relate occupation requirements to the degree of limitation experienced by a person with disabilities, taking into consideration aids and support services available. They proposed a model, beginning with assessment of the disabled person's social circumstances, functional limitations and consideration of ways in which occupational handicap might be managed, to derive a profile. This is used in a search of the computerised occupational directory to identify potential matching occupations then

the individual's employment opportunities are considered and an action plan produced. Funding for these developments was not forthcoming.

### 4.2.3 A Review of some Job Analysis Systems

The literature gives an overview of job analysis systems available (Chaplin et al., 1992; Hesketh et al., 1993) but most of these approaches were not designed with disability in mind and do not generally consider related issues. For example the Position Analysis Questionnaire (PAQ) is the most widely used statistical method for producing profiles of jobs, based upon completion of a questionnaire by someone familiar with the job assisted by a trained analyst. The questionnaire results are sent to PAQ Services in the US, which carries out the data analysis. PAQ is of limited use when considering manual jobs because task statements in the questionnaire were designed for analysis of clerical activities (Chaplin et al., 1992).

Chaplin et al. (1992) describe three systems aimed specifically at people with disabilities. The Worker Rehabilitation Questionnaire (WRQ) is a version of the PAQ adapted for use with disabled people. It works in a similar fashion to the PAQ in that the results of a self-assessment questionnaire can be directly compared with a database of job profiles to provide suggestions for employment, though job seekers can indicate areas they wish to exclude from their job. It has the same limitations as the PAQ of being applicable only to the non-managerial jobs considered in the original questionnaire design , and completed questionnaires have to be sent to PAQ Services for analysis. The ERTOMIS Assessment Method (EAM) considers the effects of different disabilities upon jobs. The results were catalogued, but not computerised. Job analysis is carried out by an ergonomist,

assessment of the individual is carried out by a physician. Both use a similar scale in their assessment so that individuals' abilities can be matched with the requirements of a job by comparing the resulting profiles. The Activity Matching System (AMAS) is mainly used in light industrial work situations. An ergonomic assessment of the job and a functional assessment of a person's abilities are carried out using the same measures so that accurate matching of person to job is possible. With consideration of training or job modification an individual can choose a job in which they can do all or most of the tasks.

Although there are no job analysis systems specifically designed for use with visually disabled people the literature recommends that such systems should determine the demands made upon vision by job components (ILO, 1984; Hesketh et al., 1993). Evaluation of the visual requirements of tasks such as near, mid range and far acuity, depth perception, colour vision and field of vision is recommended along with consideration of potential job and workplace modifications such as lighting, contrast, colour, size and distance (Bradfield and Tucker, 1988; Graves, 1986; McCormick and Sanders, 1987; Grandjean,1988; US Department of Labor, 1991).

## 4.3 Job Matching

Ultimately successful job placement is concerned with how a particular individual functions in a specific job and on-site assessment provides the best opportunity for evaluation (Wesolek and McFarlane, 1992). The availability of accurate information about an individual's abilities, up to date vacancy information and a system to match the two can assist in the job matching process and can offer an objective contribution in resource management where traditionally subjective judgement has been a major factor

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in decision making. Job matching activity requires an understanding on the part of the practitioner of the vocational implications of the disability, local employment and training opportunities, work demands of various occupations, possible use of support services and appropriate aids and job accommodation methods (Gaugler and Thornton. 1990; Klugman et al., 1991). Many organisations have expertise in some of these areas but few can claim competence in all of them so, not surprisingly, one of the primary applications of computer technology in the field of rehabilitation has been in job matching. Wong, Chan. Gay, Chalong and Hattori (1992) describe a computerised job matching system as a software programme that is capable of systematically comparing a profile of an individual's vocational strengths and weaknesses against the requirements of a job or training programme. Such systems are widely used in the US and the Dutch have developed their own job matching system. described in Chapter 3. There is general support for the use of technology in job matching provided the process is supported by rehabilitation professionals to assist in making placement decisions (Klugman et al.. 1991) and that the needs of job seekers and vocational advisers who require local data are considered (Botterbusch, 1986).

Job matching can also be used to aid consideration of possible job modifications. Graves (1986) suggests some general modifications for consideration in job matching such as moving the work site or re-organising some tasks. The Work Experience System (WES) is based on a questionnaire to identify barriers at work and the identification of accommodations and strategies to overcome them (Rumrill, Schuyler and Longden, 1997). Respondents are asked to describe reasonable accommodations and identify appropriate resources for these solutions. Bradfield and Tucker (1988) warn that modifications need to be evaluated for cost, simplicity, impact on the work site and

other employees as well as the effect that they have on the disabled individual. The Job

Accommodation Network (JAN), established by the US Presidents Committee on

Employment of people with Disabilities provides information to employers, government

agencies, rehabilitation professionals and people with disabilities about job

accommodations and employability of people with functional limitations (JAN Web site,

1999). Enquirers discuss their query with a JAN consultant via a free-phone telephone

line or the Internet. After eliciting relevant details the consultant searches the JAN

database for applicable solutions and may engage other experts to determine appropriate

accommodations. Information is sent to the inquirer about possible solutions for the

particular situation along with funding resources and employer or worker contacts who

have made similar accommodations. In the first nine years of operation JAN consultants

handled over 93,000 cases (JVIB News Service, 1995).

Job matching is used in careers education and guidance (CEG). About half of the

software systems used in careers education are occupational information systems with

built in databases and most generate job ideas to match user interests based on self-

assessment (Offer, 1992). Popular packages used in schools are Microdoors, Career

Builder and Keyclips. Adult Directions is widely used with adults and CID has been

designed for use by people with learning disabilities. Jobmatters is a CD ROM designed

for visually disabled users which aims to develop self assessment and decision making

skills. However studies to evaluate their use are limited. There are also a number of Web

sites offering occupational information and some are specifically designed for disabled

users (e.g. CanDo, a site offering specialised careers information for disabled students at

http://cando.lancs.ac.uk).

Private recruitment agencies use job matching packages; however they are not well suited for use with disabled people because they pay little attention to factors such as physical demands of a job or access to the work place. Most private agencies are not equipped to offer advice to enable an individual with a disability to broaden their opportunities (Manager, Brook Street Bureau, 1995).

### 4.3.1 An overview of some job matching systems used with disabled people

The statutory employment service conducted a pilot scheme called CAPITOL (Computer Assisted Placing in the areas of London) in London in the late 1970's (Employment Department, 1978). Through the scheme many aspects of the Employment Service work were computerised including registration of job seekers, vacancies and matching of job seekers and vacancies. Receptionists in vacancy display areas were given access to the CAPITOL system allowing them instant access to significantly more vacancy information than could be displayed on Jobcentre notice boards. Job matching through CAPITOL was possible on both job seeker and vacancy basis using the Classification of Occupations and Directory of Occupational Titles (CODOT), (1972) as the main matching factor. Indeed each time a new vacancy was received it was possible with CAPITOL to scan the entire register of job seekers to highlight potential matches. The evaluation concluded that CAPITOL increased job placements by about 10% but this was not as much as had been hoped. The report cited dependence upon CODOT as a limitation of CAPITOL since job seekers were restricted to certain occupation types in their search. The project was not extended beyond the pilot.

In the London borough of Hackney the authority's Disability Unit offers a service called Jobmatch to anyone who considers themselves to have a disability and wishes to work in Hackney (Perrot, 1992). Job seekers who wish to be entered onto a computerised database complete a membership form giving details of preferred type of work and indicate their skills by ticking those relevant in a list. This list was designed by scrutinising vacancies and listing the skills required. It is frequently amended as job skill requirements change. The Unit receives vacancies and staff consider the skills required by the job and classify them as mandatory or optional for entry into the database  The matching programme is run and vacancy details are sent to members as appropriate. Through the use of monitoring statistics it is possible to develop skills maps to indicate skills in high demand by employers and any areas of skill shortage amongst members.

Remploy, the Government supported company which offers sheltered employment for disabled people has an average of 910 new employees each year. An individual's medical profile is given prime consideration when appraising their suitability for the working environment, though their social behaviour, endurance, motivation and ability are also considered (Railland, 1994). A range of assessment techniques are used and Remploy adapted AMAS for their use by identifying groups of transferable skills and core activities of Remploy factory jobs (Income Data Services, 1992). Each person and job was assessed according to their level of competence in or the requirement for these skills and activities. All of the data was held on computer and the comparison of job activities and peoples' skills becomes a matching process for use in recruitment, placement and identification of training needs. Evaluation of the use of AMAS at Remploy indicated that a wider range of job activities were made available to individuals and supervisors had increased confidence in placing people in jobs (Railland, 1994). Although use of

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AMAS indicated that the previous assessment procedures, based upon observation, undervalued individuals' potential in 60% of cases Remploy has not fully adopted AMAS due to the cost of evaluating every job and person on site (Income Data Services, 1992).

## 4.4 A summary of occupational information, job analysis and job matching systems

Table 5 compares different systems used for job matching, disability assessment and occupational information provision. The factors assessed by these systems range from qualifications and work experience, as used by mainstream recruitment agencies, to the complex combinations of worker characteristics and functional demands included in the LSD database. Practitioner involvement in the assessment or advice process for disabled people varies and may include occupational health physicians, labour market specialists, rehabilitation professionals and ergonomists. The systems marked with an asterisk in the table were designed specifically for disabled people but only the Dutch system is currently widely used. Shortage of funding is one reason for this but perhaps the lack of published evaluation material could also discourage further implementation.

The literature endorses the use of job analysis in tandem with analysis of an individual's abilities, ideally using the same assessment criteria but Chaplin et al. (1992) contend that none of the systems examined can be recommended as suitable for a standardised framework for use with disabled people because none cover all of the relevant factors. Bradfield and Tucker (1988) stated the need to develop procedures and methods specifically designed to assess the functional vision of those with low vision and the visual demands of a job. Little progress has been made and in the UK there has been

little evaluative research of the use of job analysis with disabled people or the application of job accommodations. After some years of searching for an established system of vocational assessment that could encourage a range of professionals to work together some practitioners in the UK adopted the US DOT (Chaplin et al., 1993). They hoped that US techniques could have an impact on the provision of vocational rehabilitation in the UK but found a lack of support for standard assessment techniques. They concluded that a common language to talk about assessment is lacking and this serves as a barrier to the development of a body of knowledge that could draw the range of professionals together to verify techniques and approaches.

Some criticise traditional vocational evaluation for its lack of consideration of supported employment opportunities resulting in the exclusion of severely disabled people (Botterbusch, 1986; Rogan and Hagner, 1990; Sabousky et al., 1993). Many systems are technical, require training, experience of psychological assessment and ergonomics, and are costly to administer. Much of the job analysis undertaken in the UK is carried out by the Employment Service staff and officers in voluntary organisations such as Mencap and RNIB. It is unlikely that these groups will have experience of administering any standard system of job analysis or that finance for training would be available. However officers in the voluntary sector do have an intimate understanding of particular occupational handicaps which could be used in job analysis.

Table 5. Comparison of systems used for job analysis and job matching

* indicates system designed specifically for disabled people

| Title (country of origin) | Factors assessed | Professionals involved | Main use |
|---|---|---|---|
| *Labour Structures Database (Netherlands) | Job tasks, physical demands, work environment, qualifications, social factors, psychological factors | Doctor, Labour Expert | Disability assessment |
| * Hackney Jobmatch (UK) | Mandatory and non-mandatory skills, qualifications, some social factors e.g. hours and salary | Employment specialist and admin. Staff | Job matching |
| *Activity Matching Ability System (UK) | Work environment, physical demands, work equipment, other work demands (103 activity/skill groups in all) | Doctor, ergonomist | Job matching |
| OASYS (based on DOT) (USA) | Worker functions, methods used, physical demands, equipment used, products, job tasks, work environment, worker characteristics (aptitudes, interests, temperaments, qualifications) | Labour expert, rehabilitation professional | Various including job matching and vocational guidance |
| *Job Accommodation Network (JAN) (USA) | Functional limitations of individual, job description, details of job accommodations, profiles of employers | Disability experts | Information service to promote successful job accommodations |
| *ERTOMIS Assessment System (Germany) | Communication (verbal, oral) work environment, physical and sensory demands | Ergonomist, doctor | To promote progression of disabled people from rehabilitation into employment |

**Table 5 cont.**

| Title (country of origin) | Factors assessed | Professionals involved | Main use |
|---|---|---|---|
| Position Analysis Questionnaire (PAQ) and Worker Rehabilitation Questionnaire (WRQ) (both USA). | Job tasks, information input, mental processes, work output, relationships with other persons, job context, satisfaction | Job analyst, PAQ Services (USA) | Originally for salary settlement, now WRQ used for job matching |
| Australian Occupational Matching programme (AOMP) (Australia) | Job Content Factors (worker components; qualifications; Dutch Labour Structures Documentation factors; special requirements); materials used; mental, physical and social activities; work environment, terms and conditions | Rehabilitation professionals | Rehabilitation and job matching |
| CAPITOL (Pilot scheme only) (UK) | Job information based on Standard Occupational Classification, qualifications and work experience | Employment Service staff in Jobcentres | Vacancy filling |
| Mainstream recruitment agencies (UK) | Qualifications, work experience | Recruitment Consultants | Vacancy filling |

## 4.5 Vocational assessment of individuals

The prime concern of this research is the role and use of occupational information to improve vocational opportunities for visually disabled people, which has led to a review of job analysis. However, in view of the need to use job analysis in tandem with analysis of an individual's abilities in job matching some consideration of assessment of individuals is necessary. A number of factors have special significance when evaluating those with a visual disability, such as assessment of visual functioning (May, 1993). The literature draws attention to some tests available in the UK for vocational evaluation and suggests how they may be used with visually disabled people. However caution is urged, both in administering tests and in interpreting results of tests that have not been standardised for the visually disabled population who may have difficulty completing the tests that rely on hand to eye co-ordination (Reid, 1994; Tobin, 1994). Some work has been conducted to adapt assessment instruments for visually disabled people (Tobin and Greenhalgh, 1987; Reid; 1994). Reid (1994) suggests that it may possible to modify the test taking procedure by using low vision aids or pen and paper alternatives for visually disabled individuals. May (1993) recommends that a practitioner should be prepared to deviate from the prescribed test procedures, even if the norm is invalidated since it is better to get some useful information than to administer the standard test procedure to get unbiased, but useless information.

Although some tests, such as interest inventories, suggest 'suitable' occupations for individuals Tobin (1994) notes inherent assumptions that all jobs are available to or possible for visually disabled people. Such tests fail to take account of other factors affecting employment potential such as the attitude of employers or geographical

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location of jobs. Some authors are concerned that vocational assessment of visually disabled people tends to be geared towards low skill occupations, which can result in them being placed in positions below their capabilities. They suggest the use of task orientated assessment techniques such as work samples, that is a collection of job related skills tests which can be administered away from the workplace, and on-the-job evaluation (May, 1993; Peterson, 1995). However, practitioners should ensure that an individual is familiar with a work sample before testing so that test results reflect the individual's abilities, interests and aptitudes and not their visual disability (Botterbusch and Michael, 1985; May, 1993). Other instruments used in vocational assessment for rehabilitation purposes consider factors such as the need for vocational training, the individual's employment potential, deficits in work behaviour, or employer assessment of the individual's behaviour (Wesolek and McFarlane, 1992; Biefang and Potthoff, 1995). The Nottingham Adjustment Scale (Dodds, Flannigan and Ng, 1993), for example, includes measures of feelings of control and effectiveness that are deemed essential for effective rehabilitation to take place (Tobin, 1994).

### 4.6 Recommendations from the literature for factors to include in a job analysis and job matching system for visually disabled people

General requirements are for a clear presentation of information both onscreen and in print format with a minimum of acronyms and for a complete description of the entered profile and other variables used in the job matches. If the system includes data related to particular vacancies it should include details of support available at the work place. Job seeker interests should figure prominently since they a critical factor in vocational decision making for disabled persons of all ages entering the workforce (Harrington and

O'Shea 1984; Botterbusch, 1990; McDaniel and McClanahan, 1993). Occupational

information included should reflect actual jobs and encourage the development of

workers by ensuring that data reflects the current labour market, both national and local.

Occupations could be classified by skills for inclusion in an occupational database

(Klugman et al., 1991). Concentrating on generalised work behaviours could reduce the

number of occupational definitions required but the basis for selection of occupations

needs some consideration (Botterbusch, 1992). Supported employment opportunities

should be included and the job analysis methodology adopted for gathering occupational

data must be applicable to this sector of work. Occupations could be described in terms

of tasks, duties and performance standards; detailed physical demands and

environmental conditions; common methods of job entry; on the job training; person-

machine interaction and transferable skills such as the use of equipment and materials

and job related knowledge; products and services produced. Details of the social aspects

of the job such as working hours, amount and type of supervision, interaction with

customers and colleagues should be recorded along with information about any support

available in the work place. Some measure of job satisfaction and a subjective perception

of the job and its difficulties would also be useful (APDOT, 1992). Organisational

details should be included with typical job mobility path and patterns. Labour market

factors such as turnover, outlook, geographic and industrial location for travel to work

could be noted. Details of the characteristics required of the worker could include

aptitudes and abilities, educational and vocational qualifications and work experience.

Personal qualities such as interpersonal skills and personal motivation could be included

but temperaments, which are difficult to measure, should be excluded (Botterbusch,

1990).

Reliability and validity can be maintained by ongoing job analysis to ensure that information is current and quality control must be implemented. Errors can be minimised by implementing data coding procedures and data collection must be based on systematic sampling techniques though a variety of collection methods could be investigated. Procedures for all aspects of maintaining the system including data collection, coding and entry and carrying out matches need to be defined (Botterbusch, 1986; Earl and Gormly, 1990).

A job analysis and job matching system will not operate in isolation but within the broader context of rehabilitation service provision. Boreham and Arthur (1993) argue that it is not sufficient to offer career decision makers the information which, from an external point of view, they need in order to make a decision. They claim that people need assistance to understand occupational information and how to use it in their own decision making. Klugman et al. (1991) suggest that occupational information is more likely to be applied if it is provided in a context which offers counselling and the prospect of employment. They put forward a development programme for the design and implementation of an occupational database within a counselling model. They advise adopting a sequential approach that allows each step to be evaluated before proceeding. The programme begins with development of a job analysis methodology followed by design of a system structure and a methodology for relating functional vision to job demand factors and concluding with progressive implementation and development of administration procedures.

A vocational information system provided as part of a rehabilitation service, with elements of job analysis, job matching and information provision, fulfils these

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requirements. An organisation using such a system for placement must be prepared to collect, edit and enter job vacancy details as they become known. This implies the ability to carry out at least a minimal job analysis of job vacancy data and has implications for the training of personnel. Interpretation of results to suit the local labour market and transfer of information between different professionals are also matters for consideration (Botterbusch, 1982; Miller and Rossi, 1988).

### 4.7 Conclusion

It appears that in the UK the link between occupational information and assessment is weak and that the potential uses of occupational information throughout assessment and rehabilitation are not fully recognised. Literature describes how occupational information can be gathered and organised but further research is required to determine how it is used by service providers and made accessible to disabled people and to visually disabled people in particular. The literature points out the lack of attention given to the views of disabled people in the development of services. It is necessary to ascertain their perceived occupational information and vocational support needs. Some critical reports of organisations, both statutory and non-statutory, working to assist disabled people to find employment have been noted but the literature offers very little evaluation of rehabilitation agencies. The occupational information and vocational support needs of vocational rehabilitation workers could be examined since it seems unlikely that these groups will have experience of administering any standard system of job analysis or have funding available for training.

In view of the lack of existing assessment and job analysis provision for visually disabled people it is proposed to develop a model, based on a critique of job analysis theory and recommendations from the literature, for the use of occupational information to improve job opportunities for disabled people. The initial result will be a job analysis instrument for gathering occupational information that is relevant to disabled people and visual disabled people in particular. An investigation of the views and experiences of those involved in the vocational development of disabled people, namely employers, service providers and disabled people themselves will be undertaken to ensure that this job analysis tool and proposed vocational information system meets their needs and to determine how the vocational information system model could be incorporated into rehabilitation provision. If the system is to be used for job matching similar factors should be used to assess both the individual and the job and the matching process should indicate the level of concordance of these factors. It should be recognised that simply determining through assessment what a person can do is not sufficient. The list of potential occupations highlighted through job matching may be restricted by what the person wants to do and the local labour market. Other elements of system could include a computerised directory of occupational information, services and aids. New elements can be added to the model to meet the needs of employers, disabled people and service providers. Relevant elements from the Dutch model can also be incorporated. Data collection, storage, presentation and the procedures for use of the model should be considered as the model is tested and refined.

The literature can be used to inform the design of a job analysis instrument that covers every eventuality and offers very detailed occupational information. However, this approach may have practical difficulties with how these data are collected, stored and

summarised in a way that can be usefully shared with a range of users. In addition, occupational information must be presented in the context of other factors that could influence job opportunities for disabled people such as availability of actual vacancies and how to deal with discrimination in the work place. A broader vocational information system is required and again the literature gives suggestions regarding the information to include, operating procedures, reliability and validity, quality standards and data collection techniques. Every effort must be made to avoid the criticisms levied at the DOT in the event of design and implementation of a new system. Procedures to ensure consistency will help in this and accuracy of original data entered into a matching system is crucial. Benefits in using a vocational information system could include less professional staff time performing clerical level work in searching for vacancies, more precise judgement of disability for legal proceedings and the capability of relating placement activities directly to occupations and job vacancies (Botterbusch, 1986).

This literature review also indicates the need to take a realistic view of what can be achieved during the course of this research with the resources available. A good deal of research into job analysis systems has already been undertaken but a single occupational information system based on a widely used job analysis methodology has not materialised. Even in the US where the theory and practice of job analysis is well established and provision of occupational information centres upon a nationally recognised database there is a lack of uniformity in provision. Therefore, the development programme for the design and implementation of the system will be focused upon a small sector of the disabled population, namely visually disabled people. Vocational rehabilitation service providers from RNIB will be involved in testing the system so an examination of current level of knowledge and skill may be necessary to

assess their training requirements. In addition, the culture of professionals in the vocational rehabilitation field was identified as a barrier to adopting new methods of job analysis in the UK (see Chapter 3). An understanding of organisational culture and management of change will help to achieve the implementation of a new system. Thus it is necessary to review the literature of organisational theory.

# Literature Review


# Chapter 5. Organisations and organisational change


## 5.1 Introduction

Through the investigation of the role of occupational information in vocational service provision it has become clear that an understanding of the culture of an organisation and organisational change theory may be useful when seeking to implement a new occupational information and job matching system. Aspects of organisational theory are reviewed and then applied to voluntary organisations to investigate the organisational context for service provision. The response of the voluntary sector to economic, political and social change is discussed. This has an impact upon service provision and the inherent opportunities and barriers to improving the employment of disabled people are highlighted.


## 5.2 Understanding reactions to change

An organisation's culture encompasses traditions, habits, values and character and all these factors influence the basis for daily operations (Albin, 1992). Albin believes that cultural change is usually triggered by a development such as an advance in technology leading to change in the organisation's product range, a change in senior management staff or a reduction in financial resources. However it can take years to transform the

culture of an organisation because organisations are stuck with their past, their reputation, and staff who continue working in ways that were previously appropriate but are now counterproductive (Handy, 1988). In a situation of change Handy (1988) advises managers to pay heed to the advice and preferences of staff through consultation before deciding the course of action. He also recommends encouraging people to alter their working methods through a modification of tasks, staff training and adaptation of systems to suit the new environment. Schon (1971) suggests that organisational change threatens to disrupt the familiar systems that help to define the personal identity of staff. Thus organisations may seek to minimise change as far as possible, perhaps by applying a structural solution such as assigning a new role to a task, thus protecting the status quo but transferring the problem through the system (Handy, 1988). Strategies recommended for managing change include developing an emphasis on learning (Schon, 1971) and focusing upon the organisation's mission to create unity of purpose (Albin, 1992). Managers are advised that some staff may feel threatened by change so they are urged to communicate change to their staff in order to harness their commitment (Albin, 1992; Bruce and Leat, 1993).

### 5.3 Impact of organisational change on the employment of people with disabilities

The literature indicates that continuous learning in the work place will be the norm (Schon, 1971; Deming, 1986; Albin, 1992) as workers are subject to constant change in systems and technology. Employers will value workers who are flexible and computer literate. The Disability Discrimination Act (1995) can protect disabled people against discrimination at work but assumes that they will be qualified for jobs, with appropriate

literacy and educational attainment (Perry, 1995). Employers will also require good interpersonal skills and the flexibility to deal with ever changing new technology but flexibility may be difficult for disabled people if they depend upon special equipment in the workplace.

Unlike in the US, where businesses are keen to reflect their customer base in their staffing patterns (Perry, 1995), UK companies fear negative customer reactions to employees with various disabilities. Research has shown that this fear is unfounded (Smith et al., 1991). Disability is regarded primarily as an equal opportunity issue resulting in the tendency to treat people with disabilities at work as a group but distinct from the rest of the working population (Smith et al., 1991). One useful structural response is to appoint Equal Opportunities Officers with responsibility for improving employment opportunities for disabled people within their organisation (Floyd, Gregory, Murray and Welchman, 1983; Smith et al., 1991). Some organisations have improved their personnel systems to accommodate disability issues within induction programmes and recruitment practice. These changes can encourage people with disabilities to feel comfortable about discussing their particular situation but Smith et al. (1991) highlight the lack of disability related information available to managers. General occupational information is not sufficient; they require assistance to relate this occupational information to disability in general and to their disabled staff in particular. Voluntary agencies providing vocational services to disabled people should be preparing individuals to fulfil job requirements and need to have staff equipped to support employers with specific queries. They must be ready to assist employing organisations to change in terms of culture and management and must therefore be pursuing change themselves (Perry, 1995; Albin, 1992).

## 5.4 Understanding voluntary organisations

Voluntary organisations are affected by change in political, economic, cultural and social arenas. The political relationship between the voluntary and statutory sectors began to change as the Thatcher government of the 1980s took measures to halt the growth of the welfare state and began to emphasise a new role for charities. Responsibility for service provision passed from the statutory to the voluntary and commercial sectors (Butler and Wilson, 1990; Bruce and Leat,1993). In recent years voluntary organisations have developed a competitive way of working to secure contracts with statutory sector partners (Hall, 1989; Handy, 1988; Bruce and Leat, 1993). As the emphasis has shifted from fundraising to income generation voluntary organisations have experienced a fall in charitable income due to reduced public expenditure and the decline in the central government grants (Hall, 1989; Bruce and Leat, 1993). There is concern that voluntary organisations could become more like not-for-profit businesses, acting as representatives of their funding bodies, which exert considerable influence over strategic behaviour and decision making (Butler and Wilson, 1990; NCVO, 1992). It is no longer considered enough to be doing good, organisations must demonstrate efficiency through application of sophisitcated management techniques (Bruce and Leat, 1993). However the introduction of standards may be hindered by staff who seek actively not to be constrained by formal job descriptions (Butler and Wilson, 1990), prefering to work for a cause rather than a strategic objective (Handy, 1988). These staff may feel a constant need to respond to the needs of individual clients but managers must set boundaries because a never ending task causes low moral (Handy, 1988). Social change can affect the way voluntary organisations approach and interact with business and other community members. Voluntary organisations are similar to commercial businesses in

that they provide services to clients, however voluntary organisations are run by committees made of members and tradition is more significant in defining their culture, structures and systems (Handy, 1988). The literature recommends a much closer relationship between voluntary sector rehabilitation organisations and business than exists at present (Butler and Wilson, 1990; Perry, 1995) but caution is urged lest the business world seeks to use the voluntary sector merely as a cause for staff to rally round in team building events (Hall, 1989).

Voluntary organisations have responded differently to these changes. Some have implemented new financial arrangements to cope with large budgets, others have a greater emphasis on accountability amongst staff or increased involvement with customers and supporters (Butler and Wilson, 1990). Some authors question the justification for the existence of traditional voluntary organisations in the field of disability, claiming that the persistence of a philanthropic culture limits their ability to adapt to change (NCVO, 1997). Albin believes that barriers to improving employment opportunities for disabled people are equivalent to the barriers to pursuing change and argues that voluntary organisations should be continually striving for improvement in quality of service.

## 5.5 Models for change and quality improvement

A review of the literature on organisational culture, structure and management of organisational change indicates that an important aspect is the development of a Total Quality Management (TQM) approach. Lawrie (1996) describes TQM as a management tool that focuses on identifying how all aspects of a process directly contribute to the

quality of a product or service. As a result of studying a rehabilitation service as it changed from a centre-based to a community-based service Albin has proposed a model for change implementation based upon the Deming Cycle of quality improvement (Deming, 1986). In this model Albin equates change with an opportunity to develop a TQM approach and advocates a systematic approach to performance monitoring and improvement based on the organisation's mission. She believes that through flexible communication and structures that promote teamwork and reduce bureaucracy, first job satisfaction, and culture, and then staff commitment and performance will improve. Albin asserts that most rehabilitation organisations do not promote performance improvement because organisational management tends to rely on personnel systems that support individual experts rather than encourage dispersion of knowledge. Focus tends to be upon individual rather than team performance. Improvements in personnel systems can be made by allowing all team members to contribute to recruitment of new members and by recognising that annual appraisals are a poor alternative to feedback at the time of performance because they disregard the systems in which work is done and encourage staff to hide problems (Deming, 1986; Albin, 1992).

Albin suggests that a quality improvement begins with a thorough examination of the organisations customers. Defining the customer in voluntary organisations can be difficult due to the complex relationships between disabled individuals, voluntary organisations and funding bodies (Albin, 1982) and the ambiguous demographic data on client groups (Schon, 1971). Albin's answer to this confusion is simple; the theory of continuous quality improvement defines the customer as whoever is next in line in a process to receive a product or service. Thus employees of the same organisation are customers of each other and all employees are customers of the organisation, on the

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receiving end of an organisation's policies, resources and systems. Voluntary organisations may also have difficulty in defining the processes they use to provide products and services due to crisis management and a lack of data based planning and evaluation (Albin, 1992; Schon, 1971). However once the processes required to produce the desired outcomes have been identified it is possible to reduce unnecessary steps which waste time, such as superfluous bureaucracy.

Albin cites other barriers to quality transformation and to becoming customer driven. These include a lack of competition experienced by many voluntary organisations, insufficient staff training at all levels, managers continuing to blame people for problems rather than searching for issues in processes and systems and poor recruitment practices. Others add membership of management committees that fail to promote accountability (Handy, 1988), senior managers compromising boards of trustees and professionals claiming autonomy (Dimaggio, 1988; Bruce and Leat, 1993), tension between operational teams and central headquarters (Schon, 1971) and ambiguous matrix management structures (Butler and Wilson, 1990).

Suggestions given to encourage quality improvement are to develop a focus on customers, a belief in team work and problem solving, a recognition of the importance of data and systematic methods and pride in individual and organisational accomplishment (Albin, 1992). Flexible staff roles to promote sharing of knowledge and skills and encourage devolved responsibility are seen as positive staffing strategies. Albin also suggests that staff development programmes should recognise the need for field staff in vocational rehabilitaiton to possess both technical and business skills. Voluntary organisations are advised to consider how to equip and promote existing staff for

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improved performance rather than continually seek new staff (Handy, 1988; Patton and Hooker, 1990; Bruce and Leat, 1993) and to give staff at all levels the opportunity to take responsibility for part of the change process (Albin, 1992).

## 5.6 Conclusions

All organisations operate in a context of rapid change and the traditional boundaries between commercial, statutory and voluntary sectors are becoming blurred as they agree service contracts together. Reactions to this range from concern that funding bodies will exercise some control over the activities of the voluntary sector to a recognition of the need for voluntary organisations to adopt a more professional approach, with service standards and accountability. Implications include change in their customer base and in the nature of their work as voluntary organisations provide services to purchasers, a more professional work force and utilisation of more sophisticated management techniques.

Organisational culture and management have important roles to play and can either support or obstruct change. Senior managers must recognise the importance of enabling staff to maintain a sense of identity during change and staff need training if the organisation is to become a learning organisation and embrace quality improvement. An organisation's mission is of central importance, linking culture and management and acting as a focus for change by drawing together attitudes, beliefs and values of staff. It can create unity of purpose and direction, as can the development of a customer focus by ensuring that all employees have a clear understanding of their customer. A plan for

change for use in specific situations should identify new staff roles with training needs

and an appropriate organisational structure to support change.

**Method**

# Chapter 6. The disabled persons' perspective

## *6.1 Introduction*

The literature reviewed in Chapter 2 noted that disabled people have not been given sufficient opportunity to contribute to the development of their own support services since their views are not sought. This Chapter describes the methodology used to investigate the views and experiences of visually disabled people as they have progressed through education, job seeking, and into the labour market in order to ascertain their information and support needs. The research is directed to inform the design of the proposed vocational information system.

A telephone survey of visually disabled university and college leavers was followed up with focus group discussions drawn from the same sample to provide both quantitative and qualitative data on the issues. All of the respondents were either currently in receipt of services for disabled people or had done so recently. In addition face to face interviews were conducted with groups of residents at a rehabilitation centre and a further education college for people with visual disabilities.

## 6.2 Survey of visually disabled university and college leavers

### 6.2.1 Rationale for survey

Although some qualitative research with disabled students was reviewed in Chapter 2 the views of disabled students themselves are largely lacking. In particular there is very little research focusing upon students with specific disabilities such as visual disability. All students in post-16 education bring with them a history of earlier encounters with educational provision. This study records the experiences of a group of visually disabled individuals as they progressed through education and into their chosen career and notes how occupational information was used in the process. It allows participants to express their views about their education, training and subsequent search for employment. The study records their current employment status, generates statistical data to measure the extent of issues raised and also presents some evidence of the impact of these issues on participants.

The literature indicates the disadvantage of visually disabled people in the labour market so the study examines how vocational information is provided to visually disabled students in order to investigate how well prepared they are for seeking and securing work when they leave education. Provision of careers education and guidance (CEG) to visually disabled students is examined and its significance in their decision making and subsequent careers is investigated. Respondents' experiences of job search and support services are discussed to ascertain their information and support needs and their ideas for improving provision are recorded. The study also examines respondents' views of

the barriers they face in education, job seeking and employment and they describe the solutions they found most helpful.

## 6.2.2 Aim and objectives of survey

The primary aim of this part of the study was to identify the vocational support and occupational information needs of blind and partially sighted people in education, job seeking and employment, in order to consider how to meet these needs more effectively in the future.

To achieve this aim a number of objectives were set:

- to gain a better understanding of the experiences of blind and partially sighted people as they progress through education and training, into employment;

- to assess awareness and use of the vocational guidance, support and sources of occupational information available to visually disabled students and job seekers and to gather satisfaction feedback on these services;

- to record the post education outcome for blind and partially sighted students from both special and mainstream educational backgrounds and to investigate the support received by students in these settings;

- to investigate how prepared visually disabled students are for the next phase of their life by exploring attitudes to and experiences of the transition from education to employment;

- to ascertain factors that could be important influences on successful completion of education and obtaining employment, with particular reference to the agencies which help visually disabled people to seek and secure employment.

In order to fulfil these objectives the research took place in a number of stages, the first taking the form of a questionnaire to gather data from a large number of visually disabled people in different parts of the country. When analysed this data provided the basis of a discussion guide for focus group discussions. This second stage offered the opportunity to explore the views and opinions of participants and to discuss in more depth the issues highlighted in questionnaire responses.

### 6.2.3 Questionnaire design and survey sample

The use of self-completion postal questionnaires was discounted because of the difficulties blind and partially sighted people may have with reading and completing them. Instead individuals were contacted by telephone. A standard introduction was given to each respondent asking them to take part in a confidential survey of visually disabled university and college leavers to find out the information and support they need to find work. All subjects completed the core of the questionnaire and other sections appropriate to their situation.

The questionnaire used in the telephone interviews is given in Appendix 1. Topics covered include demographic details; statutory, further and higher education; looking for work; and employment history and current status. The level of vocational support, guidance and work experience received throughout these stages was considered. Other variables include registration status, age of onset of visual impairment, and additional disabilities.

Before the final version was produced the questionnaire was tested in order to ascertain how long it took 4 pilot respondents to complete and to check that all questions were clear. Adjustments to the questionnaire were made in the light of comments. One noteworthy alteration was moving the question 'Do you live on your own?' from the first section to the final section of the questionnaire, because one recipient felt it was too personal and declined to answer. With this question at the end of the survey, when respondents felt more comfortable about giving personal details, none declined to answer.

A sample of 177 was recruited from an RNIB database of blind and partially sighted students, by choosing every third student from a potential sample of 531, who had completed or left a course, at least to FE level, in 1993/94. 175 people agreed to complete the telephone questionnaire (conducted in 1997) and their recent course completion ensured that subjects would have sufficiently fresh experiences to draw upon. Reliance upon an RNIB source for subjects did introduce a bias in that, compared with the general visually disabled population, respondents had a high incidence of congenital visual impairment and a high proportion were registered as blind or partially sighted with social services. These respondents are likely to have received more support services than the general visually disabled population (Bruce et al, 1991). These factors

may help to explain why a high proportion of respondents were braillists and the general level of educational attainment was high.

Literature reviewed in Chapter 1 was used to estimate the blind and partially sighted student population and the number of visually disabled university and college leavers per year as 2300. Hence the RNIB database reflects about one quarter of the population. This method of respondent recruitment does introduce some selection bias in that visually disabled persons who had no contact with RNIB educational and vocational services were not represented in the sample. The impact of this bias upon the data is discussed further in Chapters 11 and 16.

### 6.2.4 Focus groups

Focus groups were used to examine the satisfaction of blind and partially sighted college and university leavers with the quality of provision they have received throughout their education, during phases of transition and particularly as they left college and moved into their chosen career. Participants had the opportunity to talk in more depth about their personal experiences and offer their opinions. To ensure that participants were able to give their views freely the focus groups were facilitated by an independent facilitator (herself visually disabled) rather than a member of RNIB staff, and taped to allow a detailed analysis of content.

Fourteen participants were selected from respondents to the telephone survey to take part in focus group discussions. Participants had a range of experiences of both education and employment and a spectrum of visual impairments was represented. Although participants were encouraged to bring a guide, travelling was recognised as a

potential difficulty so only those respondents who lived within a maximum of two hours travelling distance of either Nottingham or Manchester, the locations used for the discussions, were considered.

The discussion topic guide (shown in Appendix 2) was constructed on the basis of information obtained through the preliminary investigation and was designed to elicit information on the factors that, might affect the provision and use of occupational information. In addition respondents' suggestions for improvement in occupational information provision were discussed. However in each case the direction of the discussion was responsive to the circumstances and experiences of participants.

## 6.2.5 Data analysis

After reviewing the data from the telephone survey three responses with a high number of omissions were eliminated so the quantitative data analysis, using SPSS, was based on 172 responses. Frequencies were examined and chi-square analysis was undertaken to test the relationship between variables. The chi-square test assumes that the sample size is large. If the minimum expected frequency is less than 1 and more than 20 per cent of cells in the cross tabulation table have an expected frequency of less than 5 the test is invalid. In these cases a chi-square analysis was not used. The major themes to emerge from the analysis of the survey and the subsequent focus groups form the basis of the results in Chapters 11 and discussion in Chapter 16, which draw together findings from both phases, emphasising topics and issues that were highlighted in both. Throughout the study examples of good practice or areas causing dissatisfaction amongst respondents were identified.

### 6.3 Interviews with visually disabled residents at a rehabilitation centre and students at a vocational training college

In order to obtain some qualitative data from visually disabled people currently receiving information and support services two informal group discussions were conducted. These took place at a further education college for visually disabled people and a rehabilitation centre for visually disabled people, both operated by RNIB. The areas covered during the course of the discussion were the same as those listed on the Topic Guide in Appendix 2 and included how participants gathered information about a range of topics such as technology, benefits, social services, mobility, training and job search. Participants also offered opinions on the quality of support and information services available to them. Staff from the two institutions selected participants from their current students and residents, choosing those perceived as able to make a worthwhile contribution. Three rehabilitation centre residents and four college students were interviewed in all. The data, reported in Chapter 11, from this small non-representative sample is used to illustrate points raised in other aspects of this part of the research and to give current examples rather than to supply new areas for consideration.

**Method**

# Chapter 7. Vocational service providers' perspective

## 7.1 Introduction

The literature reviewed in Chapter 4 indicated that although service providers may

possess expert knowledge related to their client group, they may lack the skills required

to systematically gather occupational information. In order to assess the occupational

information and vocational support needs of service providers an investigation of how

they access, use and present occupational information throughout the course of their

work was undertaken. The views and experiences of service providers involved with

disabled people at various stages of rehabilitation, training and employment placement

are examined. Preferred sources of occupational information and its uses are described.

Service providers were encouraged to consider sources both internal to their

organisation and external, formal and informal and the limitations and problems

experienced when accessing and using this information. Finally they comment on further

occupational information they would like access to and suggest how this could most

usefully be presented to them. Attention was paid to specific tools and protocols used in

disability assessment and vocational rehabilitation.

Although the proposed vocational information system will be tested by RNIB staff,

other service providers were interviewed to broaden the scope of the findings and aid

development of a more widely applicable tool. These providers included representatives from a commercial recruitment agency, several Training and Enterprise Councils (who described the information used by their accredited training providers), occupational psychologists in the statutory sector and staff at Employment Needs Training Agency (ENTA), an employment preparation unit for disabled people with particular expertise in the area of mental health.

Data was gathered from service providers through several distinct processes:

- group discussions with vocational rehabilitation staff;
- observation of every day work patterns of RNIB vocational staff, particularly Employment Consultants, noting how individuals access required information;
- formal interviews with a variety of rehabilitation workers and managers in the voluntary, statutory and private sectors including occupational psychologists, work experience co-ordinators, vocational trainers, employment specialists and technical specialists;
- review of documentation including job descriptions, procedural manuals, training material and internal RNIB documents;
- a visit to the Netherlands to interview and observe the work of rehabilitation professionals in order to understand the role of occupational information in service provision and to examine the relevance of the Dutch model to the UK.

Respondents' suggestions for how occupational information could be more widely used and integrated into their own services were noted. Their comments are used later to develop a model for the use of occupational information to improve opportunities for

visually disabled people. The methodology for formulating and testing this new model is described in Chapter 9.

## 7.2 Rehabilitation Agencies

A variety of methods were used to gather data for this part of the research beginning with a series of group discussions with a total of 35 vocational rehabilitation workers, all employed by RNIB, to broadly determine their use of occupational information and discuss their suggestions regarding any further use they could make of such data. Current thinking on the vocational information system was presented and their views on the idea were obtained. Feedback of general comments, suggestions for information to include and system design requirements was encouraged. Participants were asked to offer suggestions for ways to present information, operating procedures and ideas for improvements on the basic model. The issue of training requirements was raised.

The group discussions highlighted the fact that each practitioner has their own preferred working methods and information sources so some face-to-face structured interviews and observation of the working practices of vocational rehabilitation workers were necessary. Job descriptions were requested from vocational rehabilitation staff working for a number of different organisations. Documentation was received from RNIB, two specialist colleges (Queen Alexander College and Royal National College), a TEC funded organisation called SeeAbility that focuses upon work placement and WORKABLE, a pan-disability organisation. In order to examine the work undertaken by Employment Consultants three were asked to keep a diary of their activities for a 2- week period. The results of this exercise were analysed to examine how their time was distributed

between tasks. Sixteen vocational rehabilitation workers were also interviewed

individually (13 from RNIB and 3 from ENTA); all worked in the area of rehabilitation

of disabled people but each had slightly different, though over-lapping responsibilities.

These respondents were selected because they represent a broad range of vocational

service provision from assessment, through training, to employment related services.

Those interviewed included occupational psychologists, job placement specialists,

technical specialists, vocational and technical trainers, employment advisers and service

managers. A semi-structured interview schedule, shown in Appendix 3, was used to

facilitate collection of some standard data from each interview but to allow flexibility to

pursue relevant points of discussion.


### 7.3 Statutory Providers


Training Managers at four Training and Enterprise Councils (TECs) were contacted by

telephone to find out about the occupational information and vocational guidance

provided by accredited training providers. Respondents were asked to name sources of

information and any software packages used. The TECs contacted namely, Coventry

TEC, North Nottinghamshire TEC, Humberside TEC and South East Cheshire TEC were

selected because they were known to be active in the area of vocational guidance provision.


Telephone interviews were also undertaken with the Senior Occupational Psychologist

and an Occupational Psychologist from Birmingham Employment Rehabilitation Centre

(ERC) in order to ascertain how occupational information is gathered and used by those

responsible for assessment of disabled people. The respondents were asked to describe

the role of job analysis in their service, who conducts job analysis and how they are

trained. The methodology used to conduct job analysis was discussed and respondents explained how data is recorded and what it is used for. Respondents were asked to send sample copies of job analysis reports for examination.

## 7.4 Private Providers

A telephone interview was conducted with the Manager of the Birmingham branch of Brook Street Bureau recruitment agency. Services offered to disabled job seekers, the role of recruitment consultants, the use of technology for job matching and the process adopted with employers and job seekers were discussed. The respondent was also asked to comment on use of their job matching system with disabled job seekers.

## 7.5 The Dutch model

A visit to the Netherlands to investigate the operation of the Dutch system of vocational rehabilitation was undertaken. Opportunities to interview and observe service providers at work were taken and particular attention was paid to the role of occupational information and assessment instruments used. The aim was to evaluate practices and identify protocols that could be adopted, either directly or with some modification, by service providers in the UK.

An initial meeting with the Manager and Research Officer from the Central Office of Joint Medical Council (GMD) served as an introduction to the visit and an overview of provision for disabled people in the Netherlands. This discussion took the form of a

semi-structured interview and subjects covered were the legal framework of provision, institutions providing assessment and rehabilitation services and the development of the occupational database, the Labour Structures Documentation (LSD). The full interview schedule is given in Appendix 4. The next day was spent observing the work of a Labour Expert Analyst (LEA) and accompanying her on visits to two sites to conduct job analyses. This allowed examination of standard paper work completed by LEAs and a typical methodology adopted when approaching companies. Although there was no formal interview schedule for the day discussion ranged around completion of the job analysis protocol and the role and responsibilities of a Labour Expert Analyst. Further interviews were conducted with other GMD staff, namely the Senior Occupational Physician, a Labour Expert and a Director of a Rehabilitation Team, to discuss their respective roles in assessment and rehabilitation. A semi-structured approach was taken again and topics covered included their responsibilities and tasks in assessment and rehabilitation, liaison with other colleagues, training and how the occupational database is used. The full interview schedules are given in Appendix 4. One full day was spent with the Labour Expert (LE) so there was opportunity to observe an assessment of a disabled person, and to accompany the LE on a visit to a company to carry out some occupational research. Use of the LSD during these processes was observed.

The Dutch Ministry of Social Affairs has accredited five institutes to provide rehabilitation services to disabled people. Since all of the data gathered in the Netherlands thus far had been from statutory service providers an interview was also conducted with a staff member from one of these institutes, EGGA, to obtain a view from the private sector. The approach of EGGA to assessment was discussed and the

instruments used were noted. Alternative views on the use of the LSD were expressed and the relationship between statutory and private providers was examined.

## 7.6 Conclusion

Data from service providers was analysed to develop a picture of the occupational information and vocational support needs reported by service providers. In the light of these findings, the job analysis instrument, based on the literature, for gathering occupational information was revised. Shortfalls in provision of information were identified and these findings informed the design of the vocational information system model, for the use of occupational information to improve vocational opportunities for visually disabled people.

**Method**

## Chapter 8. The employer perspective

### 8.1 Introduction

At the outset of this research a good deal of time was spent visiting vocational training establishments including specialist colleges, rehabilitation centres and sheltered workshops in various parts of the country. Interviews with tutors, residents, managers and workers were undertaken to discuss their knowledge of job opportunities for visually disabled people. Their responses indicated the need for better links with employers, case study type information about blind and partially sighted people who have been successful in work and up to date information about training schemes within industry. A study was planned to gather occupational information about work undertaken by visually disabled employees and to examine the occupational information and vocational support needs of employers. It was conducted under the auspices of RNIB, who had requested an examination of job opportunities for visually disabled people in the manual sector. The study was also designed to introduce service providers to employers so that links could serve as a basis for future collaboration. The exercise was also used to determine employers' awareness of existing information and assistance with regard to the employment of disabled people and to seek suggestions for information and support they would like. Employers' attitudes to the employment of

disabled people were examined and their reasons for employing or not employing

disabled people were assessed.

## *8.2 Employer survey*

### 8.2.1 Employer sample

A study of general employment trends was undertaken and this, plus discussion with

those involved in the placement of blind and partially sighted people, highlighted sectors

of industry most likely to offer opportunities to visually disabled job seekers with manual

skills. Some general points to emerge were the growth in service industries at the

expense of manufacturing, an increase in self-employment, an increase in the number of

part time and temporary jobs and persistent skill shortages. Clearly manual jobs are

available and skill shortages do exist, however, as traditional manual work changes so

do the requirements of industry. The incorporation of electronic controls into

mechanical equipment calls for some operators to possess both electronic and

mechanical knowledge. This information was taken into account when drawing up

criteria for selection of the employer sample. Preference was given to those sectors that

were either growing or stable, but the sample also reflected the advice of those with

practical experience in the field of vocational rehabilitation. Five occupational areas,

categorised according to the Standard Industrial Classification (SIC) system (Executive

Office of the President, 1987), were selected: manufacturing; personal and protective

services; agriculture; retail; transport and communications. These occupational areas

were deliberately selected as representing a significant share of employment opportunity.

A sample of 516 employers with these SIC codes was drawn at random by Income Data

Services from their national database of companies, stratified according to size, in terms

of number of employees. Only companies with 30 or more employees were requested because the Quota Scheme, in operation at the time of the survey, applied to companies with 30 or more employees. Respondents were asked to complete the survey with reference to the site to which the questionnaire was sent.

### 8.2.2 Study and Questionnaire design

A combination of postal questionnaire and in-depth interview was selected as the most appropriate methodology. Initial contact was by questionnaire because a high number of geographically dispersed employers needed to be contacted to ensure useful data on visually disabled workers was obtained. The questionnaire was split into five sections, namely, company profile, workforce profile, recruitment and training, particulars of visually disabled staff and awareness of support services. A number of questions within the questionnaire sought to draw out the employers' own experiences and attitudes to employing visually impaired people. Details of specific jobs carried out by blind and partially sighted staff are asked for and the respondent was encouraged to think about any jobs that could be made available to visually disabled people. Before the final version was printed five pilot subjects tested the questionnaire. Some minor alterations were made after the pilot exercise. The full questionnaire is given in Appendix 5.

The questionnaire was sent to the named personnel director with a covering letter and a hand-stamped return envelope (Kephart and Bressler (1958), found that hand-stamped mail yields a better return than prepaid metered mail). The letter offered all respondents a summary of results as an incentive to reply and promised confidentiality, stating that individual organisations would not be identified without their permission. A return date

for the questionnaire was given with a three-week period to complete and return the questionnaire. When this period had lapsed a reminder letter was sent to non-respondents. A third letter and a second copy of the questionnaire was sent seven weeks after the initial mailing to those who had still not responded. Completed coded questionnaires were transferred onto a computer file by a company specialising in data input. Data analysis was undertaken using SPSS. Frequencies were examined and chi-square analysis was undertaken to test the relationship between variables. The validity of the chi-square test (minimum expected frequency greater than 1, no more than 20 per cent of cells with an expected frequency of less than 5) was confirmed before use.

## 8.3 Employer follow up visits

This part of the study took the form of follow up visits to selected respondents in order to carry out depth interviews to verify and expand the information given in the questionnaire and to discuss their occupational information and support needs. The visits were also be used to observe staff, particularly those with a visual disability, at work and to undertake job analyses to test the model job analysis instrument (discussed in Chapter 9). It was anticipated that observations of the organisation as a whole would reveal the attitudes of employers and information needs that are usually not detected by strategies like the postal questionnaire.

Assistance from RNIB Employment Consultants to undertake follow up visits to survey respondents was requested. Those involved would be able to practise the skill of job analysis and update their labour market information. Employment Consultants agreed to carry out between 3 and 5 visits over a period of 5 months. It was necessary to ensure

that Employment Consultants were well versed in the background and aims of the research enabling them to answer questions from respondents so a report of progress was presented to each regional team. The follow up visits were discussed and written instructions were given. The job analysis instrument was discussed at team meetings and Employment Consultants were asked to use this during their visits. They were also asked to give feedback on how useful they found the instrument and any suggestions for improvement. Employment Consultants are expected to carry out job analysis as part of their every day activity so no detailed training was planned at this stage. It was envisaged that after refining the instrument to take account of comments the Employment Network could adopt a standard approach to job analysis by incorporating use of the instrument into their work.

Resources did not permit a personal visit to every respondent so a number were selected. Employers who gave examples of good or bad practice in their questionnaire reply and those that already employed or would like to employ a visually disabled person were given priority. Permission was obtained from respondents agreeing to take part in further research to carry out job analyses at their premises and discuss their occupational information and vocational support needs in person. Each RNIB team received a list of employers within their region who had agreed to take part. Contact names, industrial activity, plus other useful information, including details of any past or present visually disabled staff and examples of good or bad practice in the original response, were given.

**Method**

# Chapter 9. Formulating and testing the model

## 9.1 Introduction

A revised version of the guide for development of an occupational information and disability assessment system, described in Chapter 4, (Klugman et al., 1991) was used to guide design and plan implementation of the vocational information system:

Stage 1    Development of a job analysis instrument covering design, piloting, refinement and further testing.

Stage 2    Development of the vocational information system, drawing together separate databases of vocational information system, profiles of individuals and a methodology for comparing individual assessments to job requirements. The vocational information will include job accommodations, education and training data and descriptions of occupations based upon a set of job demand factors (as used in the job analysis instrument).

Stage 3        An implementation strategy of progressively extending the model

together with administration and operating procedures, training and

evaluation.


The first step in building the proposed vocational information system was the design of

an instrument for job analysis, based on the literature. Its suitability for use by service

providers was examined in follow up visits to respondents to the employer survey. The

instrument was also tested in a large-scale redeployment programme within National

Westminster Bank (NWB). The instrument was revised in accordance with comments

from testers. The redeployment programme provided opportunities to examine the

effectiveness of the job analysis instrument as a method of data collection since it was

administered by both vocational rehabilitation professionals and NWB personnel. This

exercise and the employer follow up visits highlighted limitations in the use of the

instrument and its failure to satisfy all the needs of visually disabled people, employers

and service providers. A vocational information system, based upon the instrument, but

drawing together a much wider range of information and offering additional elements of

job matching and user dialogue was required. Stage 2 of the implementation model was

used to guide the design of this vocational information system. Funding from DfEE

enabled work to proceed to Stage 3, with the implementation of one element of the

model, a vocational information database, based on the Internet, called GROW

(Gateway to Researching Opportunities for Work). Training was given to RNIB

Employment Network staff to enable them support the GROW service and it was

implemented within RNIB.

## 9.2 Testing the job analysis instrument in a redeployment situation

The literature reviewed in Chapters 3 and 4 was used to inform design of a job analysis instrument (described in Chapter 14) for use by vocational rehabilitation practitioners working with visually disabled people. This instrument was tested in follow up visits to employer respondents, as described in Chapter 8 and also in a research programme seeking to redeploy visually disabled staff working for NWB. In the UK, banks have traditionally been sympathetic to the employment of blind and partially sighted people in certain clerical positions; the post of 'Blind Telephonist' has existed on a separate, lower grading system to that of sighted telephonists. In recent years most banks have embarked upon a restructuring programme, part of which involves introducing new technology and removing clerical functions from local branches to regional centres. One such centre will provide administration services for several branches so the requirement for clerical staff, including telephonists, has decreased. At the same time technology has progressed to allow the switchboard operator function to change from one of simple call receipt and transfer to one of customer care. Computerised information and access to customer files allows the 'telephonist' to deal with a range of customer queries and process a variety of requests such as giving account balances, and ordering cheque books and statements. The 130 'blind' (records made no distinction between blind and partially sighted) switchboard operators at NWB were facing redundancy as this new technology made their roles obsolete. However senior executives endorsed a research programme aiming to achieve redeployment for these members of staff within the organisation. A programme based upon individual assessments and job analysis was devised.

## 9.2.1 Assessment of individuals and jobs

NWB had no central record of the geographic location of visually disabled staff and numbers were not accurate due to inconsistent recording methods, so the first stage of the programme was data collection and individual assessment. The Director of Human Resources within NWB wrote to all known visually disabled staff, via regional personnel staff, explaining the progress of the restructuring programme and NWB's desire to give all staff the best opportunity to develop within it. This letter, delivered on tape and in large print, introduced the research, and explained that each visually disabled staff member would receive an initial visit to discuss options for redeployment. It also invited any visually disabled staff to telephone a newly established telephone helpline with any queries or comments. This was a direct line to a senior manager in the human resources department. A letter from RNIB followed offering independent assistance to individuals. After this written communication one of the four case managers working on the programme contacted each visually disabled staff member to make an appointment to visit. Case managers were responsible for ensuring that each visually disabled individual agreed an action plan to achieve their redeployment and that this plan progressed smoothly.

In order to ensure that a standard approach to each member of staff was adopted and that no useful information was omitted from the discussion, interviews conducted during these initial visits were structured around a questionnaire. This was piloted with 5 visually disabled staff and then revised for use with the remaining 125 staff. The questionnaire covered education and training, work history, details of current job, support at work, special equipment, working environment, career aspirations, mobility

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skills, details of useful vision and access to information. The full questionnaire is given in Appendix 6. During the course of the interview individuals were encouraged to discuss their options in more detail and an explanation of the proposed assessment (described below) was given with an invitation to attend an assessment day at an RNIB centre near to their work place. The case manager also met with the branch administration manager to discuss any development or redeployment opportunities within the workplace.

The assessment programme included a review of NWB staff records, vocational assessment with an RNIB Occupational Psychologist (OP) and technical assessment with an RNIB Technical Consultant (TC). The individual's capacity to develop the skills highlighted in the general job analysis (described below) was considered. The Occupational Psychologist conducted psychometric tests as appropriate, comprising ability testing and measures of achievement in relevant subject areas. Assessments of communication skills, working methods and the ability of the individual to benefit from formal training were also undertaken. Results of the assessment, including any test results, were discussed openly with individuals on the day, and were compared with the individual's aspirations as discussed in the initial interview. Advice was given about developing more effective working methods in their current job, the type of work they might wish to consider in the redeployment situation and referral to a specialist low vision centre for detailed low vision assessment was made if necessary. Copies of the assessment reports were sent to the individual, in their preferred medium, and to their case manager.

Under restructuring some sighted telephonists were being trained to use new technology for a customer service role. In order for a visually disabled telephonist to carry out this role and to benefit from this training opportunity they would have to be able to use access technology in addition to the new technology used by sighted peers. Therefore it was important to assess the level of computer literacy of each visually disabled staff member and to assess his or her potential to benefit from further technology training. During the technical assessment a TC demonstrated a wide range of access technology and allowed the individual to test and compare various devices. The assessment began with an informal discussion to discover whether the individual used technology already, whether they had keyboard skills, how they accessed information and their general level of computer literacy. This allowed the TC to select appropriate hardware and software for demonstration. The TC also demonstrated other equipment that could be useful at work such as print scanners, close circuit televisions and note takers. The reporting arrangements were similar to those employed by the OP but the TC also made recommendations regarding equipment that would assist the individual in their current job or would allow them to begin to develop new skills. Details of suppliers, prices and training requirements were included in reports so that NWB could act upon these recommendations immediately.

### 9.2.2 Job Analysis and Job Matching

It was important to determine whether the role of the telephonist included a number of different tasks in different locations, thus making telephonists more flexible than NWB personnel staff imagined. It was therefore necessary to know more about the jobs visually disabled staff were already doing and how they were accomplishing them. In

addition it was essential to know more about the new jobs resulting from restructuring to gain an insight into the employment opportunities within NWB.

Visits were undertaken to a service centre and a branch. All available job descriptions were gathered and the job analysis instrument was used to investigate a number of jobs, with due consideration to the visual aspects of these jobs and the possibilities for job accommodation. In addition a TC carried out an in depth investigation of the technology in use and assessed possible technical job accommodations. The information gathered in this exercise was used to provide the background for initial individual assessments, described earlier. The job analysis reports and the job descriptions gathered were circulated to all those carrying out vocational and technical assessments to give an idea of the range of jobs available to those facing redeployment and the skills likely to be required in redeployment situations.

After the initial job analysis and individual assessment, job matching on behalf of individuals was required. If an individual's branch was to close NWB vacancies available in the locality were considered. The assessment exercise had provided information about the individual's skills and aspirations, their work experience and potential to benefit from training. When a vacancy, which seemed appropriate in the light of these factors, became available a specific job analysis was carried out in order to assess the suitability of the match between an individual and the vacancy. The case manager examined the job description, visited the location to discuss the job with the supervisor and any staff already doing the work and used the job analysis instrument to analyse the vacancy. The equipment used was investigated and special aids compatibility

testing, if required, commenced as soon as possible. After discussion with the visually disabled individual concerned the case manager supported a job application if required.

When all assessments for staff in a particular region were complete the case manager met with regional personnel staff to discuss the options for the visually disabled telephonists in that region. The current and likely future training and equipment needs of the individuals were discussed and a way forward for each case was agreed. Discussions with regional personnel staff about vacancies in the area were based on the existing skills and potential of the individuals concerned. Case managers encouraged regional personnel staff to take responsibility for co-ordinating the redeployment of visually disabled staff in their region through regular contact and by sending them copies of the monthly case manager update report.

### 9.2.3 Related activities

Simultaneous activities were initiated to ensure that visually disabled telephonists were able to make the most of the redeployment opportunity. It was anticipated that the visually disabled staff would require vocational training and training in the use of new technology, and access technology. Suitable training programmes were identified so that staff could begin them as soon as possible. RNIB Technical Consultants worked with NWB Technical Support staff in order to gain an overview of the range of technology used within NWB and to assess compatibility of special aids with NWB systems. Through a series of technical trials in different venues it was possible to establish a range of compatible access equipment, offering solutions to both blind and partially sighted staff in a variety of work situations. In order to address barriers to development of

visually disabled staff caused by lack of awareness of other staff, a programme of training for managers was developed and delivered by the author and RNIB's Training Co-ordinator to a range of NWB staff in a variety of locations.

## 9.3 Developing a vocational and occupational information database.

The redeployment research highlighted some limitations in the use of job analysis alone as a tool to improve vocational opportunities for visually disabled people. Lessons from this exercise and follow up visits to respondents to the employers survey plus analysis of the occupational information and vocational support needs of potential users were used to develop a model for a vocational information system (Stage 2 of the implementation plan: model development). One element of the model is a database of vocational information to assist disabled people to make informed choices for their personal development through education, training and employment. Funding from DfEE was secured to develop and implement this element of the model on the Internet (Stage 3 of the implementation plan). It focuses upon the needs of visually disabled people and is called GROW (Gateway to Researching Opportunities for Work). A steering group comprising representatives from service provider organisations, employers and visually disabled people themselves was convened to guide design and development of GROW.

Following discussions with the steering group it was agreed that the Internet was the appropriate vehicle to supply vocational information to visually disabled people and professionals in the field of rehabilitation. A technical expert investigated the products available to provide Internet access for visually disabled users. The System Manager,

appointed to maintain the GROW site was trained to use access technology products in order to be able to offer advice and support to new users.

Occupational information and vocational support needs expressed by visually disabled people, service providers and employers were used to specify the content of the GROW site. Since much of this data already exists on the World Wide Web a search was undertaken to look for other sites providing useful details that GROW could link into. For example, if a user wants information about Citizens Advice Bureau (CAB) a link can be set up from the GROW site enabling the user to click on the word "CAB" to go directly to the CAB's own Web site.

The technical expert used a programming language (called Hypertext Mark-up Language or HTML) to prepare data for inclusion on the GROW site to introduce the database, to link various sites together and to provide the user with signposts to these and other sites to enable them to find sites easily. Care was taken to ensure that the GROW site is fully accessible to visually disabled users by providing a text alternative to any graphics included. However not all site authors do this so the index of links to external sites gives an indication of the accessibility of these external sites along with a brief description of their content. Thus the user is advised that although a site contains the sort of information they are looking for it may be difficult to access.

Two RNIB pilot sites, a rehabilitation centre and a training college, were selected to test the prototype GROW site. Most of the staff and students had not used the Internet before and varied in their degree of computer literacy. In each location two members of staff were trained to use the system and one blind student was also trained in the college.

Staff were then able to demonstrate the system to students and residents and support them in accessing GROW themselves. Testers were asked to complete a feedback form seeking their comments on content and technical aspects of the system. Alterations were made in the light of this feedback.

Support for users took the form of documentation and a telephone response line. A quality standard was devised to cover the service offered by the GROW site and the System Manager. This document covered the information provided on the GROW site, user involvement, effective redress, reliability, the competence of staff involved with GROW and ease of use. A user manual for GROW was displayed on the site and also made available on disc, in large print and braille, obtainable from the System Manager. The telephone response line, manned by the System Manager, was able to offer immediate support to users with simple technical queries. More complex problems were referred to a technical expert within RNIB.

In order to promote the GROW service and advise as many potential users as possible of its existence a number of strategies were taken up. A briefing note was circulated to potential users within RNIB; GROW was demonstrated at a number of exhibitions and seminars; and a press release, mailing leaflet and various articles were prepared and circulated.

In order to provide access to GROW for visually disabled people who do not have access to the Internet a network of Access Points was established. A GROW Access Point offers visually disabled users a choice of text magnification or speech and there are staff available to help people get started if necessary. Access Points

were supplied with copies of the user guide on disc, in braille and large print. A fact sheet offering advice on the appropriate equipment to make an existing Internet connection accessible was provided to establishments interested in becoming an access point for GROW. A service agreement for Access Points called the GROW Access Point Quality Promise was drawn up to assist the self-assessment process undertaken by potential Access Points. When an establishment was able to fulfil the requirement of the service agreement details of the establishment were added to the list of Access Points advertised on the GROW Web site.

A log analyser on the site enabled statistical monitoring of the number of visitors to the site. Some details of the type of users were also available. RNIB Employment Consultants based in London were able to access GROW via two accessible terminals in their office. Training was offered to them on request. It was anticipated that GROW would be integrated into RNIB service provision, particularly during one to one sessions with visually disabled people.

**Method**

# Chapter 10. Impact of organisational change on improving opportunities for visually disabled people

## *10.1 Introduction*

The introduction of a new job analysis instrument into the work practices of vocational rehabilitation staff represents a change, as does the implementation of a vocational information system. Therefore the literature on organisational change was reviewed to gain an understanding of organisational theory and management of change. In addition, efforts were made to examine and understand management of change within the organisations testing the instrument and the system. This included both employer and service provider organisations. Since both types of organisation can exert significant influence over vocational opportunities for disabled people the way in which these organisations accommodate change is important.

## *10.2 Investigation of organisational change within a service provider organisation*

While gathering data on the occupational information and vocational support needs of service providers, respondents remarked upon the state of change of their situation. When questioned about their role and work related needs members of RNIB

Employment Network in particular used the opportunity to talk about their wider work situation. Topics arising during individual interviews included organisational management, organisational restructuring, staff development and performance measurement. This data was used to consider organisational change and change management in the voluntary sector.

Data collection for this phase of the research was undertaken through structured interviews with 10 members of the RNIB Employment Network including 3 Employment Consultants, 4 Technical Consultants, 1 Trainer and 2 Regional Managers. Group discussions around the topic of the introduction of a vocational information system with 35 RNIB vocational staff were also held. Attendance at RNIB internal meetings to discuss restructuring and internal RNIB documents related to the restructuring programme also provided useful data. In addition further unstructured interviews, specifically related to organisational change, were undertaken with a senior manager and the Vice Chair of RNIB. Much of the data gathered could only be understood in terms of organisational change and is presented in this context in Chapters 15 and 18. The model of organisational change developed by Albin (1992), described in Chapter 5 is applied to the Employment Network in order to assess the extent to which it can be mapped directly onto the Network. Following Albin's advice, an analysis of the understanding of the mission of the Employment Network by staff was undertaken and consideration was given to how this mission links with staff perception of their role.

An investigation of how an understanding of organisational change can be used to advantage when implementing a new system into a vocational rehabilitation organisation was undertaken. The requirements in the plan for organisational change, described in

Chapter 5, were adapted for the introduction of the new job analysis instrument in to the Employment Network. Thus consideration was given to the identification of new staff roles and training needs and the organisational structure necessary to support use of the instrument. Potential barriers to change were identified and solutions were suggested. The value of this approach is discussed with the results in Chapter 15.

## 10.3 Investigation of organisational change within an employer organisation

At the time of the redeployment programme National Westminster Bank was undergoing major restructuring due to the introduction of new technology. Organisational change theory is applied to assist understanding of the effects this and other changes had upon opportunities for visually disabled staff, affected by displacement of telephone switchboards.

# Results

# Chapter 11. The visually disabled persons' perspective

## 11.1 Introduction

The disabled persons' views and experiences of occupational information provision and vocational support were examined through:

- A survey of visually disabled university and college leavers followed by focus group discussions
- Interviews with residents of a rehabilitation centre and college students, all of whom had a visual disability

This chapter describes the results of these processes in turn and concludes with a summary of the occupational information and vocational support needs of visually disabled people to inform the design of a vocational information system.

## 11.2 Results of survey of university and college leavers

### 11.2.1 Demographic details of the Sample

The sample of 172 visually disabled college and university graduates for the telephone questionnaire was drawn from a database of people who had used the RNIB Student Support Service.

### 11.2.1.1 Gender and age range

Overall 101 (59%) of the sample were male and 71 (41%) were female and Table 6 shows that there are more males than females in every age group, with the male to female ratio remaining fairly constant throughout.

| Age range | Male | Female | Total |
|-----------|------|--------|-------|
| 18 - 25   | 34   | 21     | 55    |
| 26 - 40   | 40   | 30     | 70    |
| 41-60     | 24   | 18     | 42    |
| Over 60   | 3    | 2      | 5     |
| Total     | 101  | 71     | 172   |

Table 6. Age range and gender

**11.2.1.2 Ethnicity, age of onset of visual impairment, registration status,**

**preferred media and additional disabilities of sample**

Table 7 shows that in total 9% of respondents are from an ethnic minority background.

This supports the findings of Meager et al. (1996), who reported that 9% of the disabled

student population in FE come from minority ethnic groups. However, this sample,

drawn from RNIB service users, has no representatives from a black African or

Caribbean background. Perhaps black African and Caribbean people with visual

disabilities have greater difficulty accessing post-16 education or perhaps they choose

not to use RNIB Student Support Services for some reason. This is an issue for RNIB

to investigate further.

| | | N | % |
|---|---|---|---|
| **Ethnicity** | White European | 157 | 91 |
| | Indian subcontinent | 8 | 5 |
| | African Caribbean | 0 | 0 |
| | Other | 7 | 4 |
| **Registration status** | Blind | 123 | 72 |
| | Partial sight | 44 | 26 |
| | Not registered | 5 | 3 |
| **Additional disabilities** | Yes | 45 | 26 |
| | No | 127 | 74 |
| **Age of onset** | Birth | 86 | 50 |
| | Under 5 | 14 | 8 |
| | 5-16 | 30 | 17 |
| | 17-20 | 11 | 6 |
| | 21+ | 31 | 18 |
| **Preferred media** | Braille | 48 | 28 |
| | Large print | 74 | 43 |
| | Standard print | 24 | 14 |
| | Tape or disc | 26 | 15 |
| **Total** | | 172 | 100 |

Table 7. Ethnicity, registration status, additional disabilities, age of onset and preferred
media of whole sample

The majority of these respondents were registered with social services as visually disabled with 72% registered as blind and 26% as partially sighted (see Table 7). In all 45 respondents (26%) reported other disabilities or health problems including hearing impairments and physical disabilities. These figures dispel any assumption that as the level of a course and complexity of study increases the less likely blind people are to pursue them and shows that visually disabled people with additional disabilities and therefore additional educational handicaps can achieve a high level of study.

There was a high incidence of congenital visual impairment in this sample; 86 (50%) respondents fell into this category (see Table 7). The RNIB adult survey found that one third of visually disabled adults aged 16-59 experienced onset at birth. Such children are likely to use a range of RNIB services from an early age due to referrals from medical and social services and can progress to use the RNIB Student Support Service as they get older. Consequently, they are over represented in this sample, drawn from an RNIB source.

There is a high proportion of braillists in this sample (28%), compared with the RNIB adult survey, which found that only 3% of the visually disabled population used braille. This could be due to the high proportion of the sample that experienced visual impairment before their education began (58 %), who are likely to have learned braille skills at school. Those who experience onset of visual impairment later in life may find it more difficult to secure the opportunity to learn braille and may also find the process more onerous than younger people.

## 11.2.2 Educational history

The educational background of the 130 respondents who experienced onset of visual impairment before the age of 16 is described in Table 8. This indicates that in this sample the male to female ratio in mainstream schools is approximately equal but that in special schools there is an over representation of males (58% males compared with 42% females in special non-residential schools and 62% males compared with 38% females in special residential schools), however a chi-square analysis for gender against type of school shows that this relationship is not statistically significant. The proportion of male and female respondents who attended further education (FE) (considering mainstream and special provision) is 62% male and 38% female (see Table 9). A chi-square analysis indicates that the relationship between gender and type of further education is statistically significant ($\chi^2$ = 4.553; d.f.=1; p<.050). The Tomlinson Committee expressed concern regarding the under representation of female students with disabilities (49%), when compared with the female FE student population as a whole (55%) (Meager et al., 1996). Presumably the higher proportion of males found in specialist schools would tend to feed specialist FE colleges. However the low participation by females requires further investigation particularly since the bias towards males continues, in this sample, in higher education (HE), with 65 male (61%) respondents attending HE compared with 41 (39 %) females (Table 10). This compares with 51% male and 49% female in the overall higher education student population in 1993/94 (DfEE, 1996b).

| | | Mainstream | | Special non-resident | | Special resident | | Totals | |
|---|---|---|---|---|---|---|---|---|---|
| | | N | Col % | N | Col % | N | Col % | N | Col % |
| **Gender** | Male | 27 | 51 | 14 | 58 | 33 | 62 | 74 | 57 |
| | Female | 26 | 49 | 10 | 42 | 20 | 38 | 56 | 43 |
| **Registrati-on status** | Blind | 32 | 60 | 17 | 71 | 43 | 81 | 92 | 71 |
| | Partial sight | 20 | 38 | 6 | 25 | 9 | 17 | 35 | 27 |
| | Not registered | 1 | 2 | 1 | 4 | 1 | 2 | 3 | 2 |
| **Age of onset** | Birth | 32 | 60 | 20 | 83 | 34 | 64 | 86 | 66 |
| | Under 5 | 3 | 6 | 2 | 8 | 9 | 17 | 14 | 11 |
| | 5-16 | 18 | 34 | 2 | 8 | 10 | 19 | 30 | 23 |
| **Total** | | 53 | | 24 | | 53 | | 130 | |

Table 8. Type of statutory education against gender, registration status and age of onset for 130 respondents who experienced onset before the age of 16

Focus group participants commented on failings within both mainstream and special education to meeting their support needs.

*'I went to a mainstream school - no support - I had to sit next to board but that was not much use. I left with no qualifications because I struggled so much.'*

*'I underachieved and was desperately unhappy. I was brought up in a totally artificial environment [residential special school]. I felt very different.'*

As expected, of the 77 respondents who attended special schools a high proportion (65 or 84%) experienced sight loss before the age of five (Table 8). However, 66% of those who attended mainstream schools had also experienced sight loss by the age of five. The majority of respondents attending FE chose a mainstream college and of those who did

so, 52 (63%) reported onset of sight loss before the age of 5 (see Table 9). (Of those who attended specialist FE 58% experienced sight loss before age 5). Of those attending HE, just over half reported onset before age 5 (Table 10).

In the whole sample of 172 respondents, 95 (55%) attended mainstream and 77 (59%) attended special schools. A total of 126 (73%) respondents progressed from school to a further education establishment (Table 9). The majority, 82 (66%) received mainstream further education provision and 43 (34%) attended a specialist further educational college (1 missing response). In total 106 (62%) respondents attended higher education at some point (Table 10). Of these 45 (42%) transferred directly from school and the remainder transferred from further education. In general, respondents pursued a wide range of courses in both FE and HE showing that visual disability need not limit choice of course. This finding confirms the Jamison study (1995) in which visually disabled respondents were studying 68 different subjects

Since respondents registered as either blind or partially sighted attended both mainstream and special further education colleges and higher education, all types of institutions need to be able to support students with a range of preferred media including braille and large print by offering facilities for production of materials.

Provision of equipment was singled out as a crucial aspect of support by focus group participants, though it was clear that participants' knowledge of and access to specific equipment varied significantly.

*'It's hard to convince lecturers there is technology out there, scanners for instance, but in HE they are coming round to the idea that technology is available.'*

*'Colleges try to provide support but support is really about access to equipment. Access to study therefore depends on what colleges can immediately provide but because they've got to get equipment from elsewhere you can end up being quite a distance behind.'*

*'I was able to borrow books to send them away to be brailled but it was a nightmare because the essay deadlines would arrive before the books but then I got a text reader after I got it my marks went up by twenty per cent. I found out about it because I subscribe to a magazine.'*

The lack of experience amongst teachers and lecturers in dealing with visually disabled pupils was emphasised and participants commented on the need for appropriate assessment and more staff training.

*'We should do more to prepare teachers and lecturers for the culture shock of teaching visually impaired students.'*

*'Careers service and university support services can help, but staff while they're willing don't always know how to help, or how to translate their willingness into practical support.'*

*'Support is dependent upon the institution and on people within each department. It also depends on whom you ask for help.'*

| | | FE mainstream | | FE Special | | Totals | |
|---|---|---|---|---|---|---|---|
| | | N | Col% | N | Col% | N | Col% |
| **Gender** | Male | 45 | 55 | 32 | 74 | 77 | 62 |
| | Female | 37 | 45 | 11 | 26 | 48 | 38 |
| **Ethnicity** | White European | 77 | 94 | 37 | 86 | 114 | 91 |
| | Indian Sub-continent | 3 | 4 | 3 | 7 | 6 | 5 |
| | Other | 2 | 2 | 3 | 7 | 5 | 4 |
| **School Type** | Mainstream | 44 | 54 | 17 | 40 | 61 | 49 |
| | Special non-resident | 13 | 16 | 8 | 19 | 21 | 17 |
| | Special residential | 25 | 30 | 18 | 42 | 43 | 34 |
| **Age of onset** | Birth | 46 | 56 | 19 | 44 | 65 | 52 |
| | Under 5 | 6 | 7 | 6 | 14 | 12 | 10 |
| | 5-16 | 12 | 15 | 6 | 14 | 18 | 14 |
| | 17-20 | 13 | 6 | 3 | 7 | 8 | 6 |
| | 21 + | 5 | 16 | 9 | 21 | 22 | 18 |
| **Registration status** | Blind | 57 | 70 | 35 | 81 | 92 | 74 |
| | Partially sighted | 22 | 27 | 8 | 19 | 30 | 24 |
| | Not registered | 3 | 4 | - | - | 3 | 2 |
| **Preferred media** | Braille | 17 | 21 | 21 | 49 | 38 | 30 |
| | Large print | 35 | 43 | 12 | 28 | 47 | 38 |
| | Standard print | 14 | 17 | 4 | 9 | 18 | 14 |
| | Tape | 12 | 15 | 4 | 9 | 16 | 13 |
| | Disc | 4 | 5 | 2 | 5 | 6 | 5 |
| **Total** | | 82 | | 43 | | 125 | |

1 respondent did not answer these questions

Table 9. Type of Further education by gender, ethnicity, school type, age of onset, registration status and preferred media

Two thirds of respondents who attended higher education were aged 26 years or older (see Table 10). According to the DfEE (1996b) of the overall 1993/94 higher education student population, 60% were aged 18 - 24 years. Although respondents to this survey

had completed their courses 3 years ago and would therefore be few years older than the general student population this factor alone is unlikely to account for the high proportion over 26 years old.

| | | Attended HE | |
|---|---|---|---|
| | | N | Col % |
| **Gender** | Male | 65 | 61 |
| | Female | 41 | 39 |
| **Age range** | 18-20 | 5 | 5 |
| | 21-25 | 31 | 29 |
| | 26 + | 70 | 66 |
| **Age of onset** | Birth | 50 | 47 |
| | Under 5 | 10 | 9 |
| | 5-16 | 20 | 19 |
| | 17-20 | 6 | 6 |
| | 21 + | 20 | 19 |
| **Preferred media** | Braille | 28 | 26 |
| | Large print | 47 | 44 |
| | Standard print | 17 | 16 |
| | Tape | 8 | 8 |
| | Disc | 6 | 6 |
| **Registration status** | Blind | 70 | 67 |
| | Partially Sighted | 32 | 30 |
| | Not registered | 3 | 3 |
| | Missing responses | 1 | |
| **Total** | | 106 | |

1 respondent did not answer the question about registration status

Table 10. Higher education attendance by gender, age range, age of onset, preferred media and registration status

## 11.2.3 Transition

When asked how they made decisions about the next step after statutory education participants commented on the lack of freedom they were given in making choices.

Some participants described how they felt some pressure to follow particular pathways, often due to the low expectation others had of their achievement.

*'At school I was extremely foolhardy in deciding what I wanted to do. My special needs support worker tried to push me in other directions. She told my parents I should not consider going to university but I wanted to do a course at university.'*

*'Special Schools get you ready for the world outside rather than teaching you for qualifications...'*

*'Careers advice in 5th or 6th form was from RNIB [at specialist school]. They offered usual things, like telephony and physiotherapy.'*

The availability and accessibility of information to assist visually disabled people to make decisions about where and what to study was discussed. A range of advice sources were mentioned and several participants mentioned friends as a valuable source of information.

*' I got my information from prospectuses, sixth form colleges, and friends. I knew the RNIB could help so I got in touch with them.'*

*'I found out about my course through looking through the newspapers and talking to friends and my work mates.'*

*'I found out about university by getting hold of the information from UCAS, brochures, and by 'phoning up. The Careers Service was good. I had the opportunity here to talk about options and the Social Services helped considerably.'*

Provision of occupational information and vocational support in the form of careers guidance and work experience, by further and higher education establishments was examined in the questionnaire. Less than a third of respondents in further education and less than a half in higher education reported that they had received careers guidance or undertaken work experience. Both are important for visually disabled students, for whom access to careers information may be difficult if it is not available in appropriate media. In addition, for those from a special education background work experience may be the first opportunity they have to interact independently in a non-specialist environment. Participants emphasised the importance of provision of occupational information and vocational guidance at school. This was regarded as necessary to raise expectations and develop confidence to take up new challenges. There was a mixed reaction to the quality of occupational information and vocational support they had received both while studying and after leaving college.

*'You need the advice earlier; when you go into the world at 16 it's too late.'*

*'Careers advice should come at 11.'*

*'Careers officers should be looking at how you can overcome difficulties. DEAs [Disability Employment Advisers] should be more aware, they're too generalist; there should be a link between DEAs and careers officers.'*

*'Careers advisers and DEAs are not aware of equipment so they can't give you right guidance.'*

*'The careers advice I got after college suggested I just apply for jobs willy-nilly. If they can't be bothered, I'd rather got on with it myself.'*

Struggling with 'the system' to get appropriate information and support was a common complaint made by participants.

*'All these questions, all these decisions have been down to me, I don't feel there has been any guidance around for me. At the moment I'm trying to work my way to PACT to see if I can get any equipment.... We've nearly given up because its so bureaucratic and such hard work.'*

Table 12 later shows 54 respondents (31%) did successfully make the transition from education to employment. However, there is a need to improve both the quality and extent of careers guidance and work experience programmes.

**11.2.3.1. Job Search**

Respondents were asked about where they looked for job vacancies. Newspapers, used by 61%, were the most popular source of vacancy information (see Table 11), even with those registered blind. Jobcentres were the second most popular, used by 45% of respondents. Only 19 % of respondents used the Careers Service to assist with their job search. This could be because careers services have traditionally dealt with school

leavers and only recently have some providers begun to broaden their service to other age groups.

| Vacancy source | N | % of sample |
|---|---|---|
| Newspapers | 105 | 61 |
| Jobcentre | 78 | 45 |
| Speculative letters | 50 | 29 |
| Careers service | 32 | 19 |
| Recruitment Agencies | 27 | 16 |
| Job Club | 15 | 9 |

Table 11. Vacancy sources used

Focus groups gave evidence that they had relied upon their own initiative and persistence to find work.

*'I had to see the Director and make a lot of fuss to get on the scheme. I pestered all the top men. Eventually they agreed to it.'*

*'I did it through my own efforts, through my own personal contacts.'*

A total of 95 respondents, who were either employed or unemployed, gave details of the support agencies they had been in contact with during their job search (Table 12). The service used most was the support offered by Jobcentre staff (88 %), followed by the PACT (51 %) and RNIB advisory services (43%). To determine which of the advice sources is most effective the impact they have on employment outcomes of respondents was investigated. This measure is limited by the fact that most respondents used a combination of advice sources.

|  | Employed | Unemployed | Total |
|---|---|---|---|
| **Jobcentre staff** | 48 | 36 | 84 |
| **PACT** | 37 | 11 | 48 |
| **RNIB** | 26 | 15 | 41 |
| **Careers Service** | 15 | 11 | 26 |
| **TEC** | 14 | 10 | 24 |
| **Social Services** | 13 | 9 | 22 |
| **Training Agencies** | 6 | 6 | 12 |
| **Job Club** | 5 | 3 | 8 |
| **Total** | 54 | 41 | 95 |

Table 12. Economic activity status by support contacts during job search

Table 12 shows that 48 out of 84 (57%) Jobcentre staff clients gained employment.
PACT clients achieved higher employment rate with 37 out of 48 (77%) people in
employment, but PACT officially provides support to those already in work rather than
job seekers so it is likely these figures include some individuals already working before
PACT got involved. 26 out of 41 (63%) individuals who contacted RNIB achieved
employment. Other agencies were used by fewer respondents but in each case roughly
half of those who contacted them were in employment at the time of the survey. The use
of employment outcome as an indication of effectiveness of support and advice provided
shows that there is scope for improvement in support provision to visually disabled job
seekers. One specific example given by focus group members was the Job Club, used by
only 9% of survey respondents.

*'They're a waste of time.'*

*'You just sit around reading newspapers and pretend you're looking for a job, using the
telephone'*

Although Jobcentres and the DEAs based there were felt to be *'excellent'* at providing information on benefits and entitlements, participants were more critical of their capacity to support visually disabled people in their search for employment:

*'The Jobcentre was not a bit of use - told you about benefits but couldn't help with jobs.'*

*'I can't physically see the jobs... I just can't get close enough and sometimes the cards are very faint...there might be someone there to help you read them but it depends upon how busy they are.'*

### 11.2.3.2. Job Applications

Another measurement of the effectiveness of advice sources could be the number of job applications made by individuals who had contact with them. Advice sources could be considered more effective if they encourage job seekers to make a larger number of job applications than others. In total 126 respondents answered questions about how many job applications they had made throughout their job search. Again this measure is restricted to consideration of discrete sources and only 18 respondents contacted only one source (16 contacted the Jobcentre, 1 the careers service and 1 another source), so the value of this measure is limited. A total of 22% said they made between 1 and 10 applications; 12% between 11 and 20; 15% said between 21 and 50; and 17% made more than 50 applications. For the purpose of Table 13, which shows job search support contacts by number of job applications, the latter has been re-coded into four categories. In total 49% Jobcentre staff clients made over 20 job applications and only 4% made

none. Equally, since agencies could be considered effective if their clients secure employment after making a small number of applications it is the latter figure, the number of clients making no applications that gives a clearer indication. The figures are similar for users of RNIB employment services and PACT, which both encouraged 47% of their clients to make over 20 applications and had 2% failing to make any. 67% Job Club users made over 20 applications and no users failed to make any applications. TECs and Training agencies appear to be more effective using number of applications rather than number of employed clients as a measure. None of their clients failed to make any applications. 53% TEC clients made more than 20 applications, as did 58% of users of private training agencies.

| Contacts | Number of job applications | | | | |
|---|---|---|---|---|---|
| | None | 1-5 | 6-20 | Over 20 | Totals |
| Jobcentre Staff | 4 (4) | 26(23) | 28 (25) | 55 (49) | 113 |
| PACT | 1 (2) | 16(27) | 15 (25) | 28 (47) | 60 |
| RNIB | 1 (2) | 13(24) | 15 (27) | 26 (47) | 55 |
| Careers Service | 2 (5) | 8(19) | 9 (21) | 24 (56) | 43 |
| TEC | - | 8(27) | 6 (20) | 16 (53) | 30 |
| Social Services | 2 (6) | 11(33) | 7 (21) | 13 (39) | 33 |
| Training Agencies | - | 4(33) | 1 (8) | 7 (58) | 12 |
| Job Club | - | 1(8) | 3 (25) | 8 (67) | 12 |

Table 13. Support contacts during job search by number of applications

With regard to job applications most participants agreed that they did declare their visual disability. Several used additional innovative strategies described below.

*'I didn't want to register as disabled so I got a note from Social Services to say I was eligible to register, then at least you don't have to put that on applications because then they file it in the bin, but I use the note to claim any help with equipment.'*

*'I always put it in applications. I say I am a registered blind person but you try to counterbalance that by saying you have excellent mobility skills and are prepared to travel.'*

Others felt less confident about declaring their disability.

*'I disguise it as much as possible...whether you like it or not you're regarded as a second class citizen.'*

*'I was finding it difficult to get a job, so for some jobs I wrote for I didn't tell them I was partially sighted. Now that I've lost my sight I have a standard paragraph, which says I can't see. I don't see the point in hiding, but I'm not getting a lot of places. Who's going to employ a person with no sight?'*

### 11.2.3.3. Job Interviews

The majority of working respondents (79%) secured employment by attending 5 interviews or less so clearly it was possible for individuals in this sample to obtain a job offer by attending a small number of interviews. Respondents were asked about their interview experiences and the strategies that they adopt. Some participants felt that their disability would become the focus of the interview rather than their ability to do the job

and had developed tactics to avoid this happening. Others felt that interviews were a complete sham and described discriminatory practise and lack of awareness of interviewers who had a tendency to stereotype disabled candidates.

*'You've only got to give a hint of something that's different and they dwell on it so you've just got to keep away from that and be positive.'*

*'At interview I dwelt on my abilities, rather than my disability.'*

*'At interviews I felt I was interviewed out of inquisitiveness.'*

*'You tell them you've got a degree and they think somebody must have given it to you - "he must have had some help - somebody pulled a few strings for him".'*

**11.2.4 Employment**

**11.2.4.1. Current Economic activity status**

Respondents answered questions about their current economic activity status. Table 14 shows that almost one third (55 or 32%) of respondents were employed at the time of the survey and a further third (57 or 33%) were unemployed and seeking paid employment. The remaining respondents were not seeking work and some of the reasons given were family commitments (4), long term sickness (5), retired (4) and 38 were still studying.

| | | Employed | Unemployed | Not seeking work | Still studying | Total |
|---|---|---|---|---|---|---|
| **Gender** | Male | 26 | 36 | 13 | 26 | 101 |
| | Female | 29 | 21 | 9 | 12 | 71 |
| **Highest qualifi-cation Gained** | GCSE/'O' level | - | 5 | - | 2 | 7 |
| | 'A' level/equiv. | 2 | 5 | - | 1 | 8 |
| | BTec/C&G | 8 | 16 | 4 | 3 | 31 |
| | NVQ/Access | 2 | 2 | 1 | - | 5 |
| | Vocational | 2 | 3 | 3 | 1 | 9 |
| | Degree/ equiv. | 31 | 15 | 5 | 13 | 64 |
| | Post graduate | 6 | 4 | 3 | 3 | 16 |
| | Still studying | 1 | 2 | 4 | 12 | 19 |
| | None | 3 | 3 | 2 | 3 | 11 |
| | Other | - | 2 | - | - | 2 |
| **Regist-ration status** | Blind | 40 | 41 | 17 | 24 | 122 |
| | Partially sighted | 11 | 14 | 5 | 14 | 44 |
| | Not registered | 3 | 2 | - | - | 5 |
| | Missing | 1 | - | - | - | - |

1 employed person did not state their registration status

Table 14. Current economic activity status by gender, highest qualification gained and registration status

Table 14 examines the effect of some other factors on employment status. The higher employment rate for women (41% compared with 26% for males) might lead to the assumption that this was due to part time employment. This was not the case: overall, of those in employment, 73 % of males and 79 % of females were in full-time employment. In this sample, although the numbers are small, females were well represented in professional occupations (see Table 16). A number of differences in the circumstances and achievements of male and female visually disabled respondents have been highlighted throughout the findings, although chi-square analysis shows that relationships between gender and economic activity status, type of school attended, age of onset and highest qualification attained are not statistically significant. Further

research could examine why, in this sample, females generally experienced later onset of visual impairment, attended mainstream education, performed better in examinations and had a higher rate of employment than male respondents.

In terms of the highest qualifications gained throughout their education, respondents are generally high achievers, 80 (47%) gained degrees or post-graduate qualifications. Meager et al. (1996) found a concentration of disabled students in lower level programmes with only 16% of their sample following programmes at GNVQ level 3 or above. Table examines the effect educational attainment has on employment prospects when those still studying are excluded from calculations. A much higher proportion (58%) of respondents with degree level qualifications or above were employed compared with those with vocational or lower level qualifications (27%). This confirms the findings of Tillsley (1997), that those with academic qualifications were most successful in gaining employment.

| Qualification level | Employed | Unemployed & economically inactive | Total |
|---|---|---|---|
| **Degree and post grad.** | 37 *(58)* | 27 *(42)* | 64 |
| **Below degree level** | 17 *(27)* | 45 *(73)* | 62 |

Table 15. Qualification level against economic activity (row % given in brackets)

Table 14 shows that a higher proportion of respondents who were registered blind were employed (33%), than those who were partially sighted (25%) (though a chi-square analysis shows the relationship between registration status and economic activity level is not significant). Bruce et al., (1991) found that in the general visually

disabled population of working age, 17% of those registered blind were employed compared with 31% of those who were registered as partially sighted. Although blind respondents in this sample have achieved a high degree of employment success compared with the general visually disabled population, figures for the employment status of respondents are not encouraging given their generally high level of achievement in public examinations. The field work conducted in 1986 by Bruce et al. (1991) found a similar level of employment amongst visually disabled adults and this research shows little improvement in employment situation for visually disabled people in the intervening years.

## 11.2.4.2. Occupational Area

In order to examine the kind of work respondents were doing the Standard Occupational Classification (SOC) (Office of Population and Censuses and Surveys, 1990) was used to describe the jobs currently undertaken by employed respondents. Table 16 shows that a relatively high proportion of employed respondents had managerial and professional jobs, particularly if they had higher qualifications. The five respondents with degrees or post graduate qualifications working in clerical posts could be an example of under employment. Some classification areas such as sales occupations and plant and machine operators described only one respondent. For Table 16 these have been reclassified into an 'other' category. The level of job satisfaction indicated by respondents grew as the level of job became more professional. Under employment could also be a cause for some job dissatisfaction. Focus group participants drew attention to the difficulties in getting their qualifications recognised and used by employers.

*'After four years I applied for a job within the same service [probation] but somewhere else and the person in charge was frantic; "Oh, we've never had a visually impaired person before, what if someone comes to the door?" - really basic things. I feel like saying, "Stop trying to put barriers in my way", I'm sure I've proved myself after four years.'*

*'I worked for a bank, when I joined 7 years ago they were going to do everything for a blind girl... but I was just there for the disabled numbers. At the interview I was told I would be employed as a secretary/telephonist then when I got there I was just a telephonist. I had secretarial skills and qualifications but had no chance to use any of them. People say to me "you're very lucky to have a job"....'*

|  |  | Manager & admin. | Prof. & assoc. prof. | Clerical/ secretarial | Other | Totals |
|---|---|---|---|---|---|---|
| **Gender** | Male | 4 | 16 | 3 | 4 | 27 |
|  | Female | 2 | 15 | 7 | 3 | 27 |
|  | 1 missing |  |  |  |  | 1 |
| **Further education** | Mainstream | 4 | 16 | 3 | 4 | 27 |
|  | Special | - | 15 | 7 | 3 | 25 |
|  | 3 missing |  |  |  |  | 3 |
| **Highest qualificat-ion gained** | Post graduate | - | 5 | 1 | - | 6 |
|  | Degree/ equiv. | 5 | 21 | 3 | 2 | 31 |
|  | 'A' level/equiv. | - | - | 1 | 1 | 2 |
|  | BTec/C&G | 1 | 1 | 4 | 2 | 8 |
|  | NVQ/Access | - | - | 1 | 1 | 2 |
|  | Other voc. | - | 1 | - | - | 1 |
|  | Still studying | - | 1 | - | - | 1 |
|  | None | - | 2 | - | 1 | 3 |
|  | 1 missing |  |  |  |  | 1 |
| **Registrat-ion status** | Blind | 6 | 21 | 9 | 2 | 38 |
|  | Partial sight | - | 7 | 1 | 4 | 12 |
|  | Not registered | - | 2 | - | 1 | 3 |
|  | 2 missing |  |  |  |  | 2 |
| **Satisfied with this job?** | Yes | 4 | 24 | 5 | 2 | 35 |
|  | No | 1 | 7 | 5 | 5 | 18 |
|  | 2 missing |  |  |  |  | 2 |

Respondents failed to answer questions on these topics as indicated.

Table 16. Occupational area by gender, type of further education, highest qualification, registration status and job satisfaction

Of the employed respondents, who were registered blind, 16% were working in managerial and 55% in professional jobs. This high proportion shows that blindness need not be a barrier to managerial positions. None of the respondents working in managerial and administrative positions came from a specialist further education background and the proportion of respondents in clerical positions with this background (28%) is higher than the proportion from mainstream (11%). Further research is necessary to explore this relationship and to identify features of mainstream education that enable visually disabled people to secure managerial positions.

### 11.2.4.3. Support in the Workplace

One focus group participant described the need for support at work to accommodate *'the time it takes solving the background things before doing the task'*. The need to support some visually disabled people by provision of information in different media has already been highlighted. Other accommodations may also be necessary to enable a blind or partially sighted person to function effectively in a job. Of the 55 respondents in employment 40 used special equipment at work. Some respondents used several pieces of equipment including scanners, close circuit televisions and computers adapted with speech, text magnification or braille output. The majority of respondents had obtained their equipment through PACT; only one had equipment purchased by their employer and one had purchased their own. Once in employment, 7 respondents had to wait less than one month for their equipment and a further 15 received it within three months, so 55% of employed respondents received their equipment reasonably promptly. However, 8 (20%) of these respondents had to wait over six months for any equipment, indeed 2 individuals waited for over a year.

Focus group participants agreed that the availability of appropriate equipment was a key factor in their success at work.

*'When I eventually got a job I was helped at the time by getting specialist equipment. There were quite a few choices then so I was able to experiment.'*

*'I'm extremely lucky in my job because of the equipment I've got. I have a scanner in the office, a scanner at home and an 8-hour per week person for reading.'*

*'My employer was supportive in ensuring I had the proper equipment'*

However several problems were highlighted, such as the delay in receiving equipment, lack of training, bureaucracy, lack of technical expertise amongst advisers and the personal cost involved in continually asking for support.

*'DEAs don't know what equipment is for - and sometimes it is worse when they think they know...'*

*'I was told "You're only the equivalent of half a person here". It was totally because I hadn't got the right equipment.'*

*'I needed a scanner and it took about 14 months to get it. In the end I got so fed up with the DEA that I contacted the Equal Opportunities Commission to say I was being discriminated against. They acted on my behalf.'*

*'I have a scanner, but they won't train me in the software. It's been sitting on my desk for a year and no training...and they won't give me a personal reader because I've got a scanner.'*

*'It's all right if we're assertive and articulate.... Even for people in that category it wears you down sometimes...to have to be like that all the time.... You get fed up being the first.... You feel like you're moaning all the time, whinging, even if you know you're not you think they think here comes that nuisance again....'*

Participants were asked how they remained abreast of new technology and what they had received to identify the most suitable equipment to support them in their own employment setting. Some had made use of agencies but the majority conducted their own research and relied on their own judgement.

*'The RNIB came and demonstrated different equipment and I chose the best one.'*

*'How did I know what was available? Through personal investigation - I read magazines and rang suppliers.'*

The attitude of employers regarding provision of support for disabled staff was discussed. It varied within organisations and the level of support given was dependent upon individual managers.

*'There was support at corporate level, but not at regional level.'*

*'I got blamed if anything went wrong; "He can't see very well". I had no special*

*equipment.'*

*'I worked as a casual administrative assistant [HMSO, Civil Service]. I went before a*

*board for permanent employment, got through, got promotion, went into the personnel*

*department where the woman in charge told me, "You shouldn't be in this job". I told*

*her I'd been doing the job for a year - it was just the department, not willing to help me*

*out....'*

### 11.2.4.4. Employment since onset of visual impairment

Of those respondents who were not employed at the time of the survey 49 said they had

worked since developing their visual impairment. Respondents were asked why they had

left their last job and the most frequently stated reasons were dismissal, return to study

and completion of contract. Numbers were too small to analyse possible influences

however age of onset and registration status are examined in Table 17. This shows that

in this sample respondents who experienced late onset, or are registered blind were least

likely to have worked since sight loss.

|  |  | Worked since onset | Not worked since onset | Totals |
|---|---|---|---|---|
| **Age of onset** | Pre-16 | 41 | 46 | 87 |
|  | 16 - 25 | 6 | 7 | 13 |
|  | 26 - 40 | 2 | 5 | 7 |
|  | 41 - 60 | - | 7 | 7 |
| **Registration status** | Blind | 31 | 49 | 80 |
|  | Partially Sighted | 16 | 16 | 32 |
|  | Not registered | 2 | - | 2 |
| **Totals** |  | 49 | 65 | 114 |

Table 17. Work since onset of sight loss by age of onset and registration status

For some focus group participants losing sight was synonymous with losing work.

*'I was a Solicitor. I lost my sight and I lost my job.'*

For others the decision to leave was made as a result of discrimination in the workplace.

*'Since I was there as a "disabled number" I was not prepared to stay and work for them.'*

*'I ended up leaving, not because they got rid of me but because I was so angry and fed up with it [discrimination] that I found myself another job.'*

When asked directly about their occupational information needs participants raised a variety of topics. The value of a vocational system was recognised and participants suggested information to include.

*'Details about equipment would need to be specific and a contact number listed where people could obtain further information. '*

*'It would be useful to include information on grant awarding bodies. '*

*'The odd success story wouldn't go amiss, but it must be an ordinary success story, about an ordinary person who has made reasonably good progress - something that's attainable. '*

Although a theme of the focus groups was the reliance of participants upon personal contacts to meet their information requirements they were enthused by the idea of a vocational information system relevant to their needs. They emphasised that the information should be up to date, concise and accessible to *'ordinary'* people. Suggestions for access locations included Jobcentres, local post offices and via the Internet.

## 11.3 Interviews with residents of a rehabilitation centre and college students

Three visually disabled residents of a rehabilitation centre and four college students were interviewed. They came from a variety of special and mainstream education backgrounds and the issues that arose reinforced the findings of the focus group discussions. However, since these individuals were at an earlier stage of their vocational rehabilitation they tended to emphasise accessing the support system in general rather

than specific aspects of support. For example rehabilitation residents all wanted information about benefits and their entitlement in a range of media and help to fill out forms. One respondent had been to four sources for help to fill in a benefit claim form (CAB, Local Societies for the Blind, College tutor, Social Services) and even then her application was turned down. All wanted to know more information about technology and described the difficulty they had experienced in accessing information. Problems included the vested interest of suppliers leading to a lack of independent assessment and lack of trained advisers in statutory services. As with focus group participants these individuals also had mixed experiences of support from their DEA. Some found them particularly useful for gaining an understanding of their local labour market but others commented that regular contact was problematic because it was difficult to secure appointments and staff kept changing so there was a lack of continuity. Job Club staff were regarded as too busy to assist with reading through job vacancies but this was the support people wanted most from them. Their choice of course or occupation for the next step after vocational rehabilitation or training had been influenced by college staff who had visited the rehabilitation centre, their local labour market, college prospectuses and work experience placements. As with focus group participants, several interviewees remarked that they had relied on their own initiative to gather information. Respondents requested information on the Disability Discrimination Act, the rights of disabled people in general and about services available to them, particularly agencies that can help with job search.

## 11.4 Summary of occupational information and vocational support needs of visually disabled people and implications for proposed vocational information system.

The primary aim of this part of the study was an examination of the vocational support and occupational information needs of blind and partially sighted people in education, job seeking and employment. The objectives, set to ensure that this aim was achieved, are considered in turn with suggestions for how the needs identified can be met more effectively in the future.

- To gain a better understanding of the experiences of blind and partially sighted people as they progress through education and training into employment

The variety of subject areas studied, institutions attended and professionals encountered make for divergent experiences. Respondents experienced differing levels of support according to the expertise and resources available locally. The proposed vocational information system could alleviate some of this discrepancy by disseminating examples of good practice in support provision and strategies developed by visually disabled individuals to overcome barriers to vocational development.

- To assess awareness and use of vocational guidance, support and sources of occupational information available to visually disabled students and job seekers and to gather satisfaction feedback on these services.

Throughout the research with visually disabled individuals people tended not to make a clear distinction between occupational information, advice and guidance, and vocational support; rather they tended to itemise places they might go, such as the library or Jobcentre or people they might approach, such as their DEA. A common approach to obtaining educational advice was to contact the place where they wanted to study. Such an inquiry could result in anything from receiving a prospectus to an in-depth advice session.

This research shows a lack of available, accessible information to assist disabled people with participation in education and career choice. Certainly some respondents attributed their own educational and vocational decision making to chance and the majority did not receive satisfactory assistance to enable them to realistically assess their post education opportunities. Advice, when sought, was often presented in inaccessible media and respondents remarked at the negative attitude of service providers in a variety of settings. Respondents requested that educational and occupational information should be available to visually disabled school children. The research also shows that occupational information should be available across all age groups. Equipment to assist with access to information in education and job search was found to be in short supply. The findings have demonstrated that for many visually disabled people access technology remains a world of confusion and missed opportunity. In addition educational staff and vocational advisers were viewed as lacking knowledge in this area. Some problems, such as bureaucratic application procedures and the delay in receiving equipment are matters for statutory employment services. Other issues such as lack of training for individuals when equipment is supplied could be eased by ensuring that individuals are aware of their entitlement to training under financial assistance schemes.

Choice was a recurrent theme in the study with participants seeking a greater independence in educational and vocational decision making aided by accessible information and not hindered by low expectation of schools or professionals. Ease of access to information was another theme, with a repeated plea for easier independent access to educational and careers information. Struggling with 'the system' to get appropriate information and support was a common complaint and it was clear that respondents' awareness of support services varied.

- To record the post education outcome for blind and partially sighted students from both special and mainstream backgrounds and to investigate the support received by students in these settings

The employment status of respondents was recorded. Failings were noted within both mainstream and special schools to meet educational support needs and the lack of experience amongst teachers and lecturers in dealing with visually disabled pupils was highlighted. Educational staff were generally seen as willing to help but unable to translate their willingness into practical support through lack of experience and knowledge. The need for awareness raising and training for the full range of professionals working with disabled people was highlighted.

- To investigate how well prepared visually disabled students are for the next phase of their life by exploring attitudes to and experience of the transition from education to employment

Transition from school to FE or HE and later into the labour market was traumatic for some participants. A lack of continuity of support from previous educational experiences was a common occurrence. Although self-reliance for information gathering and job search is not a bad solution to the perceived lack of useful assistance, visually disabled people need to be aware of the variety of support to enable them to choose from what is available. Other aspects of vocational support requested by participants included assistance with searching for appropriate job vacancies, writing job application letters and developing interview skills.

Respondents expressed a clear desire for independent access to occupational information and details of job opportunities, bemoaning the lack of relevant information about jobs and noting that Jobcentres are ill equipped to support visually disabled people. Respondents described how they had been directed to certain training courses or occupations because professionals believed that they offered better employment prospects, even if these courses and occupations did not match the individuals' aspirations. Both service providers and disabled people need access to up to date labour market information to enable them to make decisions based on evidence rather than out of date misconceptions. There is also a need for information about job accommodations, descriptions of how jobs have been altered to accommodate functional limitations, to educate job seekers and service providers about the range of employment possibilities.

- To ascertain factors that could be important influences on successful completion of education and obtaining employment with reference to agencies that help visually disabled people to secure employment

Incentives and barriers that either encourage or deter people from continuing with their education and job search were discussed in the context of the choices that people made. Practical incentives mentioned were encouragement from school, useful support from professional advisers and financial assistance to purchase special equipment. Other factors that motivated people were a desire for self-development and work related factors such as getting a job or pursuing a new field. Factors that acted as a discouragement were lack of support in the classroom or work place, lack of study aids or access equipment, limited availability of accessible information about educational and occupational opportunities, difficulties with completing job applications and inadequately trained professionals. In addition the time taken to respond to individual's requirements often reduced the value of the assistance received. Respondents also expressed a clear demand for awareness raising amongst employers and service providers in statutory and voluntary agencies to lift their expectations of disabled people generally. Information is required to combat the underemployment of visually disabled people and to encourage employers to accommodate non-standard print users at work.

The results of this research give a useful indication of where and to whom to target occupational information. For many, the desire to access education is linked to the desire to gain employment. For this reason, provision of information about education needs to be combined with occupational information describing employment prospects and careers. Both mainstream and specialist educational establishments require information relevant to visually disabled people. The information provided should include positive role models and sources of specialist advice in an attempt to counteract the low participation by visually disabled females, particularly in specialist education

offering residential provision. Low participation by those from an ethnic minority can also be tackled in this way. Older people should be targeted to counteract economic inactivity. Those with additional disabilities require information about appropriate provision to encourage them to pursue further and higher education. Respondents consistently commented upon the failure of service providers and institutions to provide information in accessible formats.

The proposed vocational information system must take into account the range of preferred media. The information given in the vocational information system and the language used to present it must be appropriate for a wide age range. Occupational information given should be tailored to visually disabled people or direct them to specialists who can offer this service. The system could be used to raise awareness of the availability and scope of advice and guidance on education, training and employment issues. It could inform visually disabled people of agencies providing vocational support services acting as a signpost to the more popular services and indicate where individuals can obtain assistance that they might find it difficult to locate. It could respond to the specific requests of respondents, for example, by providing information on the Disability Discrimination Act (DDA) and how it applies to education and work environments. It could also offer information on employers who provide work experience placements to visually disabled people.

A vocational information system can directly address some of the needs expressed by respondents. Other barriers experienced by the visually disabled people interviewed, such as employers' attitudes, a lack of interest in individuals' aspirations by service providers and lack of knowledge and experience amongst professionals in education can

be dealt with indirectly by providing information to encourage and enable these groups

to provide appropriate assessment and support for disabled employees, job seekers and

students.

# Results

# Chapter 12. The vocational service providers' perspective

## 12.1 Introduction

This chapter describes the data gathered from vocational rehabilitation workers and related service providers in the voluntary, statutory and private sectors, interviewed to investigate their occupational information and vocational support needs. Vocational rehabilitation provision in the Netherlands is also described and the use made of occupational information in that country is highlighted.

Those interviewed were asked about their work and information sources. They were also asked to mention any limitations with these information sources and to consider their support needs in terms of information and training.

## 12.2 The role and work of voluntary sector vocational service providers

A convenience sample of 16 service providers (13 from RNIB and 3 from ENTA) were interviewed individually. All worked in the area of vocational service provision to disabled people and each had slightly different, though overlapping, roles reflected in the variety of job titles given. These included Employment Consultant, Work Placement Officer, Vocational Rehabilitation Officer, Occupational Psychologist, Vocational Trainer and Employment Development Officer. Backgrounds varied in that some

rehabilitation workers had degrees, though there was no pattern in subject area, others had teaching qualifications, or had worked in the commercial sector, or managed their own business and some had transferred from statutory sector providers such as the Employment Service. When asked to describe their main function a variety of statements were made.

*'The preparation of students in terms of their motivation and skills to seek and obtain work or further study'.*

*'Vocational guidance'.*

*'Assisting clients to gain, retain and succeed in employment'.*

*'Ensuring the client's action plan is fulfilled, directing the client towards the next step and trying to make sure this is implemented.'* [In this case the action plan came from the initial assessment, usually conducted by PACT].

Several responses related to assessment.

*'Formal assessment of clients which leads to a personal action plan including career goals'.*

*'Assessment of training needs and provision of training.'*

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*'Assessment of individuals technical requirements at work and the provision of compatible technical solutions'*

Only one provider interviewed mentioned job placement. He was working on a TEC funded project that aimed to place disabled people into work.

All interviewees noted the importance of assessment before providing any services. Some undertook the assessment themselves, others provided their services as the result of a referral from another agency that had already undertaken it. Although various approaches to assessment were described, service providers typically considered a wide variety of information from multiple sources during the course of an assessment. Educational attainment and skills, vocational history, medical diagnosis, client behaviour (from observation), personal needs and use of special aids were all mentioned. Some service providers used an informal approach, discussing a wide range of factors that may impact on an individual's vocational situation, such as family support, the local job market, and the availability of training places locally. Others took a more formal approach using psychometric tests and interest inventories to obtain information about skills, attributes and knowledge and followed a more structured interview programme covering employment history, experience and responsibilities. Assessment data was used for planning training programmes, recommending special equipment and, according to one rehabilitation practitioner, *'developing a realistic occupation range'*.

Vocational guidance was also frequently mentioned. One provider described this as *'offering advice to help people consider their future and make decisions'*. Support to take forward any decisions made took the form of access to careers information, help

with application forms, assistance with defining action plans to attain career goals,

researching options for further training, negotiating funding, arranging work experience,

assessing individuals on work experience placement and provision of job seeking skills

courses.

Service providers agreed that networking is an important aspect of their job since they

have contact with so many organisations including employers, social services, hospitals,

the Benefits Agency, TECs and the Government Employment Service. Information

provision to these groups is also a part of their work, motivating and encouraging them

in service provision to disabled people. One provider interviewed said she spent a good

deal of time involved in *'information provision to anyone and everyone'*. Information

provision, though time consuming, was often conducted informally, outside of any

service agreement and in the absence of any income generation, particularly if the

recipient was a disabled individual.

Several providers stressed the importance of follow up to encourage individuals and

some had a structured programme for this purpose. Interviewees also mentioned

administrative activities such as dealing with referrals to and from other agencies and

report writing.

### 12.2.1 Limitations of the job or problems experienced by service providers

Respondents were asked to highlight problems they experienced in the course of their

work. The most frequently mentioned difficulty was coping with the range of

requirements presented by disabled individuals. Another common problem was keeping

up to date with changes in the field, whether these changes related to new equipment or software, changes in benefits or employment legislation. Funding and referral mechanisms were also seen as problematic. In practice much of the work conducted by service providers is carried out as a result of referrals from Employment Service PAC Teams (or Regional Disability Service teams, as they are now called). Referrals specify the services to be provided to an individual. RNIB staff expressed frustration at the need to seek further referral from PACT before supplying any additional services they deemed necessary.

Another challenge to service providers is the variety of activities they are involved in and the wide range of skills and knowledge they require. These include understanding the functional limitations of disability, vocational assessment techniques and an ability to train others in job seeking skills. Vocational service providers must be able provide careers guidance, survey labour market trends and relate findings to individuals with particular disabilities. Additional skills in counselling, job analysis and implementing job accommodations including the development of new working methods and appropriate use of access technology and special aids are required. Knowledge of particular disabilities, statutory and voluntary support services, legislation, health and safety and the application of equal opportunities policies is necessary. Networking with a wide variety of other agencies including employers to secure employment opportunities requires persistence and diplomacy. Each practitioner does not require a high degree of competency in every area but the scope of individual providers' jobs was found to be broad enough to require most of these skills. RNIB Employment Consultants for example are required to complete a monthly activity report giving details of jobs they have been commissioned to undertake. This form lists twenty-eight different types of job

that they could be asked to provide including initial vocational assessment, employment technology assessment, small business viability assessment, vocational guidance, job search skills advice, job placement, provision of training to employers, promoting their services and labour market research.

In order to examine the work actually undertaken by Employment Consultants, three were asked to keep a diary of their activities for a 2- week period. Analysis showed that these Employment Consultants spent an average of 40% of their time each week on travel, general administration and work planning, 23% on client related work including client visits and 13% on report writing. The remaining time was spent on promotional activities, miscellaneous information provision, research and development activities and professional development (see Table 18). The job descriptions of 5 employment specialists from different voluntary organisations were also analysed and the components of the work of a vocational service provider are presented in Table 19. These include case management, client assessment, networking with other organisations, administration and research and development.

| Activity | Ave. Time per week (%) |
|---|---|
| Admin | 13 |
| Planning time | 11 |
| Report writing | 13 |
| Travel | 16 |
| Client visits | 11 |
| Client related work | 12 |
| Misc. information provision | 15 |
| Promotion/marketing | 7 |
| Professional development | 2 |

Table 18. Activity analysis of Employment Consultant work diaries

| Case Management | Client interviews/ assessment | Networking | Research and Development | Professional Development | Marketing/ Promotional | Administration |
|---|---|---|---|---|---|---|
| Co-ordinating services. Report writing for external and internal purposes. Research for a client: aids and equipment, funding sources, opportunities, etc. Maintaining case notes. Liaison with external agencies and colleagues. Review of referrals | Vocational guidance. Careers guidance. Work based assessment. Goal setting. Action planning. Information provision. | With: employers, Voluntary agencies, Local societies, Employment Service staff, Training and education providers, Other RNIB departments, Social Services, Benefits Agency, | Developing project proposals. Working on new initiatives. | Keeping abreast of developments in the field including special aids and technology, legislation, funding, benefits, government schemes. Information sharing with colleagues. | Preparation of marketing materials. Presentations to various groups. Developing links with employers and DEAs. | Dealing with correspondence. Completing admin. forms for consultancy work. Planning and organisaing visits/ interviews. |

Table 19. Components of the job of employment specialist

## 12.2.2 Information used

Service providers were asked to describe the information used during the course of their work. All respondents mentioned the Government Employment Service as a useful source and most dealt personally with PACT members and Disability Employment Advisers based at Jobcentres around the country. The Careers Service and resource centres for disabled people were also mentioned. A wide variety of publications and reference books were used, such as 'Occupations', a manual describing different occupations, the UCAS handbook and the 'In Touch Handbook' for visually disabled people. Respondents had built up their own collections of vocational information including college prospectuses, equipment brochures and course directories. Some practitioners regarded rehabilitation journals as useful but the majority did not mention this information source. Information about job vacancies was gleaned from local authority weekly vacancy lists and national and local newspapers. One training college maintained a job vacancy bulletin board offering independent access to visually disabled students. All of the service providers interviewed used software as a source of information and most used computerised storage facilities in the form of databases. The TAPS (Training Access Point) database giving information about colleges and courses was frequently mentioned. It is maintained by the Careers Service and updated every few weeks by circulation of floppy disc. Practitioners found that once an individual had selected an occupational area of interest TAPS could provide information about the entry qualifications required and places offering courses leading to these qualifications. Respondents cited other members or departments of their own organisation as useful sources of information and regarded colleagues as having their own areas of expertise, *with information in their head*

*that can't be found quickly elsewhere'.* The value of information gathered through work with visually disabled individuals was also stressed because solutions that work for a person in a particular situation may be applicable to another in a similar situation.

Some service providers used internal databases to record and share snippets of information about products and services and to store directories of useful organisations and contacts. Several had developed their own database and others preferred to keep paper records of product details, prices, suppliers and other contact addresses. Some of the information stored was duplicated both across organisations and within teams. Several respondents maintained information that could be useful to a wider group, such as a database of employers interested in the employment of disabled people, a library of career information relevant to disabled people, results of special equipment trials and details of job accommodations. One team of RNIB Employment Consultants had a 'client database' which contained data on more than 3,000 visually disabled people.

### 12.2.3 Difficulties with the use of information

Service providers highlighted some problems they faced when dealing with information, agreeing that a good deal of time was spent researching information, to solve particular problems that may never be needed again. Some thought that they spent so much time conducting informal research and answering general enquiries that the main priority of work with visually disabled people was being overshadowed.

Difficulties with storage and retrieval of information were identified and lack of communication was a common problem. Some providers complained that colleagues have a lot of useful information that does not get passed on since there is no formal structure for information sharing. Some recognised that they have information that could be useful to others, for example informal feedback from disabled students about colleges and courses, but did not record this data for passing on to others and lacked the time to do so. One team had a procedure to circulate information that any member considered important enough to be shared round but this information took a long time to reach everyone and some members said they lacked the time to read it all and often missed important items.

Dealing with existing information in an ordered fashion was also a problem. One respondent commented that the large number of internal directories was confusing and others said they did not know where information was kept. The issue of lack of indexing was raised several times and physical location also created access difficulties.

*'Information in filing cabinets is not used very much because it is not indexed properly.'*

*'The location of filing cabinets is not very good. If they were to hand they would be used more.'*

These problems are linked because it seems that when information sources are not easily accessible practitioners compile their own and consequently information is not passed on.

*I don't use the database as much as I should because I have my own ways of accessing information. If there were more information that was clearly indexed I would be more likely to use it.'*

Even respondents from the same organisation had no standard format for maintaining client files. In the absence of a standard format for recording this data practitioners exerted their personal preferences so information of general interest is difficult to extract. However respondents generally recognised the value of extending access to their information and some said they would like disabled individuals to be able to access information, specifically vocational guidance packages and occupational information, for themselves, in their own time. Lack of computer skills and cost were seen as a barrier to this, particularly for visually disabled users who would require access technology. The TAPs database was given as an example of a software package which people found easy to use since it requires only the space bar, curser and enter keys. Managing information was also an issue for service providers. Sorting and categorising of information is necessary if it is to be available to and understood by members of the same organisation let alone more widely useful. Generally providers wanted increased computerisation of information. For example one required instant access to student addresses and details of their home area when dealing with telephone enquiries but the data is currently only available in print. However the issue of confidentiality of computerised client reports was a concern and there was some reluctance to use the technology already available: *'I have access to the Internet from my PC but I don't use it.'*

Service providers interviewed expressed concerns regarding the accuracy of their information, mainly because they believed it was out of date.

*'Much of the paper information held is out of date or inappropriate.'*

*'I am not confident that our database is up to date.'*

One reason given for this was the failure to update communal files when this was a shared responsibility. One team had a computerised document for storing details of prices of frequently ordered equipment, which everyone was expected to update, *'but this doesn't seem to happen'.*

### 12.2.4 Requested Information

When the possibility of a new computerised vocational information system was raised with service providers all said that they would welcome an easy way to update colleagues both locally, throughout their organisations and in other agencies with useful occupational information.

When asked about information they would like to have access to via such a system service providers gave a long list. They wanted more information about all levels of education and training opportunities for disabled people and sources of funding for these. Information about courses is widely available, through TAPS, but this concentrates on mainstream

provision so there was a call for more information about specialist options and providers were interested in feedback from people who had undertaken education and training regarding accessibility and support offered. It was recognised that transition between school and further education can be difficult for disabled people so respondents called for more information about how individuals could be supported, particularly details of links between special schools and colleges. Details of organisations that provide support for all those involved in education provision to visually disabled people was requested, particularly information for staff who have never taught a visually disabled student before and training for support workers. More details of services offered by careers officers and contact numbers for specialist careers officers were also requested. Information about basic skills training, such as literacy skills, and the growing range of possible qualifications were requested. Details of confidence building courses for disabled people plus training in particular skills such as braille and those required for self-employment were also requested along with information about local training organisations, their equipment and general accessibility for visually disabled people. Service providers envisaged that the vocational information system could assist them by providing access to local and national information since disabled people often move to different regions and new programmes in one area may inspire other areas to follow. Providers covering large geographical areas were also eager to have access to information about local facilities before visiting an individual.

Frequent requests were made for more information about special equipment, low vision and daily living aids. Several asked for an introduction to access technology with the functions of different technical aids. Others wanted more sophisticated information about which

products are compatible and the results of technical trials. Details of where to get independent advice and who can provide initial assessments and reviews for new technology requirements were often requested, as was information about where to get help with funding. A catalogue of supplier names and addresses and all the products they work with was requested and one respondent suggested that suppliers' literature and price lists should be more readily available. Information about training for technicians who support visually disabled students was also requested. Feedback from visually disabled people about how they are using special equipment and how it is functioning in their work place was asked for and details of services offered by resource centres, the equipment available, procedures for arranging demonstrations and contact names were also requested.

Providers were generally aware of vocational guidance packages such as Adult Directions and CID, indeed some used them, but others wanted to know how and where to access them. All respondents were interested in hearing feedback from users, both visually disabled people and professionals regarding their usefulness and accessibility. Practitioners commented that careers information is mainly aimed at 16-year old school leavers and expressed a need for information appropriate for use with older job seekers, and those who are newly disabled and therefore in the job market for the first time with a disability. Easier access to labour market information was requested with details of how to access sources of labour market data such as Chambers of Commerce and TECs. Some official data sources, such as the Census of Employment and Labour Force Survey, and other publications like local authority bulletins and DfEE research publications were recognised as potentially useful but providers wanted a brief description of each plus details of how to access it.

Information about job seeking was requested by most of the respondents. Specific requests included details of job seeking skills courses, lists of those who can assist with job search in local areas including DEAs and PACT contacts, plus where visually disabled people can get help with completing application forms and CVs and interview skills. Respondents wanted information about employers, occupations and job vacancies, including voluntary work and work experience opportunities. Several suggested that examples of disabled people in work, unusual or innovative types of employment and information about organisations that are positive about employing them would be useful. One respondent identified a need for occupational information that is positively orientated to disabled people to boost confidence and motivation and to indicate occupational areas that individuals might consider. Feedback from visually disabled people who have undertaken work experience with particular employers was also considered useful. Although the vocational service providers interviewed did not have a primary responsibility for advising disabled people about benefits most did get involved in provision of benefit information so requests were made for more details about access to benefits information, the benefits help line and procedures for claiming benefits.

An introduction to different disabilities, for both practitioners and disabled people, was requested with details of what individuals should do and whom they should approach when they develop a disability and an explanation of the registration process. Information about support services for newly disabled people such as contacts at eye hospitals and details of services offered by low vision aid clinics and how to access them was requested. Practitioners wanted more information about the 1995 Disability Discrimination Act,

employment law and health and safety regulations to inform visually disabled people of their rights. Information about other support agencies such as Citizens Advice Bureau, local societies for the blind, supported employment providers and Social Services was requested.

Providers of services to visually disabled people recognised that access to information can be problematic for blind and partially sighted people. The interviewees wanted information about braille transcription services, cassette libraries, talking newspapers and libraries with resources for visually disabled people. Information related to mobility such as obtaining travel timetables in alternative media, mobility training and guide dogs were also requested. RNIB Employment Consultants recognised that, since they rarely carry out job placement activities, a central point where visually disabled people could look for jobs would be very useful. Employers seeking suitable locations to advertise their vacancies in order to attract visually disabled applicants could be directed to this point.

## 12.3 Statutory Providers

### 12.3.1 Training and Enterprise Councils

A series of telephone interviews was undertaken with representatives of four Training and Enterprise Councils (TECS), each known to be active in supporting disabled people, in order to find out about the vocational information and guidance provided by accredited training providers. Each respondent mentioned the guidance systems Adult Directions and Microdoors and the TAPS database for information on education and training opportunities,

though one preferred the Opportunities Database (a database similar to TAPS, developed by Birmingham Careers Service). Other packages mentioned were KUDOS, Career Builder and CID.

## 12.3.2 Birmingham Employment Rehabilitation Centre

Telephone interviews were undertaken with the Senior Psychologist and an Occupational Psychologist (OP) from Birmingham Employment Rehabilitation Centre (ERC) to ascertain how occupational information is gathered and used by those responsible for assessment of disabled people. Until recently it was the ERC policy that each new OP would carry out 12 job analyses, enabling them to practice core skills and add to the library of occupational information. Informal training was given in the principles of job analysis and example reports were discussed. OPs were advised to avoid organised factory tours or company visits in preference to informal discussions with supervisors. It was customary to ask what problems a person with a disability might have in a particular job since this question often uncovered anecdotes of previous worker with disabilities. The OP was then expected to judge which of the perceived problems constituted a genuine barrier to a job and note the limiting factors in a report, produced as soon as possible after the visit. The Senior OP preferred to allow each member of the team to develop their own style of job analysis, within broad guidelines, rather than apply standard methods of data collection and presentation. Consequently the reports differed in content and format. The data was not computerised and is used for reference rather than direct job matching. The Senior OP held the opinion that this approach to job analysis resulted in useful descriptions and gave staff

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valuable experience to draw upon when advising disabled people. Examination of a number of reports compiled by various OPs reinforced the view expressed by occupational health physicians in Chaplin's research (1992), that professionals preferred to develop their own methods of recording occupational information. Due to the reorganisation of employment rehabilitation services in Birmingham new OPs joining the team no longer follow a training programme in job analysis.

## 12.4 Private providers - Brook Street Bureau recruitment agency

A regional manager with Brook Street Bureau recruitment agency described the service they offer to disabled job seekers. This respondent believed that Brook Street Bureau probably gets more disabled job seekers than any other high street recruitment agency because it is a member of the Employers Forum on Disability, though no figures were available to back up this claim. The efforts made to attract disabled job seekers include postcards in agency windows advising people that all vacancies are open to disabled people (not likely to attract many visually disabled job seekers!) and a variety of job seeking projects in different parts of the country for disabled job seekers.

The process of matching a job seeker to a vacancy was described. When a job seeker joins the agency a standard form giving career history for the last ten years and personal details is completed. Skills such as word processing are tested using a computerised evaluation package. The purpose of these tests is to check that a CV accurately records skills rather than provide a skills assessment. Job seekers' CVs, covering personal and past employment

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details, are held in paper files. Employers seeking new staff supply information about their

organisational culture, structure and policies. This is recorded on a computerised database

for ease of storage, searching and retrieval. In addition recruitment consultants gather

occupational information in the form of job descriptions and company statistics through

personal contact with organisations. Employers supply the agency with a job description

and person specification for their vacancies. Brook Street asks the employer to identify the

most important skill required and then uses this to carry out an initial matching procedure.

Other criteria such as location and salary are then considered and a recruitment consultant

produces a short list of candidates. The recruitment consultant will then use data in the

employer database and his understanding of the organisation to identify the most

appropriate candidate(s) to put forward for interview. The respondent stressed that the

limited amount of information held by their computer system could not compensate for the

skill of the recruitment consultant in identifying a good match between job seeker and

vacancy. This skill is the application of knowledge built up from experience of dealing with

the employer, visiting their premises and researching previous work with that organisation.

Thus some flexibility in the matching system is required when dealing with a job

specification provided by the employer.

As with other service providers occupational information is not a term that this recruitment

agency would tend to use though recruitment consultant staff deal with occupational

information every day. Since the primary customer for recruitment agencies is usually the

employer the focus of service provision is different. The emphasis is on meeting the

employers needs and selecting the most suitable candidates rather than supporting job seekers, with or without disabilities.

## 12.5 The Dutch system of disability assessment and rehabilitation

A visit was made to the Netherlands to investigate the operation of the Dutch system of vocational rehabilitation with a view to comparing the work of vocational service providers in the UK and the Netherlands and applying lessons from the Netherlands to the UK. Interviews were undertaken with eight rehabilitation staff including labour experts analysts, an occupational physician and the manager of a rehabilitation team. The process of disability assessment was observed. Although the Government does not prescribe assessment methods it will not accept assessment reports giving full benefit allowance to disabled people unless circumstances are exceptional. All capacity measurements and subsequent insurance judgements have to take into account the full range of jobs in the Labour Structures Documentation not just those of a similar level to a claimants former occupation. So, for example, a former university professor , unable to return to an occupation of this nature due to disability is not entitled to the full amount of disability benefit since he is expected to supplement his income by taking an unskilled job.

Although the Dutch system of disability assessment and rehabilitation is sophisticated, practitioners highlighted a number of areas requiring further development. Some commented on the Capacity Pattern used for disability assessment. The original version had 38 factors and the present has 28 making it more manageable but there are omissions and

development continues. Although approximately one third of claimants present with psychiatric disorders few of the 28 factors deal with psychological aspects so the instrument is lacking in this area. In these cases Physicians and Labour Experts must use their professional judgement to agree the loss of capacity. This highlights another problem. A Labour Expert, who did not use a medical model of disability, designed the original instrument. The Physician interviewed explained that he finds it difficult to describe claimants with the precise measurements required by the Capacity Pattern. The lack of suitable training courses for rehabilitation professionals was also discussed. GMD provides training and work experience for its staff and Labour Experts use videos of people at work to conduct analyses for discussion in a training situation. GMD staff commented that training is necessary to ensure the consistent application of the Capacity Pattern by all staff because the existing guidelines provided had proved inadequate in this respect.

It became apparent that none of the practitioners interviewed had much experience of working with visually disabled claimants, since the majority of GMD clients presented with either cardiovascular problems, loco-motor difficulties or psychiatric disorders. Assessment methods for those with other disabilities, such as visual disability are not so well developed.

Several practitioners commented on the range of individuals who 'slipped through the net' of this system. One respondent from a private rehabilitation company claimed that state service providers focused their support upon those who least needed it and were most likely to gain employment. He suggested that individuals who are likely to require extra support to be able to work find it more difficult to get assistance and that continual

movement of rehabilitation staff made the development of working relationships difficult. Statutory services have a well-established system for gathering and using occupational information. Unfortunately this information is not nationally available. Access is not granted to private rehabilitation agencies or other sectors of the community.

## 12.6 Conclusion: The information and support needs of service providers

Information requested by practitioners to assist with their work emphasised feedback from users as well as factual information. Examples were disabled students' views on college facilities and the operation of special equipment in the work place. There is little opportunity for dissemination of good practice amongst vocational service providers themselves. Some innovative ways of making occupational information accessible to disabled people were highlighted, such as open access to terminals with information and guidance software. Some practitioners recognised the lack of useful occupational information in their own information systems and RNIB Employment Consultants recognised the need to develop their own understanding of occupational opportunities for visually disabled people in general. There was no generally recommended structure for the provision of vocational guidance services and no recommended information sources. Service providers had favourites, often used in former jobs and some preferred to rely on their previous personal experience of work. When analysing jobs or developing profiles of disabled people, respondents based their assessment decisions upon a wide range of information and their own experience and judgement, but did not follow a standardised path to obtain the data. There were no standard checklists used, although disabled individuals

requiring a more rigorous assessment may be referred to an Occupational Psychologist. The process is not precise and relies on the subjective impressions of the service provider involved. Most of those interviewed had a good deal of experience of providing vocational services to people with particular disabilities and were eager to do so. However some lacked experience of dealing with a wider range of people, such as employers, who may require evidence to back up subjective opinions. Though service providers might be working towards job placement there was little evidence of this service actually being provided.

Training for vocational service providers appeared to be lacking in view of the wide range of tasks they were expected to undertake. In some cases these tasks are not well defined or understood and providers were usually expected to learn on the job. In the UK there is only one degree level course in vocational rehabilitation. The professional organisation for those working in the field of vocational rehabilitation is embryonic, and there is no resource centre offering practical support and no national research and training centre. This lack of formalised training is reflected in the range of background and skills of the service providers interviewed. Localised projects to identify training needs were noted during this research but individuals commented that progress was slow and fragmented due to lack of central co-ordination. Despite a lack of formal training most respondents demonstrated in depth knowledge of developing employment opportunities for individuals with functional limitations. Structured job analysis could be encouraged by the use of a suitable instrument. With the application of job analysis techniques, individual assessment procedures and

training in the use of labour market data, vocational service providers could give evidence to support recommendations they frequently make to disabled people and employers.

The job analysis instrument (described in Chapter 14) designed during the course of this research is recommended to service providers as a tool for gathering occupational information. It has a simple checklist format to encourage those used to a non-standard approach to use it. If the occupational information gathered is entered into an occupational information database it can be used to meet some of the requirements expressed by respondents. However, interviews with service providers also indicated that job analysis alone could not satisfy all of their occupational information and support requirements confirming that a much wider vocational information system is necessary. This vocational information system is also discussed further in Chapter 14.

# Results

# Chapter 13. The employer perspective

## 13.1 Introduction

In order to ascertain employer practice, attitudes and information needs, an investigation of existing employment opportunities for visually disabled people was undertaken. A postal questionnaire yielded 194 responses (38 %). Follow up visits were undertaken to 20 respondents to observe employer practices at first hand, to ascertain employers occupational information and support needs in more detail and to carry out job analyses, testing the new job analysis instrument.

The jobs undertaken by visually disabled workers were examined and any work adjustments introduced were investigated. Employment practices regarding the recruitment and retention of disabled staff were examined and respondents were asked about problems they have or envisage when employing blind and partially sighted staff. The fieldwork was carried out before the introduction of the Disability Discrimination Act (1995) which places a requirement upon employers to undertake 'reasonable adjustments' for disabled employees. Some aspects of practical support available to employers have changed since the fieldwork was conducted, for example various Government schemes have been replaced by a single scheme entitled Access To Work. However the study provides data regarding employers'

support and information needs to aid the design of the vocational information system, which could serve employers today. The study also highlights some general attitudes to the employment of disabled people and visually disabled people in particular.

A number of methodological problems emerged with the follow-up visit phase of the study. These are highlighted in this chapter but a more detailed consideration is given in Chapters 14 and 15.

### 13.2 Employer Survey Response

As a result of a review of industrial trends and discussions with professionals in the field of vocational rehabilitation a number of Standard Industrial Classification (SIC) codes were selected as representing occupations likely to offer vocational opportunities. These SIC codes were used by Income Data Services to draw up a random sample of 516 employers for the survey. In total 194 (38%) completed questionnaires were received from employers, across the country, involved in a range of activities including manufacturing, retail, agriculture and service industries. Respondents gave information about number of disabled employees, number of blind and partially sighted employees, number and types of manual jobs within the organisation, recruitment and training practice, equal opportunities policy implementation, understanding of support services available and suggestions of jobs which may be appropriate for blind and partially sighted workers.

Since the Standard Industrial Classification (SIC) was used to select the initial sample, the SIC codes of non-respondents is compared with those of respondents to ensure that respondents are representative of the sample (see Table 20 below).

### 13.2.1 Industrial activity

Respondents were asked to indicate their main area of activity by selecting from a list based upon the Standard Industrial Classification (SIC). The industrial activity of respondents was split into broad categories. Table 20 shows that almost three quarters fall within manufacturing (73%).

| SIC | Respondents | | Non-respondents | | Total sample | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Agriculture | 7 | 3.6 | 9 | 2.8 | 16 | 3.1 |
| Manufacturing | 141 | 72.7 | 210 | 65.2 | 351 | 68 |
| Transport | 9 | 4.6 | 12 | 3.7 | 21 | 4.1 |
| Retail | 12 | 6.2 | 32 | 9.9 | 44 | 8.5 |
| Services | 25 | 12.9 | 59 | 18.3 | 84 | 16.3 |
| | | | | | | |
| Totals | 194 | 100 | 322 | 100 | 516 | 100 |

Table 20.. Comparison of respondents with non-respondents by SIC category

The given critical value of $\chi^2$ with 4 degrees of freedom for p = 0.05 is 9.49. The calculated value of $\chi^2$ (5.69) (see Appendix 7) is less than this indicating that the proportional split of respondents and non-respondents is not significantly different and therefore that the characteristics of respondents are indicative of the characteristics of the sample.

### 13.2.2 Profile of Workforce

### 13.2.2.1 Size of company by number of employees

Respondents were asked to note the number of both full and part time staff, at that site only, to give an indication of size of organisation.

| Total employees (full and part-time) | N |
|---|---|
| 1-30 | 32 |
| 31-100 | 89 |
| 101-250 | 42 |
| 251-1,000 | 25 |
| 1,000 + | 3 |
| **Total** | 191 |

3 respondents did not answer this question

Table 21. Size of company by number of employees

Table 21 shows the size of responding companies by number of employees. Although the intention was that questionnaires should be sent only to companies with more than 30 employees, since these employers were required to comply with the Quota Scheme, it appears that mailing list records were out of date since 32 respondents had less than 30 employees. All respondents had some full time staff but 30% said they had no part time workers.

### 13.2.2.2 Breakdown of employees by disability

Table 22 shows the number of employees in organisations employing disabled staff in general and visually disabled staff in particular.

| Size of company by no. employees (full and part-time) | Respondents employing at least one disabled person | Respondents employing at least one visually disabled person |
| --- | --- | --- |
| 1-30 | 4 | 0 |
| 31-100 | 41 | 6 |
| 101-250 | 27 | 8 |
| 251-1000 | 15 | 4 |
| 1,000 + | 3 | 1 |
| Total | 90 | 19 |

Table 22. Number of disabled and visually disabled staff by number of employees

In all 90 (46 %) respondents employed at least one disabled person and 19 (10%) employed at least one visually disabled person. Analysis of size of company by number of employees against number employing at least one disabled person gives a significant result ($\chi^2$ = 57.77; d.f.= 4 ; p<.05). In this sample companies most likely to employ disabled people were small, with between 31 and 100 employees. Since the number of respondents employing visually disabled people is small and the chi-square test is invalid it is difficult to draw any conclusions from the figures. However, in this sample, companies with less than 250 employees employ more visually disabled people.

Table 23 shows the employment of part time staff against employment of disabled people. Analysis gives a significant result ($\chi^2 = 4.99$; d.f.=1; p<.05). Respondents who employed part time staff were more likely to employ disabled people.

| Employ part-time staff? | Employ disabled people | | |
|---|---|---|---|
| | Yes | No | Total |
| Yes | 68 | 22 | 90 |
| No | 61 | 40 | 101 |
| Totals | 129 | 62 | 191 |

3 respondents did not answer this question

Table 23. Comparison of respondents who employ part time workers and disabled people

### 13.2.3 Employment practices

### 13.2.3.1 Training

Questions were asked regarding both method and content of training given to manual workers. The most popular method of training for manual workers amongst the total sample was 'on the job', favoured by almost all companies (93%). Some respondents commented on how this was done. Job shadowing, regular assessment and open learning were mentioned in answers. Other methods used were internal and external training courses and apprentice schemes. Content of training included use of equipment, mentioned by 66% of respondents, with cutting machines, lifting equipment, assembly tools, vending machines and inspection and test equipment referred to specifically. Almost half of the organisations

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gave numeracy and computer training to manual workers. Skills in literacy, customer care and telephone technique were also viewed as important and formed part of the training programme for manual workers in one third of responding companies.

### 13.2.3.2.Recruitment

The most commonly used method of recruitment was national and local press, used by 82% of respondents. Companies continue to rely on word of mouth quite heavily with 49% choosing to recruit in this way. 20% of responding companies used work experience and training programmes as a recruitment method  Other recruitment methods noted were general letters of application, mentioned by 11 (6%) respondents and 11 (6%) mentioned assistance from the Disability Employment Adviser.

The factors influencing an employers decision to hire a visually disabled person were examined by asking the 19 respondents who did employ visually disabled people about what had persuaded them to do so. Although numbers are small it is encouraging to note that 8 respondents believed the applicant was best person for the job. A further 8 respondents had been influenced by their equal opportunities policy or positive action policies and 3 had been influenced by external agencies such as RNIB or the Employment Service.

### 13.2.3.3 Job retention

In all, 81 (42%) respondents said they had employed a disabled person in the past five years who had since left; 12 respondents indicated that visually disabled worker had left in this period. In addition 4 respondents said that a member of staff had become visually disabled whilst in their employ. All of these cases raise the potential for job retention support so the actions taken to accommodate these workers were examined. Respondents were asked why visually disabled staff had left work. Reasons given included retirement (both early and at the usual age), resignation and dismissal. Although none linked disability directly with resignation or gave '*disability*' as the reason for dismissal, preferring to cite '*performance problems*' or '*health reasons*', it could be that individual's disability was a contributing factor. On a more positive note 3 visually disabled individuals left because they got a better job. Numbers are too small to test whether the presence of an equal opportunities officer made any difference to the outcome and further research is required to clarify how and when job retention support could be given. The respondents who identified workers who experienced sight loss while employed explained that these individuals were all still in their original job, 3 with no change and 1 with shorter hours and a modified workload.

## 13.2.4 Jobs for visually disabled people

### 13.2.4.1 Jobs undertaken by visually disabled staff

Respondents employing visually disabled people were asked to briefly describe the jobs

undertaken within their organisation by blind and partially sighted people. Examples of job

titles and task descriptions given include machine operator, operating a variety of machines

such as guillotines, meat slicers and industrial sewing machines; clerical workers

undertaking paperwork, reception duties and operating computers; supervisors responsible

for production planning, preparing quotations and negotiating contracts; draughtsman using

computer aided design technology to prepare technical drawings; and a welder using

welding equipment.

|  | Performance | Attendance |
|---|---|---|
| **Better** | - | - |
| **Same** | 14 | 13 |
| **Worse** | 2 | 2 |
| **Unable to say** | 3 | 4 |
| **TOTAL** | 19 | 19 |

Table 24. Perceived performance and attendance of visually disabled employees

In order to investigate employers' perception of standards of work respondents were asked

to compare performance and attendance of existing visually disabled staff with that of their

sighted colleagues. Table 24 shows that the majority of respondents considered both

attendance and performance of their visually disabled staff to be the same as that of their sighted colleagues.

### 13.2.4.2 Support for employers and visually disabled employees

All respondents were asked to indicate their awareness of support schemes. None of the support schemes mentioned were well known. Funding for special equipment, recruitment advice and funding for assessment and rehabilitation were each recognised by approximately 30% of respondents, yet only 8% were aware of clerical support for print-disabled workers. Supported employment and the Job Introduction Scheme were each known by about one quarter of respondents.

The support received by the visually disabled staff identified in the survey was investigated Over half of the visually disabled people identified received no support at work. Even though the job descriptions of visually disabled staff, given earlier, indicate the use of a wide variety of equipment, only 2 used any special equipment. Other examples of support mentioned were extra training, a special induction programme, support from the Department of Employment and from RNIB and assistance from colleagues, although respondents do not describe this in any detail. One respondent reported that a visually disabled employee had regular reviews with the company medical officer.

### 13.2.4.3 Potential job opportunities

Information about grants and support schemes was provided in the survey and respondents were asked to suggest potential job opportunities in their organisation for blind or partially sighted people. Although respondents were considering possibilities rather than actual situations and most lacked sufficient knowledge to make reliable judgements their answers present an interesting overview of employers' views and offered a starting point for follow up investigations, in which jobs could be analysed in more detail.

Respondents with and without any visually disabled staff suggested a total of 67 jobs for visually disabled people. Some respondents said that '*all*' or '*most jobs*' would be potential opportunities, '*provided the person was qualified by profession to do the job*'. One respondent, aware of potential but unsure of details, admitted his need for assistance in making this sort of decision: '*I don't know - I would need advice*'. Jobs suggested for partially sighted people included inspection of finished goods, stock control, machine operation with specific examples given and computer operator. Clerical and managerial jobs were also mentioned. Although respondents suggested fewer jobs for blind people (23 suggestions, compared with 44 for people with partial sight) and some made negative comments such as '*Nil*', '*None - high degree of mobility required*', ideas included sewing machinist, assembly worker, packer, canteen assistant, receptionist and accounting. Again, one respondent recognised the need for individual assessment: '*No jobs are purely routine or sedentary - but it would depend upon individual*'.

**13.2.5 Barriers to employment**

Respondents were asked to consider problems they encountered in employing visually disabled people by grading suggested problems according to the level of difficulty experienced within their organisation. *'No suitable jobs'* was considered a problem by 65% of respondents, 62% found that *'health and safety regulations'* caused problems, and 37% said there was a lack of applicants. Only 9% of respondents considered that the level of awareness of managers posed a problem. Respondents were asked to comment on the problems they faced and their remarks on each barrier identified are discussed below.

**13.2.5.1 'No suitable jobs'**

Several respondents emphasised the fact that they were not recruiting then added.*'...and anyway jobs are not suitable'.* Some comments related to 'unsuitable jobs' were due to the fact that *'all positions require sight at sometime or another'.* In some instances more detail was given regarding the 'unsuitable' nature of the work, for example, *'We employ draughtsman/engineers, therefore they need sight', '...colour awareness is essential',* and *'...all jobs have some writing content'.* Several respondents highlighted large volume or level of detail in paperwork as a barrier. Driving and computing were also mentioned: *'all staff are expected to drive',* and *'all staff need VDUs, except for drivers'.*

Although in some instances the tasks mentioned by respondents may not be accessible to visually disabled staff further research is required to examine the basis on which employers

decide they have no suitable jobs. This study highlights contradictions since jobs regarded by some respondents as *'unsuitable'* were being undertaken by blind and partially sighted people in other responding organisations. For instance several were involved in *'intricate work'*, such as draughtsmen preparing technical drawings and inspectors checking parts to specification, and several used computers and visual display units. One respondent noted that *'customer perception'* was a barrier for the employment of visually disabled people in his organisation but other respondents had visually disabled people working as receptionists. In addition smaller companies seemed well aware that legislation (the Quota Scheme, not mentioned in the survey) did not apply in their case. One respondent remarked that *'This is not a large enough company - only employs 11'*, as though this gave grounds for not considering the employment of visually disabled people.

### 13.2.5.2 'Lack of applicants'

One respondent commented that *'lack of applicants is a limiting factor'* in the employment of disabled people, though, of course, employers may not be aware that they are getting applications from disabled people. It might be assumed that respondents who monitor implementation of equal opportunities policies are more likely to be aware of applications from applicants who declare their disability. However a chi-square analysis of 'lack of applicants' against 'equal opportunities monitoring' revealed no significant relationship ($\chi^2 = 0.06$; d.f.=1; p>0.05).

### 13.2.5.3 'Awareness of managers '

One respondent commented that *'Awareness of all employees (not just managers),*
*particularly with regard to tidiness, would need constant education'.* Another illustrated a
different attitude to blind and partially sighted people: *'This answer is for a partially sighted*
*employee; there would be substantial problems for someone with no sight.'* A national
provider of sheltered and supported employment indicated that people with other disabilities
were more their concern: *'Blind and partially sighted people are not referred to us by*
*DEAs - they accommodate them elsewhere'.*

Clearly the level of awareness of the individual completing this questionnaire affects all
these answers. It might be assumed that a respondent who is aware of disability issues is
able to judge the awareness level of colleagues more astutely than those who are not.
Although a declaration that awareness of managers does not pose any barriers to the
employment of visually disabled people may be true, if the organisation in question does not
employ any disabled people the reasons for this need to be examined. It may be that
attitudinal barriers exist where respondents perceive that they do not. For example, it might
be assumed that managers who are aware of disability issues would also be aware of special
aids and equipment for disabled people in employment. However analysis shows that less
than half (41%) of those indicating no problem with awareness of managers were aware of
special aids (see Table 25).

| Problems with awareness of managers? | Awareness of special aids? | | |
|---|---|---|---|
| | Yes | No | Totals |
| Yes | 6 | 22 | 28 |
| No | 28 | 41 | 69 |
| Totals | 34 | 63 | 97 |

97 respondents did not answer the question about awareness of managers.

Table 25. Awareness of managers against knowledge of special aids

### 13.2.5.4 Health and Safety Regulations

Almost two thirds of respondents considered that health and safety regulations present a barrier to the employment of visually disabled people. In some instances respondents specified their concerns, for example:

*'Health and Safety would be a concern in certain areas such as the bakery and meat departments or the warehouse.'*

*'Slippery floors, very hot and cold surfaces, moving forklifts, noise level, means blind persons would not be aware of hazards.'*

*'Little opportunity exists for blind persons due to moving vehicles, except in limited clerical positions.'*

*'Our company fabricates sheet metal ducting systems involving shearing, bending, forming welding etc. Materials are moved manually from section to section and parts have sharp edges before completion.'*

In other cases the comments were more general. for example *'looking after the elderly would be unsuitable'*, *'contact with machinery'*, and *'heavy engineering involves many dangers'*, or even *'dangerous machinery'*, and *'dangerous work'*.

Again, jobs done by visually disabled people in other responding organisations show that health and safety need not act as a barrier. For example several were using items of so called *'dangerous equipment'* such as guillotines, industrial sewing machines, meat slicers and welding equipment.

## 13.3 Follow-up Visits

Follow-up visits were used to verify and expand upon data gathered through the questionnaire and to discuss with employers their occupational information and support needs in more detail. A total of 20 visit reports were collected with contributions from 2 Employment Consultants each conducting 3 visits. The remainder were carried out by this author (10 visits) and two other members of RNIB staff (2 visits each). Visits gave the opportunity to interview and observe staff at work and to carry out job analyses, testing the new job analysis instrument. Follow up visits also gave practitioners the opportunity to become more familiar with employment opportunities in a variety of work environments. An

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overview of the activity of organisations helped to broaden their understanding of the labour market and issues of multi-skilled workers, task rotation to reduce the risk of repetitive strain injury and sub-contracting certain activities were raised in reports. Personal contact with employers provided the means for fostering links between employers and voluntary sector service providers. Through personal contact it was possible to identify good practice, encourage its extension and enlighten employers who were unaware of potential job opportunities in their organisation.

Evaluation of the new job analysis instrument is described in Chapter 14. The low participation by Employment Consultants is discussed in Chapter 15.

### 13.3.1 Identification of good practice and barriers to employment

Several of the organisations visited employed visually disabled people and the jobs they were doing were analysed. Practitioners were able to identify data that could be of general interest such as job accommodations and examples of good practice. Examples of job accommodations ranged from simple furniture rearranging such as turning a desk away from the window because an individual found the light dazzling, to use of complex access technology to enable an individual use a variety of production software programmes. In some instances respondents noted that an accommodation had benefited all staff, as in the case of the addition of a pane of glass to a solid door to allow people to see if their blind colleague was coming through the door from the other side. One employer explained that he employed a partially sighted applicant because the individual had demonstrated a high

degree of competence in a keyboard skills assessment and gave a clear explanation of how

he could accomplish the tasks involved in the job despite certain functional limitations. Job

retention practices were also examined in cases where the individual had experienced onset

of sight loss after recruitment. These ranged from well structured redeployment

programmes to dismissal. An example of both is given below.

A foundry employing 150 people used to employ a pattern maker whose vision deteriorated

so that, according to the Works Manager, he found the job increasingly difficult to do. The

company was concerned about *'health and safety'* and *'the quality of his work reduced, so*

*he was asked to leave when things became too difficult.'*

One large automotive manufacturer recognised that *'it costs a lot to employ people in the*

*first place'* and so had given responsibility for redeployment of employees who develop a

disability to a member of the Medical Department. This Redeployment Officer generally has

a caseload of around 30 workers who have become disabled and spends over half of her

time negotiating redeployment for them. When P began working for the organisation the

routine medical revealed an eye problem. The physician said he should not do any inspection

work. In a few years P's eyesight deteriorated and recognising he could not continue in the

same job he contacted the Medical Redeployment Officer. The report of another company

medical examination stated that he should not climb ladders or go near machinery. This

severely limited P's options within the company. Fortunately the Redeployment Officer

recognised the need for specialist assessment and arranged for him to attend a residential

rehabilitation centre for 3 months, with full pay. He returned to work in a different job, in

the Resource Planning Department, and gradually gained confidence and promotion. He now deals with a large amount of paper work and considerable time pressure in his job as a Configuration Program Engineer.

A wide variety of good practice was uncovered during follow-up visits. These included time off for mobility training for an employee whose sight deteriorated; effective monitoring, demonstrated by a personnel officer working for a large mail order company who had a thorough personal knowledge of the 25 registered disabled staff, plus documentation detailing their particular needs; clear understanding of the difference between disability and ill health within an organisation, as demonstrated by a visually disabled employee who had never had dealings with the company's Occupational Health Department; and one company had circulated an equal opportunity policy guide, covering all existing staff, job applicants and customers to all its employees, with specific mention of job retention and job accommodation for staff who become disabled.

The larger organisations visited were able to supply documentation such as job descriptions, person specification and appraisal forms. Smaller companies tended not to use these documents but this was not necessarily an indication of lack of action. During one visit the Managing Director of an egg packing company, with 30 employees, referred to 2 deaf employees recruited with assistance from the Employment Service. During their induction and training the company employed an interpreter and the DEA assisted with safety issues and integration into the team.

Follow up visits also offered the opportunity for discussion with respondents who had indicated certain barriers to the employment of visually disabled people in their questionnaire. A respondents from one of the companies visited had commented on the lack of disabled job applicants. This employer displayed the two-tick symbol but found this had little impact on the number of applications from disabled people. During interviews discussion focused upon how disabled people could be encouraged to apply for jobs by making them aware that an application would be taken seriously. The inclusion of pictures of disabled people at work within annual reports and recruitment literature was suggested. Visits also served to highlight some other barriers to employment experienced by disabled people. A personnel officer in an electronics components manufacturer regarded *'attitude as the greatest barrier to the employment of disabled people'* in her organisation. In another organisation a visually disabled worker described how her colleagues had initially been sceptical that she could do the job but were persuaded by the standard of her work. Indeed, the attitude of colleagues was mentioned regularly in visit reports and one practitioner found that workers in one factory would not be happy to have a disabled colleague in case their piece-rate bonus scheme was affected. During one interview the employer (a national retailer) was initially keen to point out the multi-functional nature of jobs in the organisation, but through observation and further discussion conceded that some areas of work were busier than others. This respondent then went on to suggest that a visually disabled person could begin by working in the quieter areas, as do individuals undertaking work experience placements, and then progress to more demanding activities. Another employer (a cardboard box manufacturer) stressed that flexibility of routine would make it impossible for a visually disabled person to work there. However, during the factory tour he

admitted that operatives tend to stick to the same machines. A personnel officer in a mail order company saw health and safety regulations as a major barrier to the employment of visually disabled people citing the layout of the premises and close proximity of forklift trucks as specific examples. Despite this initial reluctance the practitioner was able to work with her to identify four job functions as potential opportunities for visually disabled workers.

Observations of organisations and in depth interviews with managers revealed differences in perceived and actual information needs. Through personal contact it was possible to examine employer perceptions of what disabled people can do. One practitioner identified the need to remove *'the negative attitudes of managers'* before the recruitment of disabled people could become a realistic goal. Some employers eagerly sought advice and support from specialists. Specific requests included help in identifying potential job opportunities for visually disabled people, assistance to develop equal opportunities policies, information about job accommodations and special equipment, and support as individual officers attempted to promote disability friendly policies and practice within their organisations. Some respondents sought recruitment advice to encourage more disabled people to apply for vacancies and several asked if analysts could supply candidates.

The visits also showed the need for regular liaison with employers in order to maintain an up to date picture of employers' requirements so that training programmes for disabled people can encourage development in these areas. For example one large retail company

had an appraisal programme for every member of staff based upon knowledge of their duties, interpersonal and communications skills.

## 13.3.2 Job Analysis Report structures

Visit reports highlighted the benefit of using specialists to conduct the analyses since they were able to apply their extensive knowledge of special aids to the variety of work environments and tasks investigated. The two partially sighted Employment Consultants conducting visits both used a narrative report format and chose not to use the new job analysis tool to aid data collection. In general the narrative reports noted tasks undertaken and equipment used and the possible use of special aids was considered. However there was a tendency to make subjective statements and rely upon personal experience of sight loss to decide which jobs might offer potential openings for visually disabled people.

*'...jobs centre around very monotonous tasks and as a result I am sure that only a limited number of visually impaired individuals would be prepared to do that kind of work...'*

*'A keen eye is definitely the crucial factor for this job and I would therefore say that this job is not suitable for our client group.'*

*'My view is that the job would be too difficult for most visually impaired people to do because of the large amount of precision visual work required.'*

*'In my opinion the general factory environment was one of the worst to accommodate a visually handicapped person because there are sparks and flames shooting in all directions.'*

The last statement was qualified with a description of the poor light and high noise level but there is no reference in the report to how the health and safety of all employees is protected in this situation.

In one narrative the analyst wrote:

*'This area is particularly unsuitable for visually impaired clients in its present state. It is dark and dirty, is badly labelled, involves climbing and lifting....In this area, unless tasks are divided, only a good partially sighted person would undertake such tasks, bearing in mind the climbing, lifting and reading ability required.'*

Although this job may have presented difficulties for visually disabled individuals the first statement mixes information about the work environment and tasks, without giving any standards for either. The second statement, made later in the report, appears to contradict the first and again contains no information about standards required, leaving the reader confused, yet the practitioner goes on to rule out work in this organisation as *'not suitable for our client group'.*

Narratives consistently contained useful information but failed to give a clear picture of an organisation and its job opportunities due to missing data. Both narrative and instrument based reports identified examples of good practice but those based upon use of the instrument were more comprehensive. Feedback from those who used the job analysis instrument indicated that they found it easy to use, however the reports indicated that further training is required for analysts. Ambiguous statements such as, *'the porter performs a standard stores function...'*, and *'nothing in the job description or my observation of the function indicate any major difficulties for a visually impaired person with sufficient residual vision'*, were still present. Although statements were consistently qualified by descriptions of the work environment, tasks undertaken, tools and equipment used, performance standards, qualifications and experience required, physical requirements of the job and responsibilities of the post holder the pitfalls of personal judgements need to be emphasised. In addition physical demands were often not mentioned and there were indications of misunderstanding of certain work-related terminology. For example, *'quality control work, by definition, involves a lot of visual work'*, there are many instances when a quality controller measures goods produced without the need for close physical inspection. There may be a requirement to read gauges or computer print outs and complete documentation but this requires analysis and consideration of special aids for job accommodation.

### 13.4 Summary

These findings highlight a range of occupational information and vocational support needs of employers. Specific requests included help in identifying potential job opportunities for visually disabled people, assistance to develop equal opportunities policies, information about job accommodations and special equipment, and support as individual officers attempted to promote disability friendly policies and practice within an organisation. Some respondents sought recruitment advice to encourage more disabled people to apply for vacancies and several asked if analysts could supply candidates.

Observations of organisations and in depth interviews with managers revealed attitudes and information needs that were not detected by the postal questionnaire. Differences in needs perceived by respondents and actual needs (as perceived by practitioners), particularly related to attitudes towards disabled workers, were recorded.

Examination of job analysis reports highlighted the need to support comments made with factual evidence. One personnel officer was adamant that the company had no suitable jobs for visually disabled people but the practitioner expressed the opinion that 90% of the jobs were potential opportunities. This opinion needs to be supported with evidence. Jobs need to be broken down into tasks and compared to other tasks and jobs that visually disabled people are doing elsewhere. This information can then be presented to an employer with an unrealistic perception of what disabled people can do. Easy access to information through a vocational information system could combat this ignorance.

**Results**

# Chapter 14. Formulation and testing of the model

## *14.1 Introduction*

Throughout the literature review attention was paid to specific tools and protocols used in disability assessment and vocational rehabilitation, to assess suitability for use with visually disabled people by service providers. The literature suggests a certain strategy for the use of occupational information to improve opportunities for visually disabled people. This is based on the development of a system that links the collection of occupational information with assessment of individuals and provides results of these exercises to users, where users could be any combination of visually disabled individuals, service providers or employers. The basis of this strategy is an instrument for job analysis, to gather occupational data, and this chapter describes the development and testing of such an instrument. This fulfils Stage 1 of the guide for design and implementation, adapted from Klugman et al. (1991), described in Chapter 9. Further development of the job analysis instrument is required if it is to become more useful for assessing both the individual and the job so that factors assessed can be matched for work placement. A vocational information system is proposed to accommodate additional elements of provision, namely an occupational information database, vocational information databases, and a job matching service. This constitutes Stage 2 of the design and implementation plan.

Funding from DfEE enabled work to proceed with development of the vocational information system model. One element of the model, an Internet based occupational and vocational information database for visually disabled people, called GROW, was implemented and the information requirements highlighted throughout the research served as the basis for design and content. This development is the first part of Stage 3 of the design and implementation plan.

## 14.2 Design and Implementation of the job analysis instrument

The literature reviewed in Chapter 4 indicated that many job analysis instruments are technical, require training, experience of psychological assessment, ergonomics, and are costly to administer. Practitioners in the UK tend to favour non-standard approaches and generally lack formal training in assessment methods. However voluntary organisations have considerable information about the type of work carried out by disabled people and expertise in the means used to expand opportunities for employment. The job analysis instrument developed through this research is an attempt to harness this expertise for structured job analysis without the need to invest in costly training programmes and resource materials.

In order to enable participation of RNIB Employment Consultants in testing the instrument it was necessary to consider their current working practices. At present these officers carry out very few job analyses, carry them out in a non-standard manner and there are no central records of their findings. Many of the Employment Consultants are themselves visually disabled and prefer to make notes on tape. The instrument

developed had to be simple, with related documentation kept to a minimum and available in a range of media.

The design and implementation plan, adapted from work by Klugman et al. (1991), was used to guide development of the vocational information system. The first stage, the job analysis instrument was designed and is shown in brief in Figure 2; the full instrument is given in Appendix 8. It draws upon suggestions from the literature regarding job-related information that is useful in vocational rehabilitation and practical issues are also considered. It constitutes a checklist of prompts to aid the evaluator to work through a job analysis in a systematic fashion. A check list approach fulfils criteria indicated by the literature and by practitioners interviewed during the course of the research. It is simple, requires some but not lengthy training to administer, is not too restrictive in terms of reporting style required but can encourage provision of standard information. Although many of the instruments reviewed earlier included rating scales for job assessment this one does not in an attempt to maintain simplicity of both data collection and analysis.

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Job Analysis Instrument – overview

Prior to analysis: read supporting documentation

During analysis: Use the checklist during observation and interview of job incumbent
and other relevant personnel such as supervisors, colleagues and personnel staff. In
addition to making notes on the items listed note any difficulties in these areas and
possible solutions.

Checklist
Tasks
Work environment
Organisational and social aspects
Standards
Physical aspects of the work
Sensory aspects of the work
Recruitment procedures, equal opportunities policies
Difficulties and satisfaction in the work as reported by job incumbent
High turnover jobs and skill shortages within the organisation

After Interview: Consider possible job modifications
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Figure 2. Over view of Job Analysis Instrument

The follow up visits to employer survey respondents afforded opportunities to test the

job analysis tool. RNIB staff who used the tool gave feedback and assisted in its

evaluation. They noted that it was easier to consider possible job modifications during

the analysis rather than after and gave suggestions for other items that could appear on

the checklist. These were an extension of the physical requirements section and

inclusion of contact with others as some measure of interpersonal skill requirements.

Testers said they felt ill equipped to respond to queries from employers regarding

adaptation of specific jobs to make then accessible to visually disabled people due to the

lack of available information on this topic. In addition practitioners recognised the

similarity of certain jobs in different companies and wanted to be able to compare

results. These comments highlight gaps in information related to job accommodations

and occupational data. The vocational information system should address these.

Although testers found the instrument easy to use and produced well structured reports it was clear that the instrument should contain more explicit instructions and a little more structure in order to assist evaluators and encourage standard presentation of data. To this end a list of introductory details was added including requests for the job title of the occupational under investigation, company name and contact details. A new section prompting an introduction to the company was added. Some items were reorganised under new sub headings to add clarification and some items were made more explicit such as the inclusion of a prompt for 'duties/ role' and 'any additional duties'.

If the instrument is to form the basis of a vocational information system that includes a job matching element the criteria for evaluating a job also need to be used in assessment of individuals. In order to enable easy adaptation of the instrument for individual assessment sections about skills, qualifications and experience and the cognitive requirements of the job, such as planning and memory requirements were also added. Figure 3 gives an overview of the revised job analysis instrument. The full version is given in the Appendix 9.

**Revised Job Analysis Instrument -overview**

Job Title:
Company name:
Contact:
Evaluator's name:
Date of visit:

Introduction to company

Tasks
Skills and qualifications/experience required
Work environment
Organisational and social aspects
Conditions
Standards
Physical requirements
Cognitive aspects of the work
Sensory aspects of the work

Satisfaction and dislikes in the work as reported by job
incumbent
Possible job modifications

Figure 3. Overview of the revised job analysis instrument

## 14.3 Testing of revised instrument with National Westminster Bank

The Board of Directors at NWB endorsed research to re-deploy 130 'blind' staff whose role

as switchboard operators was soon to be obsolete. A programme focusing upon assessment

of individuals, job analyses and matching individuals with opportunities was devised. A wide

range of professionals including rehabilitation and technology specialists and NWB human

resource staff were involved and as a result of the research 120 members of staff were

assessed, supplied with new equipment, received training, had their current job expanded or

secured a new job. The remaining 10 visually disabled staff left NWB due to retirement, dismissal for misconduct, or to take up employment elsewhere. NWB human resource staff have since developed policies and systems to ensure that development of blind and partially sighted staff and their own awareness of barriers to that development is ongoing. In addition the salary scale of 'Blind Telephonist ' has disappeared, along with the job title as individuals have been redeployed into other jobs such as Customer Liaison Officer and Mortgage Adviser on the standard salary scale.

Restructuring within NWB was already well under way when this research began, indeed a few switchboard operators had already been displaced by new technology as transfers under the restructuring programme began to take effect. However the effect these changes would have in remaining locations and on specific jobs was still uncertain. The process of redeployment began with a review of the different fields of work available in the organisation to gain a broad understanding of the skills, knowledge and experience required. Individual assessments were necessary because personnel records, based on annual appraisals, did not provide sufficient information for redeployment and indeed some inaccuracies in NWB records were highlighted by the individual assessment reports. Data gathered from the general job analysis (that is job analysis not linked to a particular individual) provided a basis for individual assessments and were used to give those facing redeployment an overview of the range of jobs available. At this stage some jobs were selected for a more in depth job analysis using the job analysis instrument. In addition, as the skills and aspirations of the individuals involved were clarified, job analysis of actual vacancies in each region became important so that the results of individual assessments could be matched with the vacancy assessments.

All visually disabled staff took part in an initial interview with their case manager. These interviews were inevitably general due to the lack of information available about opportunities in the region but nevertheless individuals' aspirations were taken as the first step in the job matching process. Visually disabled staff then went on to undertake a vocational assessment with an occupational psychologist and a technical assessment with a technical expert. The vocational assessment began with an in depth interview to assist the individual to identify their achievements and clarify aspirations. If appropriate a series of psychometric tests, tailored to meet the individuals needs, were used. These consisted of ability testing and measures of achievement in relevant subject areas used (e.g. the verbal scales of the revised Wechsler Adult Intelligence Scale). An assessment of communication skills and working methods was also made and the ability of the individual to benefit from formal training were assessed. The Occupational Psychologists were all experienced in working with blind and partially sighted people. Testing situations were adapted by ensuring the optimum use of lighting to suit the individual and the reorganisation of the work space to allow the use of special equipment such as low vision aids and closed circuit televisions. Test material was also adapted if necessary, for example some material was produced in large print and some written tests were carried out verbally. Occupational Psychologists used their clinical judgement in addition to test scores to interpret the results of assessments and make recommendations. Credit was always given in the report if the individual had worked particularly quickly or relied on their mental ability, in mathematics tests for example, even though they were unable to use print.

The technical assessment enabled the individual and Technical Consultant to decide

which was the most appropriate method of access (speech, braille, character

magnification) for their level of vision, taking prognosis into account. This was followed

by a demonstration of equipment, allowing the individual to select the preferred model

from the product range available. Taking part in assessment served to educate visually

disabled individuals who had previously had little contact with access technology. This

knowledge encouraged independence and some visually disabled staff were able to

make a specific request for equipment with appropriate justification for funding upon

their return to work. Technical assessments also highlighted a lack of training in access

technology. Many visually disabled telephonists had been given a Eureka A4 (a

computer with a braille keyboard, speech output and a non-standard operating system)

when NWB had made a bulk purchase a few years ago. Unfortunately, some of these

had never been used due to the lack of training.

Each visually disabled person was allocated a case manager from the 4 working on the

programme. (The author acted as case manager for 15 people in the Midlands). The case

manager was responsible for keeping track of the overall process for an individual and

ensuring that their action plan was progressing, accessing external support if required.

Negotiation with the Employment Service (ES) to secure funding for access equipment

proved to be a time consuming activity. NWB staff, who did not have experience of

working with the ES, often underestimated the time required to complete application forms,

await approval, take delivery of equipment and arrange training .In most instances the case

managers were also responsible for researching suppliers and prices of access equipment

and advising ES of their findings. Another part of the case manager role was to encourage regional personnel to take increasing responsibility for the redeployment of staff within their area to ensure ongoing support for visually disabled staff.

Training for all participants in the project played a key role in the redeployment programme. Although corporate support for the project within NWB was strong, in practice a visually disabled individual was dependent upon local support to achieve satisfactory redeployment. Initially regional personnel reported that they had 'no experience of the issues' and were confused by the range of statutory and voluntary provision for disabled workers. A course was designed and delivered to over one hundred NWB staff ranging from regional personnel officers to branch managers. It gave an introduction to the barriers faced by visually disabled people in employment and encouraged participants to consider possible solutions and thus challenged some misconceptions of visual disability.

The majority of blind and partially sighted telephonists required vocational training and training in the use of technology. One of the barriers to internal training courses for visually disabled staff was the lack of expertise within NWB in the use of access technology. Equally external specialist trainers knew little of NWB systems and processes. This was overcome by sending an external trainer on an NWB training course to learn how to operate their customer information and records system. He was then able to train visually disabled staff in the use of this system in conjunction with special aids. In addition case managers had to research accessible external training courses to meet individuals' additional training needs. The availability of product details in accessible media was also identified as a key factor in

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development since many of the new job roles involved informing customers of products and services. Training for visually disabled staff in knowledge of NWB products was then possible.

After the initial job analysis, investigation of vacancies became centred around individuals. The case manager initiated the process of matching individuals with opportunities by reviewing actual or potential vacancies with the visually disabled individual and noting areas which overlapped with their skills and aspirations. If required, potential job modifications and training were considered to broaden the range of options available to individuals. If a vacancy became available the case manager concerned would investigate further, gathering details of the job description, visiting the location, discussing the job with the supervisor and any staff already doing the work. Whenever feasible the visually disabled job seeker was invited to view their prospective workplace    with their case manager to gain an understanding of the job and to facilitate a discussion. Using the results of vocational and technical assessments the case manager was able to discuss with the visually disabled individual any differences between the requirements of the job and what the individual could offer. Solutions to possible difficulties were considered so that the case manager was then able to support the individual's job application.

Technology trials to test compatibility of access technology with the variety of NWB systems were time consuming; equipment and systems were not standardised across NWB and liaison with technical staff proved difficult. There were also issues of confidentiality and security to overcome before RNIB was allowed to use any

NWB equipment in tests. Some tests were conducted on a one off basis because they were linked to specific individuals and potential jobs, others were more general. Access options for partially sighted and blind Telephone Liaison Officers (the post replacing switchboard operators) were identified and other options for access to the customer information database were tested. The introduction of job modifications resulted in many new employment opportunities becoming available to visually disabled staff.

## 14.4 Comments from service providers on design of a vocational information system

The occupational information based approach to improving vocational opportunities for visually disabled people has limitations. Research with NWB highlighted limitations in the use of job analysis as a tool for broadening employment opportunities for disabled people, the need for expert assessment of individuals, testing of job accommodations, training for all those involved and job matching were other important factors in redeployment. The concept of a vocational information system that could accommodate some of these other factors was presented to RNIB vocational rehabilitation staff to elicit their comments and suggestions for development. There was general agreement that linking assessment and job analysis to provide relevant occupational data and job matching to individuals would be valued by visually disabled people. Staff stressed that any technology used to deliver the system needs be user friendly and compatible with special aids (character magnification and speech ). One team explained that members had experimented with a paper-based job matching service for

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a short period. Visually disabled people sent in CVs to be matched manually with vacancies found in newspapers and employers vacancy lists. This experiment ended after 3 months due to inadequate resources to cope with the paper work generated but it did produce a good deal of interest from local visually disabled job seekers. The job matching process was discussed and it was agreed that flexibility is required when matching vacancies to individuals such that it should be possible to highlight partial matches based upon separating mandatory and desirable skills. It was recognised that employers would not alter their vacancy information to suit the system but that employers could be encouraged to send job specifications rather than just brief vacancy details to assist with analysis.

RNIB Employment Network staff, who could be involved in testing the proposed system, raised concerns about resource implications if the vocational information system is to be used in the longer term. Suggestions raised to minimise the extra work included using a recruitment agency to run the job matching aspect of the system or feeding vacancies into a central point for entry and matching with individuals. One practitioner believed that any matches generated by the computerised system operated by a central administrator would probably require further sifting by an employment specialist to ensure that vacancies were correctly matched. It was suggested that a realistic view of resource requirements should be taken and funding sought for new posts to co-ordinate data collection and entry. Evaluation of the system was discussed and feedback from visually disabled people and employers was seen as important. Telephone calls to employers whose vacancies were offered for job matching was one possible method suggested for gathering evaluation data.

Suggestions and requests regarding the design of the proposed vocational information system were elicited from vocational rehabilitation staff in RNIB and other voluntary organisations. These covered accessibility issues for disabled users, the need for continual updating of information and the availability of national information to enable information sharing with rehabilitation colleagues elsewhere in the country. Some stressed that the system should be offered within a counselling setting with support available for disabled people who require it. Requests were made that the system be intuitive to use and easy to learn, particularly for those with limited computer literacy.

## 14.5 GROW

GROW (Gateway to Researching Opportunities for Work) is a vocational information database based on the Internet (http://www.rnib.org.uk/grow), accessible to visually disabled people. GROW was designed to work with Webspeak, designed specifically for speech access to the Internet and Lunar for Windows screen magnification system. It is designed to assist visually disabled people in making informed choices for their personal development through education, training and employment. In other words it is a system for storing and presenting vocational and occupational data. Primary users were defined as blind and partially sighted people and RNIB staff. Other potential users were service providers and employers who could use GROW to find out about the support available to them. User information requirements, as indicated through the research with visually disabled people, service providers and employers, were used to specify the information to include in GROW.

A prototype system was pilot-tested by potential users at RNIB sites and then refined. When the system had sufficient content and worked smoothly with access technology it was publicised. A telephone help line to assist new users and record their feedback was established and documentation for display at points offering visually disabled users facilities to access GROW was developed. Other non-RNIB sites such as colleges and resource centres, able to offer appropriate access facilities and support, were encouraged to consider becoming access points for GROW.

The Internet has the advantage of making information available to a wide range of users, fulfilling the requirement to present information nationally. There is already a tremendous amount of information relevant to potential GROW users available on the Internet, although searching for it can be time-consuming, so GROW was designed to act primarily as a signpost to others sites. An advantage of this 'signposting' approach is that maintenance of the information is the responsibility of other organisations so the traditional problems associated with trying to maintain a database and update geographically dispersed users do not apply. However, there is no way of controlling the accessibility of other Web pages and some fail to give an alternative to graphics for text-only browsers. GROW gives a brief description of the content and accessibility of link sites so users can choose whether to read them or not. Data gathering for GROW included finding World Wide Web (WWW) sites offering relevant information, testing them to assess how accessible they are to visually disabled users reliant upon text magnification or speech output and then referencing them.

### 14.5.1 Pilot testing of GROW

The information requirements described by users were categorised into a series of information categories (see Appendix 10). Regular searches of the Internet identified vocational information available on existing Web pages that met these requirements. Links were established so that each GROW topic contains links to the Web pages of organisations providing related information. These links are presented in a standard format with a brief title and description of contents; the user does not need to know the site addresses but simply selects the topic they want to find out more about by clicking on the title. A click on 'Job seeking' for example can lead users to information on who can help, work experience, the labour market, and enable them to search through job vacancies advertised on the Net. Other links will give the user access to web sites offering careers guidance, tips for people interested in self employment, information about qualifications, student grants, universities and colleges and information from access technology suppliers.

The first two GROW pilot sites were an RNIB residential rehabilitation centre and an RNIB training college. The necessary equipment was installed and staff were trained to use GROW so that they could assist residents and students. Some testers were experienced Internet users others were beginners, some had useful vision and preferred text magnification others were totally blind and used screen readers to access a computer. Feedback gathered through observation of testers working with GROW and in written responses focused on the content and design of the site. In general testers enjoyed using GROW and visually disabled testers welcomed the opportunity to access a wide range of

information independently, in one place. The section on job vacancies was particularly popular and one tester commented that she found these vacancies much easier to read than newspapers, which she reads slowly with a hand held magnifying glass. The sections on CV preparation and information about employers using the two-tick symbol were also highly regarded. Staff testers were generally less enthusiastic, commenting that their use of GROW was restricted by the lack of detailed vocational information, though they did agree that it was potentially useful.

Although there was a good deal of overlap in the information required the differing priorities of service providers and job seekers began to emerge as they tested the system. Service providers were likely to use the system to answer a specific query whereas visually disabled testers had queries of a more general nature, or were simply keen to browse. There were some exceptions to this, for example students approaching the end of their course had specific queries related to job search. In addition several testers made comments about the inclusion of employment examples or experiences of job seekers.

*'It is very important to include employment success stories to broaden careers advisers views as well as visually impaired peoples own views.'*

*'Experiences are more useful than contacts because they describe the way things are rather than the way they should be.'*

One tester suggested including employment examples from visually disabled people themselves and suggested that these are '*more valuable than the professional view*'.

In response to comments from testers the structure of the content was altered and it is now possible to get back to the information categories or to specific links easily. Fast data links to the information category headings were added to allow experienced users to skip the introduction. Generally testers liked the layout of the site and found the category headings clear but errors such as unnecessary references and the omission of the email address on the user feedback form were highlighted and altered. Additions were made to facilitate navigation for visually disabled people, such as 'the following list of ten items gives the different areas available for...' to give speech users an idea of the scope of the data before listening to all the items. Another information category, 'Help or Advice', offering links to the Web sites of various agencies including Citizens Advice Bureaux and RNIB, was added. The GROW site is continually updated and now contains 10 information categories, including 'Education and training', 'Careers advice and guidance', 'Financial support' and 'Supported employment'. The GROW home page, which lists the information categories, is given in Appendix 10.

Throughout the trials computer literate users were particularly interested in GROW and able to give detailed comments. However, users new to technology preferred to have someone with them and lacked confidence to begin searching for themselves. This highlighted the need to provide support to users with little experience of technology. In addition, the location of the PC caused difficulties at both pilot sites. Concern over open access to the Internet for residents at the rehabilitation centre meant that the terminal was

not situated, as originally planned, in a resource room with open access but in a staff office to allow use under supervision. Similarly at the college, the PC was located in a staff office, again restricting use to pre-arranged times. This restriction limited the potential of GROW to offer visually disabled users independent access to information.

**14.5.2 Development of GROW**

Since GROW is available on the WWW anyone with an Internet connection can use it. However accessibility for visually disabled users has been limited by the state of available access technology, with Web access for visually disabled people in its infancy, and by the design of other web sites if graphics are presented without a text alternative. Although many users can get access to the Internet at their place of study or a local resource centre, a network of GROW access points was established for those who do not have access to an accessible Internet connection. Advice on appropriate technology to make their Internet connection accessible was offered to organisations interested in setting up an access point for GROW. These access points are open to the public and offer speech and magnification access options and support staff to assist users. They are located at various RNIB centres around the country, the University of the West of England, Scarborough Local Society for the Blind and East Berkshire College. All Access Points have copies of the GROW User Guide (shown in Appendix 10), which provides a simple explanation of how an Internet site works, in braille and large print.

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GROW was initially defined by visually disabled people and users continue to have a direct influence on its development by using an on-line feedback form or a telephone response line to make comments. The telephone response line, now operated by an RNIB Information Officer, can also offer immediate support to users with technical queries. To promote ongoing quality of the GROW information service a GROW Quality Promise (see Appendix 10) was devised to ensure users are aware of service standards and how to influence future developments. This is published on the site and states that GROW offers up to date, impartial information links and equality of access for users through the use of access technology, accessible Web page design and associated documentation, available in a range of media.

A bulletin to publicise the service detailing latest developments, new links and Access Points was sent to over one thousand libraries, all TECs, PACTs, Local Societies for the Blind, other voluntary organisations, schools with units for visually disabled students, careers providers based at further and higher education establishments, RNIB staff and cybercafes. The site was registered with search engines. A press release (shown in Appendix 10) was taken up by New Beacon, Disability Now and People Management and articles were published in DfEE Individual Commitment News, Hobsons Directories, Share the Vision (a libraries newsletter), RNIB staff magazine and the ABAPSTAS newsletter for blind and partially sighted teachers and students. Demonstrations were given at the Careers Direct Exhibition at Wembley, East Berkshire College Open Day and a GROW open day for RNIB staff. Details of users can be gathered from the log analyser on the GROW site. In the early

stages of GROW the most popular pages were job seeking, training and equipment. Usage increased to an average of 36 requests a day.

DfEE is now seeking to establish IT based information points around the country, linked to a national telephone helpline. DfEE has recognised GROW as an example of good practice in information provision and has recommended that local information networks developing these information points adopt the same standards of accessibility for visually disabled people.

# Results

# Chapter 15. Impact of organisational change on improving job opportunities for disabled people

## 15.1 Introduction

Employer and service provider organisations are in a position to influence job opportunities for disabled people. The way in which these organisations accommodate change has an impact on these opportunities. This chapter presents the results of work with a voluntary sector service provider, the RNIB Employment Network and an employer, National Westminster Bank (NWB), within a framework of organisational change by drawing upon themes from literature reviewed in Chapter 5. The main focus of research with staff in the voluntary sector was the occupational information and vocational support needs of service providers. However many respondents took the opportunity to talk about their wider work situation and topics arising included organisational management, organisational restructuring, staff development and performance measurement. Much of these data could only be understood in terms of organisational change. This chapter presents the perception of those interviewed. Although this may give a partial view, it is the perception of service providers that is of interest when considering how their role is affected by organisational change and the implications this has for service provision to disabled people. The

introduction of the vocational information system into the Employment Network is examined from the point of view of change management and guidelines from the literature were adopted for the introduction of the new job analysis instrument.

## 15.2 Change experienced by RNIB and other voluntary sector organisations

Chapter 5 describes the economic, cultural and social changes that voluntary sector organisations must grapple with. There have been several factors affecting the RNIB Employment Network over recent years that could have acted as triggers to cultural change. For example all divisions of RNIB have been forced to make cuts in expenditure due to a decrease in the organisation's financial resources. The Employment Network has made a significant contribution to these cuts by redundancies and freezing posts. In addition the Employment Network now operates under a contractual agreement with the Employment Service (ES).

A restructuring programme to merge employment and educational services within RNIB's Employment Network has recently led to additional change. This change is examined in some detail using data gathered through informal meetings with staff members, attendance at team meetings, individual interviews and formal meetings devoted to discussing a particular topic. As a result of restructuring Student Adviser staff have joined Regional Employment Teams and Small Business Advisers have been drawn into regional teams to work as generic Employment Consultants (ECs). All ECs are now expected to deal with the full range of employment situations rather than specialise in certain types of cases.

Following consultation nearly all field staff were made redundant and asked to apply for positions within the newly merged teams. Those who took up these positions indicated that they have not received training to take on broader roles. Consequently, in practice the pattern of transfer of cases to colleagues with appropriate expertise persists and most of those interviewed commented upon the apparent lack of strategy behind proposed changes in the Network restructuring.

One of the outcomes of the merger between employment and education advisers has been high staff turnover. Three of the original seven Student Advisers left immediately and fourteen out of twenty Regional Employment Team staff left within eighteen months. Some staff recruited to replace those who chose to leave stayed only a few months. One team is now staffed by completely new people because all of the original members, including the manager, have left.

## 15.3 Organisational change management within RNIB Employment Network

This section highlights themes from the literature reviewed in Chapter 5 and considers organisational change management within the Employment Network in the light of these themes.

### 15.3.1 Mission

The Network mission is to support and enable blind and partially sighted people of working age to obtain, retain and advance in employment and to influence decision makers at all levels to promote and provide quality services on behalf of blind and partially sighted people of working age. This was devised at a divisional management conference in 1995. Field staff had minimal input into its formation and many of those interviewed commented that it does not accurately represent the Network's activity and ethos.

### 15.3.2 Definition of customers

Service providers interviewed struggled to define their customers. One RNIB manager said:

*'We have a poor understanding of customers needs – we may have good understanding of customer from our own service perspective but not of the customer as a whole. Why? Because staff are grouped by function so no-one has overall responsibility for the way the customer interacts with the organisation.'*

Employment Consultants (ECs) were asked to name their customers. The majority viewed visually disabled people as their primary customer. When asked for clarification ECs explained that, in theory, the term refers to all blind and partially sighted people of working age. However most admitted that in practice almost all their effort is focused upon visually disabled people in work, serving Employment Service contracts for provision of assistance

with job adjustment and assessment for special equipment. Third party funding agencies such as ES were recognised as customers and employers were also mentioned, but as purchasers of consultancy services rather than as potential providers of employment for visually disabled people. The Network does gather feedback from customers through customer satisfaction surveys but these are usually undertaken by a teleworker rather than field staff themselves. None of the staff interviewed mentioned other members of the organisation as potential customers.

Products offered by the Employment Network are also be difficult to define. Although the EC may have a rough idea of what a visually disabled individual wants s/he cannot be sure until they meet. Through the use of their professional expertise an EC is able to develop the 'product', vocational guidance for example, during the course of the meeting. In addition there is some confusion over the processes used to deliver the product to the customer. For instance the Network does not officially offer support to individuals who self-refer. However ECs have some autonomy, due to the physical separation of their work from supervision, and many choose to continue providing direct services on a non-fee earning basis. One reason for this could be that field staff feel a constant need to respond because the Network does not have a waiting list. ECs also expressed frustration with the delay in service delivery caused by the need to obtain further referrals from ES in order to provide any additional or alternative services they deemed necessary upon meeting individuals.

### 15.3.3 Organisational culture

RNIB was formed over 100 years ago and has its roots as a self-help group for braille readers. Today it operates in a contract culture and is currently grappling with the many changes described in Chapter 5.

Historically the Employment Service has provided services to visually disabled people in the manual sector and RNIB has served those in the commercial sector. However as the statutory service was restructured in the early 1990s posts which were dedicated to dealing specifically with blind people were deleted and the statutory agency began to refer on to other agencies visually disabled people in a wide variety of situations including those with or wanting jobs of a manual or lower skilled nature. RNIB committees did recognise a change in the external environment and were concerned about the employment prospects of visually disabled people with manual skills. They commissioned some research (hence the focus upon manual skills in the employer survey), but their concern was not translated into practical support for Employment Consultants. There was no recognition that the scope of their work was changing and no training was provided.

### 15.3.4. Organisational structure

The organisational structure of the Employment Network is described in Chapter 3. The Network Manager, although geographically distant, retains control of regional activities and budget management. The use of matrix management for project work and some national

services is promoted. For instance Network staff supporting the research to re-deploy staff within National Westminster Bank were working within a matrix management model. Ongoing negotiation with regional managers was required to secure staff time.

RNIB operates a committee structure through which representatives of blind and partially sighted people can influence the direction and activities of the organisation. RNIB has a policy of training and supporting committee members to enable them to contribute more fully as their role changes. As yet there has been no evaluation of this work. Senior managers attend committee meetings but the majority of field staff interviewed had never attended or met any committee members.

### 15.3.5. Personnel systems

The job description and person specification of RNIB Employment Consultants is given in Chapter 3. The Employment Network monthly activity analysis list lists 28 tasks which ECs are expected to undertake. Analysis of the work of EC based upon work diaries is presented in Chapter 12 and this reflects a wide range of activities requiring both technical skills (assessment, vocational guidance, job accommodation techniques) and business skills(negotiation, networking and resource allocation to manage a case-load). However, few of the ECs interviewed had received training to support them in the development of their role and some were better equipped than others to deal with certain elements of their job. ECs identified their own skills gaps by requesting more training in the areas of employment law, health and safety, ergonomics, negotiation skills and low vision

assessment. They indicated a requirement for more information on procedures related to their work, demonstrating a desire for more guidance rather than freedom to develop their own approaches and working methods.

The breakdown of EC tasks in Chapter 12 indicated that 13% of their working week is spent on general administrative tasks. Due to a lack of administration support many field staff have to do routine paperwork which is a poor use of their skills and time. Many complained about the growth in paperwork over recent years, particularly the amount required for financial reports which staff believe do not accurately reflect how they spend their time or offer a useful measure of performance.

### 15.3.6 Communication and staff training

One theme of the feedback from RNIB staff was the need for improved communication within the Network. The majority of those interviewed noted the lack of communication between different Regional Employment teams, between field staff and managers and even between members of the same team.

Within the Employment Network there is no standard induction programme for new staff. ECs tend to develop their own way of working by learning on the job. For example, there is no recommended structure for the provision of the vocational guidance service and no recommended information sources. Employment Consultants have their own favourite texts,

often used in former jobs and some prefer to rely on their previous personal experience of work.

### 15.3.7. Staff commitment and performance measurement

Employment Network staff are often frustrated by different interpretations of need when asked, under contract, to provide a specific service to a disabled individual by PACT. There are also tensions between staff from different disciplines who adopt differing approaches to their work, such as Occupational Psychologists and Employment Consultants.

The Network is currently implementing annual performance reviews for all staff. Both appraiser and appraisee complete standard forms in preparation for the interview that focuses on both past performance and future goals. Some Network staff have refused to sign the resulting appraisal reports due to disagreement over the content. A senior manager in the Network commented that there is a weakness in a system that appraises individual performance against individual targets without reference to organisational and team objectives and performance.

Income generation is perceived as the only data required for measuring performance. Indeed some regional teams operate a system of individual income generation targets. Team members admitted that this acts as a disincentive to pass referrals on to others with more appropriate expertise.

### 15.3.8. Organisational strategy and systems

The RNIB Corporate Strategy describes priorities for the organisation. It details four strategic priorities and service objectives. It was drawn up over a period of time with assistance from external consultants but the final version was agreed at a management conference. In general field staff interviewed did not have a good understanding of the corporate strategy document, indeed several said they found the coding system confusing and they generally felt that this strategy was quite removed from their activity.

During interviews with service providers it was necessary to distinguish comments related to occupational information from those more concerned with other information and communication issues. It became clear that some service providers are struggling with inadequate information systems (such as management information, financial information and internal communication systems). Those interviewed wanted more information about their clients, based upon work conducted over a period of time. Clients can be a rich source of occupational information but the lack of an appropriate record system makes gathering and analysing useful data about the client group difficult.

*'The client record system needs an overhaul.'*

*'Apart from ad hoc liaison there is no way of knowing what colleagues in other regions are doing. This can lead to duplication of work.'*

### 15.4 Introduction of a new occupational information system

The introduction of a new vocational information system represents change and the application of organisational change theory could assist with implementation. In specific situations a plan for change should identify new staff roles with training needs, an appropriate organisational structure to support change, potential barriers to change with solutions, and monitoring and evaluation criteria. The first stage of development of the vocational information system was the job analysis instrument and ECs were invited to contribute to its design.

The employer survey had provided useful employer contacts who agreed to take part in further research and follow-up visits. This was an opportunity to test the job analysis instrument in practical situations. The Employment Network and Employment Consultant staff appeared to provide an appropriate structure and staff role to support testing and implementation of the job analysis instrument and ECs agreed to take part in the follow up of respondents to the employer survey. This exercise could provide them with the opportunity to undertake labour market research and to develop links with employers. After consultation with ECs and their managers it was agreed that each EC would visit between 3 and 5 employers over a five-month period. A suggested visit programme and copies of the job analysis instrument to assist interviews and observation were provided.

After several weeks the employer visits had not taken place and it transpired that ECs were nervous about approaching employers when their query was not related to a particular

client. Contacts with over 60 employers were made on behalf of ECs in order to ensure that employers were willing to take part and were prepared for a telephone call from an EC to arrange a visit. Contact details were passed onto regional teams. EC response was still less than enthusiastic and some made no visits at all. Many said this was due to the extra paperwork the visits would entail. Finally a total of 20 visit reports were completed with contributions from 2 ECs, the remainder carried out by this author and two other members of RNIB staff. The ECs who did take part chose not to use the job analysis instrument and preferred to write a narrative report.

Job analysis is mentioned in the EC job description and it is one of the services these staff provide to funding agencies. The exercise to introduce a standard approach to job analysis was based upon the assumption that ECs already had some knowledge of and experience in job analysis. This assumption appears to have been ill founded since ECs generally lacked confidence in their abilities to gather occupational data during visits to employers. Training programmes to equip staff with appropriate skills and knowledge of job analysis have been lacking. This could explain the poor response to involvement in the follow up of employer respondents. An external training course was designed to give staff an overview of the tools available to investigate jobs and identify the skills required to complete tasks in a wide range of employment situations. Senior managers decided that all ECs should attend the course. The reaction to the course was mixed; some were keen to attend to broaden their skills, others were less enthusiastic.

Monitoring and evaluation of the exercise to introduce the job analysis instrument focused upon the quality of the job analysis reports received and these were described in Chapters 13 and 14.

## 15.5 Investigation of the impact of organisational change within an employer organisation on jobs for visually disabled people

The redeployment research programme within National Westminster Bank (NWB) provided an opportunity to observe an organisation, that had traditionally employed a significant number of visually disabled people, in a period of internal transition. Organisational change theory is applied to assist with understanding the effects this change had upon opportunities for the visually disabled staff affected by the introduction of new technology.

### 15.5.1 Staff roles

Senior Bank staff wanted to draw visually disabled staff into mainstream support and recognised that regional personnel staff should be responsible for the redeployment of individuals. However regional personnel teams needed a lot of support and encouragement from the case managers to get involved with visually disabled staff at all. Work undertaken by case managers included interviewing staff if circumstances changed, discussing vacancies with supervisors, assessing individuals' training needs, arranging appropriate training courses and liaison with new managers in cases of relocation. Regional personnel regularly undertake these tasks on behalf of NWB staff but were reluctant to take on the work on

behalf of visually disabled staff claiming lack of experience of dealing with visual disability as the reason.

Under-employment of visually disabled telephonists was a common finding. For example several had excellent keyboard skills but had never been given the opportunity to use these at work. Under the auspices of the redeployment programme, individuals received the equipment necessary to enable them to develop their existing roles and support to negotiate with supervisors if redeployment was likely to take some time.

### 15.5.2 Staff concerns

The redeployment programme had to address concerns at all levels of the organisation to stand a chance of success. Visually disabled staff were afraid of losing their jobs and afraid of *'failing'* assessments. Positive publicity from telephonists who had found the assessment helpful was used to encourage others to take part. NWB staff were afraid of having a 'blind' person as a colleague because they did not know how to deal with disability and disabled people. Visually disabled people were afraid of declaring themselves as such in case this jeopardised their position. Managers and supervisors were reluctant to take blind staff into their team, perhaps fearful of a negative impact upon team performance or concerned about their own ability to manage a visually disabled person. In some cases when a visually disabled individual started a new job a trial period was agreed during which case managers offered extra support. Not all trials succeeded. One particular branch in London already had two blind switchboard operators, each with extended duties. When another joined he was

unable to work with the same flexibility and required a good deal of support from his colleagues, such that their work suffered. This individual was moved from this branch and attended an extended training course in word processing.

Senior managers were afraid of allowing visually disabled staff a greater degree of influence over their future. There were many opportunities to involve visually disabled staff, for example with technology testing, preparing information in a range of media and giving interviews for the NWB internal magazine. However NWB could not be persuaded to invite a visually disabled staff representative to join planning meetings or to include them in awareness training sessions for other staff. Neither were individuals present at their case conference with regional personnel managers. One visually disabled telephonist suggested the development of a team of regional disability co-ordinators to act as a source of information and support to colleagues. These co-ordinators could have saved human resource staff a lot of time if they developed links with local sources of funding, training providers and PACTs, but the idea of devolution of responsibility to visually disabled staff was not popular with human resource staff.

### 15.5.3 Disseminating knowledge

Many blind and partially sighted telephonists had been in the same job for years but through lack of training were unfamiliar with NWB systems, products and equipment. Training in the use of new technology, access technology and vocational training were required. In the new banking environment selling of products and services is a core skill for most staff so the

availability of product knowledge in accessible media was vital. Many visually disabled staff were given new equipment and received training to acquire skills that could be incorporated into their present job and would prove transferable to new jobs. This served to create an environment for development that had not existed for visually disabled telephonists within NWB previously. However despite being more flexible visually disabled staff continued to experience barriers to redeployment in certain areas. Although some managers were eager to get involved they were unsure how, others were less keen and thought that most jobs were unsuitable for visually disabled people. Very few NWB staff were aware of the special equipment and access technology available to boost productivity. Visually disabled staff were often excluded from team meetings and training courses. A training course was designed to encourage NWB staff to think about the barriers to development experienced by visually disabled employees, to dispel misconceptions and to encourage consideration of solutions to these barriers.

On occasions poor internal communication within both NWB and RNIB led to difficulties. Within NWB delays were often caused by bureaucracy and information was not always disseminated throughout the numerous levels of the communication chain. Much to the dismay of the human resource staff one visually disabled telephonist was sent home on full pay because his manager was not aware of the redeployment programme and did not know what else to do with him. Lack of awareness at branch level also caused difficulty when arranging assessment appointments or visiting staff and it was necessary to discuss the programme in some detail with branch administration managers to ensure that suitable switchboard cover was arranged. Within RNIB the role of Employment Consultants in the

redeployment programme was not clarified early enough. Although briefing documents were circulated to all RNIB Employment Network staff and a range of managers attended review meetings with NWB, details of the programme had not been adequately communicated to field staff. ECs had not been involved in the individual assessments and did not subsequently want to take on the responsibility of liasing with PACT on behalf of NWB staff. In the event several PACTs expressed a desire to deal directly with NWB so it was agreed that case managers would take responsibility for liaison with PACT.

**Discussion**


# Chapter 16. Occupational information and vocational support needs of visually disabled people, service providers and employers.


## *16.1 Introduction*


This chapter draws together findings regarding the occupational information and vocational support needs of visually disabled people, service providers and employers. Awareness and current use of existing information and support are considered.

The research has provided a better understanding of the experiences of blind and partially sighted people as they progress through education and training into employment. This chapter explores their attitudes to and experiences of the transition from education to employment. Factors that could be important influences on successful completion of education and obtaining employment are highlighted.

The views and experiences of service providers involved with visually disabled people at various stages of rehabilitation, training and employment placement are discussed. The use they make of

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occupational information and the quality of information provision by service providers are considered.

Data regarding existing employment opportunities for visually disabled people were gathered, as employers identified jobs undertaken by visually disabled staff within their organisations. Attitudes to the employment of disabled people are examined by considering reasons given by employers for employing or not employing visually disabled people and by examining the impact equal opportunity policies have on employers' practice. Follow up visits enabled vocational service providers to carry out job analyses to identify potential employment opportunities and job accommodations that might assist visually disabled people. The value of this exercise is considered.

The suggestions given by disabled people, service providers and employers regarding additional occupational information and support they would find useful were described in Chapters 11, 12 and 13. This chapter highlights gaps in occupational information and vocational support provision. The implications of these findings for the design and content of the job analysis instrument and the vocational information system to improve vocational opportunities for visually disabled people are discussed.

## 16.2 Visually disabled people

### 16.2.1 Exclusion

Since the samples for the studies of the occupational information and vocational support needs of visually disabled people were drawn from individuals who were either undertaking rehabilitation, training or had recently left college or university the results give a picture of some potential users of the vocational information system. Their demographic characteristics show that these users vary in terms of age, gender and severity of disability, so the vocational information system needs to be relevant to a wide range of visually disabled people. The findings also indicate that visually disabled people who are females and/or from an ethnic minority background are under represented within current service provision and further research is required to understand the reasons for this exclusion. Further research is required to investigate the apparent under representation of females in special education and the extent of under representation of visually disabled students from an ethnic minority background. It is necessary to understand the occupational information and vocational support needs of these groups in more detail in order to enable providers to tailor and target their information and support provision to counteract this low participation.

### 16.2.2 Factors influencing educational attainment

In this research those who attended mainstream rather than specialist establishments generally achieved better qualifications in terms of examination success, but the

relationship between these factors is complex. The study does not consider the ability of the students or the reasons they attended either mainstream or specialist provision. Focus group participants criticised both mainstream and special schools, the former for lack of support and the latter for over-protectiveness. There is limited provision of further education opportunities within the special education sector so the quality of support within mainstream education becomes more important for visually disabled students at this stage. Comments made in focus groups were also critical of the level and quality of support received in both further and higher education. Difficulties in identifying and contacting support staff and with accessing libraries present problems. Several cited the attitudes of teaching staff as a barrier to progress in their education and this implies a need for training and support for teachers and lecturers. Another way to alleviate problems could be the introduction of an assessment of need for all new students that could act as a trigger to support provision. A balance needs to be struck between supporting individuals to enable them to cope in colleges as they exist and the need to require colleges to change current practices to remove disabling features.

### 16.2.3 Factors influencing employment outcome

This research has highlighted some of the influences on employment outcome but further examination is required to clarify other factors. The results have shown that there are many occupations undertaken by blind and partially sighted people but the difficulties experienced by visually disabled people, including such issues as the low awareness of support schemes amongst employers, are also highlighted. The low level of careers guidance received by

respondents and the poor satisfaction rating they expressed are also causes for concern.

Two thirds of visually disabled respondents did not undertake work experience during their

courses. Dearing (1997) identifies lack of work experience as the graduate recruitment

problem most often mentioned by employers and the literature describes the important role

that work experience can play in the development of disabled students (Reiter and Palnizy,

1996; Dearing, 1997). The majority of respondents had impaired vision before they were 16

and would benefit most from work experience if consideration is given to preparation of

students, the work situation, the environment and staff (Kendrew, 1997). This has

implications for co-ordinators of work experience placements who need to work closely

with employers encouraging them to adapt the working environment through the use of

appropriate aids and equipment.


These findings provide some evidence of a failure of educational establishments to prepare

students adequately for transition into employment and a failure of agencies responsible for

supporting the transition process. This is born out by published research that indicates that

many school graduates are unprepared for vocational integration (Gleeson, 1990; Brown,

1991; McGinty and Fish, 1992). The literature also points to the importance of information,

advice and guidance if adult learners and job seekers are to make the best use of available

opportunities (Tremlett and Park, 1995). The Careers Service Annual Report (1996) warns

that young people without qualifications are at risk of being marginalised. Despite their

visual disability and in some cases limited support whilst studying, visually disabled

university and college leavers in this sample achieved examination success well above the

national average. Given that Hagemoser (1996) found educational attainment to be a

significant predictor of employability, it seems anomalous that students who achieve such high levels of examination success should fail to achieve a higher level of employment on leaving education. Although it was more common to have no careers guidance or work experience the survey did indicate that employment is a realistic goal for visually disabled people so provision of support in making the transition from education to employment for disabled students requires further development.

When questioned about where they went to get information to assist with job search the most popular answer given by respondents to both surveys was the Jobcentre. Only Jobcentre staff appear to have made a significant contribution to helping individuals find work. Specialist organisations and colleges were mentioned by less than half the respondents, Careers Service by less than one third. Visually disabled participants reported that the attitudes and expertise of some of the professional staff involved in all of these agencies acted as a barrier to their development. For instance, results demonstrate the wide range of subjects studied and occupations entered by visually disabled people. These extend far beyond the stereotypical areas of telephony and clerical work. Comments from disabled respondents indicate that this development has been hard won, against the stereotypical expectations of professionals. Many told how they battled against lack of information, uninformed professionals who were not aware of their needs or under estimated their abilities and a bureaucratic support system with complex eligibility rules. There is a need to provide information resources to agencies to underpin the quality of advice and guidance offered to disabled people. A Disability Employment Adviser (DEA), for example, can expect to be confronted by a wide range of people requesting assistance, both in terms of

type and level of severity of disability. Focus group participants indicated dissatisfaction with the quality of service that they received from DEAs but it may be unreasonable to expect any one individual to develop expertise in so many areas. It is also possible that the individual disabled people wrongly attribute responsibility for their unemployment to service providers and professional advisers when other factors such as the attitude of employers, are actually the major difficulty. However, there is clearly room for improvement in provision. Visually disabled participants also complained about a lack of continuity of service, for example when they left a rehabilitation centre or training college and returned to their home situation without support they found it difficult to remain motivated. The process of referral on to a professional to support them through the next stage of development requires some attention since it appears to be failing in some cases.

### 16.2.4 Implications for the vocational information system

### 16.2.4.1 Access to occupational information

The variety of subject areas studied, institutions attended and professionals encountered make for divergent experiences, depending upon the level of support and expertise available. Provision of occupational information happens in a fragmented and disorganised way and focus group participants often use personal sources for information and advice. There appears to be no system connecting the complex assemblage of provision to link disabled people themselves, service providers and employers. The study of organisational change showed that the multiplicity of service provision to disabled people is a relatively new

phenomenon. In addition, lack of funding for administration and training of service providers present a barrier to development. Disabled job seekers can approach a wide array of service providers for support including Government departments, private agencies and voluntary organisations. The challenge is to draw together professionals from a range of disciplines to establish a multi-disciplinary approach.

Some participants were unclear about the nature and benefits of occupational information and vocational support. Those unable to read print or computer screens unassisted were frustrated with lack of support in Jobcentres and generally by the need to rely on others to access information on their behalf. Advice about benefits was easier to come by but support with job search and information about occupations other than those that fit disability stereotypes (such as telephony and clerical work) was scarce. Central to the requirements expressed by visually disabled respondents is accurate and relevant assessment related to up to date occupational information. Yet there is no instrument specifically designed for the vocational assessment of visually disabled people and visually disabled people have difficulty gaining independent access to occupational information. Professionals supervising an assessment using tests that have norms based on the general population are required to apply their judgement in the interpretation of test results. Contrary to community-based assessment approaches gaining ground in the US this makes visually disabled people more dependent upon the 'experts'. In the UK there is no national occupational database describing jobs in terms of skills and other factors relevant to disabled people. Detailed information about the sensory and physical implications of certain tasks and how pieces of special equipment can be incorporated into jobs is not available. There is no central

monitoring of national or local patterns of employment of disabled people that could serve as a basis for understanding how they are changing. This results in limited knowledge of labour market trends amongst vocational rehabilitation practitioners who are therefore unaware of the implications these trends have for actual jobs for disabled people. Literature reviewed in Chapter 4 indicates that a technical solution may be a possible way forward and offers suggestions for the development of computer based occupational directories. The proposed vocational information system, based on this concept, can respond to the lack of relevant occupational information available to disabled people by linking information about education with information about employment prospects and careers and can offer both occupational data and job vacancy details. The system could present information about job accommodations and the full range of jobs undertaken by disabled people to dispel misconceptions regarding occupations that offer more favourable employment prospects. Statutory and voluntary service providers are not centrally co-ordinated and the end user (disabled people, employers, professionals and indeed service providers themselves) is likely to be confused by what is on offer, and unaware of the range of provision available. The vocational information system could assist by providing a navigational aid to newly disabled people or those entering the system of provision the first time, sign posting users to existing services, providers and sources of useful information. It could describe the range and aims of services available.

Recurrent themes in the research were choice and access to information, with repeated pleas for easier, independent access to educational and careers information, in accessible formats. Disabled people are seeking greater independence in educational and vocational decision

making. They need information to counteract pressure, from professionals in various agencies and educational establishments, to follow particular pathways. The provision of relevant educational and occupational information, in an accessible format, to aid vocational decision-making is an area in which a vocational information system could make an important contribution. Expansion of choice in education could be achieved by disseminating information about accessible courses and colleges. The vocational information system could also be used to raise awareness of the availability and scope of advice and guidance on education, training and employment issues.

This research has indicated that visually disabled people have difficulty in finding out about equipment and access technology. In addition, institutions are generally failing to provide equipment to assist with access to information in job search and in education. The vocational information system should provide information about equipment, with specific details about devices, suppliers, and assistance with assessment and funding. It could clarify training entitlements under financial assistance schemes and could alleviate problems related to the perceived lack of technical expertise amongst advisers and the personal cost involved in continually asking for support. It could also contribute by dissemination of good practice related to the use of special equipment in various schools, colleges, universities and libraries.

To alleviate the problems of continuity of support during stages of transition the vocational information system should seek to provide information about support that enables disabled people to learn, such as facilities, materials, equipment, appropriate induction programmes,

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mobility assistance, flexible assessment and examination processes. The system also has a role to play in informing disabled people of their entitlement to these services and the availability of service providers in various institutions and agencies who have a responsibility to provide this support.

The vocational information system can assist with awareness raising by providing a wide range of information to lift the expectations of employers, professionals and providers of service to disabled people, who although willing to offer support may be lacking in experience. One function of the vocational information system could be that of disseminating examples of good practice in provision of support to disabled people and of strategies disabled people have developed to achieve their educational and employment goals. Work experience, for example, was highly rated by the minority of visually disabled people in this research who undertook a placement. The vocational information system could provide information for employers about work experience and encourage dialogue between disabled people who have undertaken placements and those who are seeking placements.

## 16.3 Service providers

### 16.3.1 The role and recognition of occupational Information in vocational service provision

At the time of this study there was great concern amongst organisations of and for blind people about increasing unemployment in manufacturing industries, which had traditionally offered jobs to visually disabled people in repetitive machine work, as technology was taking the place of machine operators. The failure to record and analyse occupational information meant that service providers had no evidence or data to turn to when faced with the problem of increasing unemployment amongst visually disabled people with manual skills. Visually disabled people seeking employment in the manual sector had traditionally been assisted by statutory service providers. This resulted in a limited understanding of manual occupations within the voluntary sector. Providers of vocational services did recognise that service industries were becoming a more important source of work as visually disabled people obtained jobs such as word processor operator but this opportunity did not necessarily suit visually disabled people with manual skills. Service providers wondered what the industrial equivalent of word processing could be in the new look manufacturing industry and began to search for the occupation that could replace traditional machine work as the employment opportunity for the growing number of unemployed visually disabled people with manual skills (RNIB, 1991). This approach took no account of individual aspirations, assessment and potential job accommodations. It epitomised the limited understanding of the labour market within the voluntary sector, due to insufficient

use of occupational information. Links with employers that could provide first hand occupational and labour market data were weak or fully not exploited. Research findings confirmed that vocational service providers have specialist skills in catering for specific groups, and have considerable unstructured information about the types of work opportunities open to these groups. However they do not generally gather and organise occupational information in any of standardised methods described in Chapter 4 and staff lack training in skills such as job analysis. There is no structured approach to collecting and disseminating other occupational information, although many service providers are ideally placed to do so through their links with disabled people in work and with employers, both potential and actual, of disabled people. There is little use of the occupational information available through publications and no central co-ordination of data. Providers develop their own approaches to the use of publications; some are well used others less so and some staff pay little attention to occupational information at all. In order for service providers to offer relevant, up to date vocational advice they must maintain a detailed understanding of the labour market, but participants in this study made little use of labour market information to analyse labour market trends and examine the implications these have for employment opportunities for disabled people.

Part of the problem stems from the fact that provision of vocational services to people with disabilities is spread over a number of different service providers. There is a diverse range of information with many different ways of accessing it. Indeed individual providers develop their own ways of accessing information. There is insufficient sharing of occupational information between organisations and no process or standard terminology to

do so. Some practitioners have access to information, publications and software but others do not. These findings showed that even within teams and departments there may no centralised information system. Pockets of occupational information were identified, for example small libraries of narratives describing jobs undertaken by visually disabled people, but this information is generally not made available to other organisations or even shared with other individuals within the same organisation. In short there is little recognition of the role that occupational information can play in improving vocational opportunities for visually disabled people and the benefit appropriate use of occupational information could have for service providers.

Practitioners from a wide range of backgrounds are involved in vocational service provision. Most work in multi-disciplinary teams but individuals seem to guard their own area of expertise and since each group of professionals tends to focus upon a different aspect of provision no-one takes responsibility for maintenance of up to date, relevant occupational information and this exercise is not given priority. These findings have confirmed the literature reviewed in Chapter 4 that indicated that professionals in the UK prefer an unstructured approach to assessment and job analysis. In the absence of a standard approach and recognised instruments for the vocational assessment of visually disabled people, professionals involved in the process continue to rely upon subjective judgement and personal experience rather than systematic methods. With little specific guidance or training there is no accepted vocabulary to discuss occupational information so even within the same organisation communication between workers is hindered. The multi-

disciplinary teams observed in this research functioned in a disjointed fashion and often the role of occupational information was not recognised or viewed as important.

Chapter 3 concluded by asking whether providers of vocational rehabilitation consistently possess and communicate reliable and current information. Providers interviewed for this research expressed concerns regarding the accuracy of their information, believing it to be out of date. Indeed several were using out of date publications. The lack of standardised, regularly updated information was cited as a cause of poor information provision. Lack of easy access to details of previous cases and the confusion caused by the proliferation of databases within service provider organisations were viewed as problems, so the storage and retrieval of information are areas for improvement. It was recognised that data gathered when dealing with individuals would be useful in the future, but even in cases where this data was stored ease of retrieval was generally not considered. Consequently there were frequent requests for easy access to reports of previous assessments, training programmes, equipment trials and applications for funding. Although service providers, many with personal experience of disability, have built up a good deal of expertise the present systems of information storage in paper files that are difficult for others to access and reliance on colleagues to remember solutions to problems are unreliable. There is potential for work duplication and visually disabled people may miss useful information. Information management is also a problem for some service providers who have equipment or software that does not work or they cannot use due to lack of training. Priority is not given to maintaining information systems and consequently responsibility for this task may not be allocated. Internal information systems within service provider organisations may not function efficiently due to poor operational procedures and lack of information exchange

between colleagues. Information sharing within organisations is not aided by the many different storage methods used and easy data exchange is hindered as individuals develop their own data collections. The reluctance of practitioners to adopt standard methods was noted. There also appears to be a reluctance to share information, or at least a perception that others (external agencies and colleagues) give partial replies to queries. Departments of the same organisation need to adopt procedures for information exchange to ensure continuity of service to visually disabled people rather than rely upon ad hoc liaison between colleagues.

### 16.3.2 The use of occupational information in the Dutch system and lessons for practitioners in the UK

Occupational information is central to the system of disability benefit payment and rehabilitation in the Netherlands. The estimation of loss of earning capacity and disability assessment are part of the same calculation; definition of severity of disability takes account of how a person might function in the labour market. Although recent legislation has introduced the requirement to consider the full range of occupations a newly disabled individual could be capable of performing rather than just those requiring a similar level of skill to their previous job, the link between disability assessment and the labour market remains through the use of the Labour Structures Documentation (LSD). Providers of vocational rehabilitation services, with an understanding of the labour market and how this can impact upon disabled people seeking work have designed sophisticated instruments, such as the LSD, for assessing eligibility for work related benefits for disabled people. Labour

experts work with physicians throughout the assessment process so the model adopted is not purely medical. This multi-disciplinary approach to assessment works because the instruments used are common to all groups of vocational rehabilitation professionals. The instruments have been adopted nationally and professionals continue to maintain, use and develop the instruments. A programme of ongoing job analysis ensures that the occupational information within the LSD database reflects a picture of the current labour market. The job related information in the LSD is also used in rehabilitation provision, for example in vocational guidance, because of the strong links between assessment and rehabilitation. The UK has no equivalent instrument, procedures or professional structure. In the UK there is no occupational information system based on a widely used job analysis methodology, applicable to all workers and types of work, incorporating the assessment of jobs and of individuals and able to match the two. However, there are some similarities between the systems of provision in the Netherlands and in the UK. In both countries problems can arise when professionals from different disciplines, using different models of disability work together, although service providers in the Netherlands have the benefit of common instruments that promote common terminology and definitions. Lack of suitable training courses for vocational service providers is a problem in both countries but statutory providers in Holland have a well-developed internal training programme. Competition for funding is an issue in both countries and appears to encourage agencies to guard rather than share their information.

### 16.3.3 Training and professional standards

Lack of training appears to be a common problem for vocational service providers, who tend to learn 'on the job' to carry out a wide variety of activities. Respondents to the survey of visually disabled university and college leavers noted that inadequately trained professionals acted as a discouragement to their job search and educational progression. The majority of employment specialists interviewed for this research lacked skills in activities regarded as essential for vocational rehabilitation professionals in the literature, reviewed in Chapter 3, and the follow up of the employer survey highlighted the need for further training in job analysis skills. There are a small number of training programmes for vocational rehabilitation specialists in the UK but practitioners interviewed for this research were generally frustrated by lack of training opportunities. The UK has just begun to grapple with questions regarding appropriate qualifications for a professional in the field of vocational rehabilitation. A fledgling professional body for rehabilitation workers has been established but the situation is very different from that in the US where the Council on Rehabilitation Education accredits postgraduate training courses and vocational rehabilitation workers are legally required to gain certification from a national body. Further work is required in the UK to develop a professional structure with a lead body able to set national standards and develop training and accreditation.

## 16.4 Employers

### 16.4.1 Occupational information and vocational support needs of employers

One objective of this research was to survey employers' support and information needs with regard to employment opportunities for visually disabled people. Even though almost half of the respondents employed disabled people only 10% employed visually disabled people. One reason for this could be the need for specialist information and support. Amongst these respondents the general level of awareness of existing support was low, particularly support aimed specifically at visual disability, as was the use of sources of specialist information. The Access To Work scheme has gone some way to meeting the vocational information and support needs of employers but visually disabled individuals interviewed indicate that gaps remain. It appears that some employers may be eligible for support (financial or otherwise) but are not applying simply because they are not aware of what is available. Support services are not being widely enough used for the same reason, for example only 8% of participating organisations knew that reading for clerical support can be provided for visually disabled employees. It could be that a number of individuals are not receiving support that could help them work more effectively, or are losing their jobs unnecessarily. Visually disabled people taking part in this research indicated that the availability of appropriate equipment was a key factor in their success in education and at work but noted that they had to continually ask for support due to erratic recognition of their needs. Work with National Westminster Bank showed that the attitude of employers regarding provision of support for visually disabled staff can vary within organisations and the level of support given is

dependent upon individual managers. Provision of support is dependent upon all those involved (disabled individual, employer and service provider) recognising needs through assessment and knowing what is available. The vocational information system could inform these groups of equipment, services, funding and contacts for further advice or information.

The survey of employers identified visually disabled people undertaking a wide variety of jobs, in what could broadly be called the manual sector, using a range of equipment for diverse tasks. Respondents were able to identify further jobs within their organisations that they perceived as potential jobs for visually disabled people. These ideas were generally based upon only a minimal understanding of the information and support available to both visually disabled workers and employers and suggestions may indicate more about the attitude of the respondent rather than actual employment opportunities. However, these findings show at least a willingness to consider opportunities within their organisation for visually disabled workers.

### 16.4.1.1 Preparing visually disabled job seekers to meet employer requirements

The employers questioned expect all workers to be able to demonstrate a wide range of skills including sales and customer care skills, so visually disabled people need to be able to demonstrate these skills to satisfy employer requirements. Results also indicate that employers regard computer literacy and business skills as important, even for people in manual jobs. Service providers should ensure that the training curriculum for visually disabled people preparing for work includes business awareness. Employer respondents

indicated that they often train people to operate machines and use equipment. Rehabilitation centres and training colleges need to take account of the types of equipment most commonly found in the work place to familiarise students with them but vocational training and rehabilitation should not be limited to training on specific pieces of equipment. Service providers supporting visually disabled people in work can take note of the range of techniques for 'on-the-job' training adopted by respondents to the employer survey. This shows that flexibility is possible so ensuring that training programmes are accessible to visually disabled staff should be feasible. Research with National Westminster Bank showed that training and development for visually disabled staff could be overlooked so it may be necessary to encourage employers to provide it.

### 16.4.1.2 Recruitment and job retention

This research allows a comparison to be made between the recruitment practice of employers with job search habits of visually disabled job seekers. A similar pattern emerged with national and local press identified as the most commonly used method of vacancy advertising by employers and newspapers as the most popular source of job vacancies for visually disabled job seekers. However job seekers and service providers should also consider making use of less formal recruitment methods since a significant proportion of companies rely on word of mouth in recruitment. The vocational information system can encourage informal networking to promote this approach.

Work experience, regarded as significant in the literature (see Chapter 2) for preparing disabled people for work, but scarce amongst visually disabled respondents in this study, was identified by almost half of the employers questioned as a recruitment method. Service providers should seek to set up set up work experience opportunities with these and other companies that use work experience as a method of recruitment. Again, the vocational information system has a role to play in linking employers offering work experience placements with individuals eager to undertake a programme.

Almost half (42%) of employer respondents had employed a disabled person who had left their company in the last five years. The low level of awareness of support available could indicate that employers and employees did not receive information and support related to job retention in many of these cases. Responding employers seeking to employ or retain disabled workers said that general occupational information is insufficient; they require assistance to relate this occupational information to disability in general and to their disabled staff in particular. Employers, service providers and individuals need more information about how jobs can be altered for visually disabled people to enable them to retain their job. Although employers may have retention policies findings suggest that, in practice, they may not know how to deal with individuals who develop a disability by considering redeployment or job accommodation. Respondents to the employer survey said that visually disabled employees who left did so because they were dismissed or resigned due to disability or performance problems. This finding highlights a problem with employers' view of disability. If someone is considered to have a disability only when they reach the stage of having difficulty doing the job, employers' perception of disabled people is based on

failure or problems and not on success, so they need to be made aware of some success stories. Equally disabled individuals may not be aware of redeployment and retention options and, as one visually disabled respondent put it, *'leave when things become too difficult'* before considering alternative courses of action. Current publicity about special schemes or services available is not effective. This confirms the literature (Klugman et al., 1991; Borgia and Crowder, 1996) indicating that information about potential sources of information and support is not reaching disabled people.

In the small number of job retention cases examined in this research a variety of practical solutions were adopted including a flexible approach to hours of work, work load and use of special equipment. Advice and support was provided by external agencies in two instances. The employers in question were large organisations and had designated staff to act as a case manager for the visually disabled member of staff. This is an advantage but smaller companies may not have sufficient resources to provide designated support staff. All companies need access to information about which agencies can provide support in job retention situations. Equally individuals need to know that job retention is a realistic option in order to encourage them to seek advice at the earliest opportunity. The vocational information system can disseminate information about how people have been redeployed, or enabled to stay in the same job when they develop a disability. Details of how job retention was accomplished including use of special equipment, job modifications and redistribution of resources could encourage both employers and individuals to seek appropriate assistance at an early stage. Employers could demonstrate their compliance

with the 1995 Disability Discrimination Act (DDA) by using the vocational information system to share their experiences of job retention to inform other employers of possibilities.

### 16.4.1.3. Attitude and awareness

Investigation of the factors influencing employers in their decision to employ visually disabled people might offer insight into actions that service providers and visually disabled people could take to improve their chances of securing employment. Employers in this study indicated that they were much more likely to employ a disabled person if they were considered to be the best applicant for the job. This places the emphasis upon individuals and service providers supporting them to ensure that they have a clear understanding of what a job requires when they apply and can demonstrate that they have the necessary skills and abilities.

A significant focus for service providers, trying to raise employer awareness, could be the barriers to employing visually disabled people identified by employer respondents. Some of the reasons given for not employing visually disabled people such as 'inaccessible premises' and 'health and safety regulations' indicate that awareness amongst employer respondents of the implications of sight loss is limited. Although premises are unlikely to be inaccessible to blind people who do not have additional mobility disabilities the Access To Work Scheme can provide funding for alteration of premises. Respondents citing 'health and safety' used this as an umbrella term to cover anything from slippery floors to the presence of heavy engineering equipment. To comply with the DDA employers will need to consider

health and safety more rigorously. Health and safety need not act as a barrier to the employment of visually disabled people since several individuals were employed in occupations regarded as dangerous by other employer respondents. Similarly the lack of 'suitable jobs' was a reason given by questionnaire respondents for not employing visually disabled people but other respondents gave examples of visually disabled people undertaking jobs widely regarded as unsuitable. Visually disabled people are capable of a much wider range of activity than some employers imagine. These findings indicate that barriers to visually disabled people undertaking particular jobs may be related more to the low level of awareness of the employers than the physical barriers presented by the work itself and that the basis upon which employers make this assumption is generally ill founded. Many other examples of the discrepancy between perceived and actual needs in the areas of awareness and attitude were identified. Several respondents noted that they were unable to employ visually disabled people due to the extra assistance they would need from colleagues, making comments like "*staff numbers would not allow for extra help required, training or assistance.*" Other respondents described a variety of possible job accommodations to offer support to both the visually disabled individual and the employer; assistance from colleagues is not necessarily required or welcomed.

Another recent study has highlighted perceived problems with the employment of disabled people (Honey et al., 1993) and reported that the source of difficulty most frequently cited was related to the jobs an organisation could offer. The authors attributed this to the stereotypical image of disabled people held by employers, but did not offer any solutions to the problem. Perhaps only when an existing member of staff who has developed a disability

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begins to experience difficulties with performing his job and requires specialist advice do

employers become aware of the gaps in their own knowledge. The employer may then be

eager to receive whatever information and support is available but the challenge for service

providers is to intervene before this point to inform employers about the range of jobs

undertaken by visually disabled people and raise awareness of job accommodations.

Employers who have implemented solutions may be able to offer useful lessons on how they

initially tackled problems. The vocational information system could provide a forum for

sharing this information.

Another reason given for not employing visually disabled people was the lack of visually

disabled applicants. However, visually disabled people interviewed for this research

described multiple job applications and repeated rejection. This indicates a need to link

visually disabled job seekers with interested employers and provide advice to visually

disabled job seekers with regard to targeting job applications. If the vocational information

system includes a job matching service this could offer a mechanism for bringing together

disabled job seekers and employers who consider lack of applications from disabled people

to be an issue for their organisation.

Comparison of data from the postal survey and observation and interviews showed

differences in perceived and actual needs of employers. Some employer respondents

acknowledged their need for advice, others did not perceive a lack of awareness within their

organisation. Of those respondents who indicated that awareness of managers within their

organisation posed no problem in the employment of visually disabled people less than half

were aware of special aids highlighting the difference between perception of awareness and actual awareness. The vocational information system can contribute to a solution by providing information to raise awareness of employers who want to know more. Those remaining unaware of their need to learn present more of a challenge but clearly issues considered as problems by some respondents did not pose difficulties for others. Some organisations may be able to offer information on how they tackled the issues initially and how to overcome both physical and attitudinal barriers in the workplace.

### 16.4.2. Occupational information provision

The communication of occupational information to employers needs to be improved, ensuring it is appropriately targeted and supported with evidence, so that it is used rather than ignored. Different ways of presenting occupational information have been examined in this research. Using a narrative, the approach favoured by most service providers, as the basis of presentation of occupational information does not necessarily lead to production of clear, concise reports. In some instances narrative reports followed a logical pattern (basic task assessment, visual aspects of the job, job accommodations, conclusion) but they lacked any consistency and some failed to give a clear picture of the jobs analysed. Narrative reports did sometimes consider a variety of aspects of the job but report conclusions depended upon the individual analyst who was likely to rely upon personal experience to make subjective judgements rather than evidence to support their claims. Analysts require more training to enable them to base judgements upon structured assessment. Standards need to be introduced if data gathered is to be used by others and there is a need for access

to information about visually disabled people at work to assist with comparisons. The job analysis instrument includes all aspects covered in the narrative reports and introduces a standard approach to job analysis that can also aid report writing. However there is a need for further training of practitioners if the instrument is to be adopted for regular use to ensure that statements made in reports are not ambiguous and are based upon evidence. Training is also required to ensure consistent use of terminology. Specialists might benefit from sharing reports with one another in training sessions and de-briefing after visits to employers.

Use of the refined job analysis instrument by trained specialists could provide data for inclusion in the proposed vocational information system and give an indication of jobs undertaken by visually disabled people, requiring differing degrees of visual ability. Statements made in reports based on use of the job analysis instrument were consistently qualified with factual data. However physical demands of jobs were not consistently included. This may be because practitioners testing the instrument do not carry out job placements and are not therefore aware of all the factors that can have an impact upon a successful placement. There is a need to include suggestions for a summary section in the tool since this was often missing. Use of the job analysis instrument did lead to inclusion of a description of the relevant organisational structure, which was consistently missing from narratives. However, one limitation of the instrument was the lack of rating scales restricting analysts to simply indicating the presence or absence of a requirement. For example *'a packer must lift boxes of eggs weighing an estimated 20 kilos'*, and *'much of this work involves lifting heavy items and therefore would require someone with*

*reasonable strength'.* There may be a need for more accurate analysis since in these

examples there is no indication of how many boxes must be lifted per hour and how often

the packer lifted boxes. Further research is required to examine the case for introduction of

a more sophisticated tool with rating scales, though this would increase its complexity and

could dissuade practitioners from using it.

### 16.4.2.1 Limitations of job analysis

Findings highlight occupational information and vocational support needs that could be not

be addressed by job analysis. Information and support requested by employers included

recruitment advice, assistance with developing equal opportunities policies, advice on how

to implement equal opportunities policies throughout an organisation, information about job

accommodations and special equipment, help with identifying potential job opportunities for

visually disabled people and a request for a supply of visually disabled job applicants. The

majority of employer respondents interviewed had no idea how a visually disabled person

might work with equipment typically used on the job or how they might fulfil requirements

such as recording information or accessing printed information and computers. Although

the practitioners involved in the research had considerable experience of working with

visually disabled individuals and were able to draw upon this when considering the use of

special equipment and task re-organisation they were not fully equipped to satisfy all of the

requests from employers due to lack of appropriate information, training, resources and

insufficient contacts amongst visually disabled job seekers.

There is a need for a better system of information transfer between visually disabled individuals, service providers and employers. A structure providing ease of information transference and a mechanism for linking job seekers with employers disposed to recruit visually disabled people are required. Service providers and employers also need access to details of successful job accommodations. If service providers are to advise employers and visually disabled individuals about potential job accommodations then they need access to information about job accommodations that have worked elsewhere. A permanent record for storage and retrieval of job accommodation data would be valuable for both new and experienced practitioners.

Results from work with National Westminster Bank indicated that visually disabled employees were able to identify some barriers to their successful re-deployment particularly in the areas of their own skill gaps and discrimination in the work place. Individuals often suggested solutions but usually needed support from their case manager to remove the barrier. For example the case manager would discuss discriminatory practice with managers and supervisors on their behalf or research suitable training courses and secure funding to enable the individual to participate. Expert assistance was required to both identify and overcome more complex barriers such as those related to the use of technical equipment. These findings show the limitation of job analysis, operating as a data collection method alone, as an approach to improving vocational opportunities for visually disabled people.

Personal contact with employer respondents through follow up visits enabled practitioners to establish differences between policy and practice. Visually disabled respondents to the

telephone survey expressed a clear demand for awareness raising amongst employers (and service providers) to lift their expectations of disabled people generally. Several employer respondents were convinced that visually disabled people would not be able to work in their organisation. Presumably, they had not read leaflets or publicity material about visually disabled people in employment. Even so, they were prepared to accept a visit from a vocational rehabilitation practitioner. In these instances the practitioner must be able to present evidence of what visually disabled people can do to challenge unrealistic perceptions. Information can be tailored to particular working environments by breaking jobs down into tasks and comparing these with other tasks and jobs undertaken by visually disabled people elsewhere. Although personal contact with employers is labour intensive, findings highlighted examples of the benefit of visiting employers to conduct structured job analysis, enabling the vocational rehabilitation practitioner to encourage the employer to think more carefully about jobs within their organisation and discuss the possibility of extending good practice. Practitioners can also derive benefit from personal contact with employers as direct links with the labour market enables service providers to base their vocational guidance and training upon up to date knowledge and real, local examples. The manager of the private sector recruitment agency interviewed stressed that the ability to deal flexibly with a job specification when placing an individual in a job comes only from experience of dealing with the employer, visiting their premises and researching work within that organisation. Service providers in the voluntary sector could emulate this close working relationship with employers to the benefit of visually disabled people.

## 16.5 Conclusion

This research has shown that the occupational information and vocational support needs of visually disabled people, vocational service providers and employers are diverse but intertwined. People tend not to recognise the role that occupational information plays in services they use or provide, partly because the term itself is unfamiliar and also because occupational information is generally not distinguished from other provisions such as advice and guidance or vocational support. Despite not recognising the role of occupational information visually disabled people, vocational service providers and employers regularly use occupational data in the form of job vacancies, training and qualification details, provision or receipt of advice and consideration of job adaptations. Visually disabled people tend to think about occupational information in terms of places they would go or people whom they might approach to obtain it. The quality of information received through this approach depends upon how well equipped individual advisers are to deal with requests. Service providers in particular have a lot of occupational information held within clients' files that could be of value to a much wider audience.

There is a need for a better understanding of jobs amongst employers, service providers and disabled people and a common language to share occupational information. Use of the job analysis instrument could support this understanding by supplying a simple checklist of aspects to consider when assessing a job. However job analysis alone cannot satisfy all of the occupational information and vocational support needs of visually disabled people, service providers and employers identified through this research. The job analysis

instrument must operate within a vocational information system designed to meet these wider needs. Potential users require a mixture of factual information, such as details of organisations providing training in braille skills, and intervention, for example software to assist visually disabled people to develop decision making skills. The vocational information system can act as a signpost to sources of information and to other organisations offering interventions. In addition, potential users require data in the form of feedback, such as comments from visually disabled people about how they are using special equipment and their views on the accessibility of training courses. One solution to this would be to encourage dialogue between users through use of an electronic bulletin board.

This research has indicated that there are numerous barriers, operating in combination, that have to be overcome if visually disabled people are to improve their employment opportunities. Some are practical, such as the lack of occupational information in job vacancy details or the lack of vocational support, assistance to complete application forms for instance. The vocational information system can provide information to fill these gaps or direct users to service providers who can assist them. Other barriers, such as the expectations of employers and service providers are more difficult to overcome. Visually disabled people agreed that it was difficult to retain self-esteem and confidence when dealing with service providers' lack of interest in their aspirations and frequent job application rejections from employers. They added that only the most assertive and articulate individuals are able to persist when they have to ask repeatedly for appropriate support. The desire to blend in with the crowd rather than be seen as a nuisance can be compelling, so many prefer to give up. The Disability Discrimination Act (DDA) requires that service providers take reasonable measures to

ensure that they do not discriminate against disabled people. Similarly, through the DDA, discrimination in the workplace is outlawed. Although the vocational information system cannot end discrimination it could provide information about the DDA and how it applies to service provision and work environments in order to inform service providers and employers and to assist disabled people to understand their rights.

Employers continue to be influenced by a stereotypical image of disabled people and many remain unaware of the vocational support available to them and disabled workers. These findings have shown that their misconceptions are often factually incorrect and indicate the need for an efficient system of information transfer between employers, service providers and disabled people. Service providers need to take more opportunities to influence employers. Although labour intensive, personal contact enables mutual awareness raising and this research has shown that meetings between vocational service providers and employers, discussing needs and sharing information can make a difference to the practice of even the most reluctant employers. Employers who do not generally take notice of information from service providers may be more ready to consider information from other employers so a mechanism for information transfer between employers is also necessary.

There is a need to draw disabled people, employers and service providers closer together through a clearer understanding of the labour market, developed through occupational information provision based upon common terminology, presented in a relevant format for each group. Joint working to develop the vocational information system through data

collection and analysis could assist with breaking down the barriers that exist between these groups.

**Discussion**

# Chapter 17. Evaluation of an occupational information based approach to improving vocational opportunities for disabled people

## 17.1 Introduction

This chapter seeks to evaluate the approach based upon occupational information for improving vocational opportunities for disabled people adopted throughout this research. This research has identified gaps in service provision to disabled people, and particularly weaknesses in approaches to job analysis. The limited role of occupational information in existing provision has been demonstrated. Use of a job analysis instrument is recommended to encourage standardised, wide spread collection of occupational data. However, this research has highlighted some practical problems in implementing the new job analysis instrument and these are discussed. Lessons from the redeployment programme at National Westminster Bank (NWB) are discussed and a model for redeployment is presented. The development and implementation of the vocational information database (GROW) are discussed and reasons for the slow take up of GROW amongst service providers are considered.

If occupational information is to be more widely used by service providers and integrated into existing models of vocational rehabilitation and the UK system of disability assessment there is a need for a vocational information system that manages and presents a variety of vocational and occupational information. A model vocational information system linking aspects of provision, assessment methodologies and occupational data is envisaged, based upon the themes that emerged through research with visually disabled people, service providers and employers regarding their occupational information and vocational support needs. This chapter considers the individual elements that make up the model and the operating procedures required to support implementation. Progress is measured according to the plan for design and implementation of the vocational information system, devised in Chapter 9. There remains a need for further research and development to extend existing elements and to implement the full vocational information system, including use of a Multi-purpose Assessment Instrument (M-pAI), presented in this chapter, which could act as the basis for the system. Development of rules for job matching and a database of job accommodations are other elements that require further work. One way forward could be more interaction between disabled people, service providers and employers through online communication. This and other options for further development are considered.

## 17.2 Lessons from the redeployment programme with National Westminster Bank

### 17.2.1 Management and administration of redeployment

It proved difficult to support visually disabled staff who wanted to prepare to make the most of new opportunities when the exact nature of these opportunities was unclear. Dates of mergers and relocations were often not released in time to analyse jobs with a view to identifying suitable opportunities to match with individual visually disabled staff, let alone order, install, test and train on new access equipment. Careful resource planning was necessary to ensure that those with the most pressing need were assessed and supported appropriately. Later, when individual development plans had been established, the restructuring programme placed restrictions upon the redeployment programme. For instance extensive testing of access equipment was required for a particular individual but this had to be conducted within a three-week period, to fit in with the restructuring of a service centre. It was necessary to allocate sufficient resources to ensure that all testing was completed in this period. In such cases, even if supervisors are supportive of disabled staff in their desire to develop, it is necessary to consider the implications of wider organisational change for activity planning.

Delays at all stages of the redeployment process were common. Most frequently delays occurred in the installation of equipment and technology testing. These were due to prolonged negotiations to secure funding for equipment, difficulties

identifying technical contacts and miscommunication between technical staff from different organisations. On several occasions speed was of the essence, for example when responding to a vacancy and, if the individual was successful, actually starting work. Every effort should be made to ensure that delays are kept to a minimum with particular attention paid to the problem areas highlighted by this research.

Inevitably in restructuring there are changes of plan. However something which may seem like a minor addition to a job, such as the use of a computerised directory, can cause major ramifications to a visually disabled person. Sighted staff were able to incorporate this equipment into their job after attending a short training course and altering their working method. To enable a visually disabled staff member to do the same it was necessary to carry out detailed compatibility testing in the work place with a range of access technology. Once the individual had chosen the most appropriate device negotiation to gain funding was necessary and a special training course to suit particular needs was devised. It is important that employers realise that disabled staff may not have the same level of flexibility as non-disabled colleagues. Change can usually be accommodated but extra work may be required to achieve a satisfactory solution. Equally it is unrealistic to expect prior warning of all variations to the original plan so service providers must be prepared to act swiftly.

Communication within and between the employer and service provider occasionally became confused. NWB regional staff felt left out because central human resource staff were co-

ordinating the programme. Many RNIB staff had contacts within NWB from previous case

work and the information transferred between both parties was not always up to date.

Telephonists have a very effective grapevine and this served to add further confusion as

rumours and misinformation were spread by a small minority. A co-ordinated approach to

publicising the programme internally within both employer and service provider

organisations would have been helpful.

For the service provider it may be preferable to negotiate user involvement at the

programme outset, to clarify expectations and agree the form that this will take. In

this particular instance representation at review meetings could have proved useful

but NWB were reluctant to allow any visually disabled staff to take part in planning

the programme.

This exercise has demonstrated the value of encouraging disabled staff to network

with colleagues to gain information and even visit other locations to view new jobs

and equipment. This type of positive exchange can counteract misinformation and

resistance to change and enables staff to take more responsibility for their own

development.

When the post of Telephone Liaison Officer (TLO) was identified as a potential role for

visually disabled staff NWB assumed that the majority of visually disabled telephonists

would become TLOs. This assumption did not take account of individual aspirations,

abilities and varying needs for access technology. Although several operators did

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become TLOs they required different amounts of support and others have taken on completely different roles that their employer had not considered originally. In some cases enthusiasm preceded good sense, for example one case manager negotiated a TLO position for an individual without due regard for the initial assessment reports, which pointed out his lack of any keyboard skills. Further assessment revealed that the individual had poor spatial awareness due to mild cerebral palsy and would be unable to develop sufficient keyboard skills to carry out the TLO job. Hopes were dashed, managers were misled and valuable time was wasted due to reliance on assumptions rather than detailed assessment. The redeployment programme has shown that there is no such thing as a typical redeployment case because individuals and circumstances differ and each case required work, often of a pioneering nature, to achieve a unique solution.

The support needed by employers who employ a visually disabled person should not be underestimated. Each placement within NWB, a large, forward looking organisation with a history of equal opportunities, required intensive negotiation and practical, ongoing assistance. Although corporate support for the programme within NWB was strong, in practice a visually disabled individual was dependent upon local support to achieve satisfactory redeployment. It became clear that training for managers to encourage them to consider the barriers to staff development in employment and possible solutions was essential if visually disabled staff were to be given opportunities. Employers and job seekers taking part in a job matching programme should be advised of sources of assistance such as the DEA, local PACT and other local agencies. In the

redeployment programme case managers maintained contact with individuals even when alternative employment was secured. It was found that individuals' support requirements changed over time because jobs are not static. Some were able to act on their own behalf to negotiate appropriate support either from their employer or external agencies, others were unsure of how to do this and required assistance. In most instances of redeployment or job retention there is no established case manager so it is important that individuals know whom to contact for advice and support. In addition when working with individuals it is necessary to remember that aspirations change over time; maintaining contact with individuals may make any future work easier.

## 17.2.2 A multi-disciplinary approach

A multi-disciplinary team of case managers was responsible for overseeing the redeployment of visually disabled staff and their role was primarily one of co-ordination and advocacy. Due to the range of contacts of team members this multi-disciplinary approach required extra attention to communication to ensure that all those involved were aware of progress. Usually several different groups of people were involved in the redeployment process; visually disabled staff, regional personnel staff, central human resource staff, regional technical co-ordinator, local supervisors and colleagues, case managers, PACT and other external service providers. The different professional emphases of team members caused some disagreements, regarding the degree of influence given to visually disabled staff in planning the redeployment programme for instance. In addition co-ordination proved difficult when responsibilities were blurred.

For example special equipment, funded by PACT, a government agency, is usually installed onto standard computers, funded by and purchased by the employer. Each local PACT operates independently and teams require a different level of information before taking action. Employers in national organisations may not be accustomed to developing local agreements and negotiation with local PACTs can be complex and time consuming. Sufficient resources should be allocated to this important aspect of redeployment programmes.

Initially NWB visually disabled staff were alarmed that equal opportunities staff had been made redundant and their responsibilities passed on to occupational health staff. Literature indicates that this is a growing trend with in-house disability management departments becoming smaller as the function is integrated with related activities such as occupational health (Perry, 1994). This could be a positive change if disability issues are drawn into the mainstream operation of an organisation. However it remains to be seen whether the integration of equal opportunities into other departments will address the factors identified as barriers to effective integration of disabled staff. Work with visually disabled people has shown that these may include under-employment and the tendency to treat people with disabilities as a homogeneous group with the same requirements, providing visually disabled staff with special equipment without regard for training or ongoing support. NWB human resource staff were encouraged during the programme to take responsibility for redeployment of individuals but initially lacked the confidence to do so. They had little knowledge of possible job accommodations, special equipment, sources of funding, or the general barriers to development faced by

visually disabled people in the work place. Those who attended the specially designed training course were supplied with information regarding aids and adaptations, assessment procedures and whom to contact for specialist advice. They gradually took a more prominent role in redeployment, though some continued to require support to do so. It is important to recognise that the integration of equal opportunities and disability management into other departments should be linked with appropriate training and support for the staff concerned. In addition it is necessary to ensure that other staff, including disabled people, know exactly whom they can approach for advice.

### 17.2.3 Assessment

After initial meetings with NWB visually disabled staff it became clear that they were often under employed in their current jobs and that their work histories did not reflect the full range of their abilities. An accurate employment record is particularly important when there may be a possibility of staff redundancy. Service providers are advised to check that information is current. Although many visually disabled staff in NWB were highly qualified most had received no training from NWB and consequently they knew little of NWB processes or products. Although eager to develop many were unable to see opportunities to use their existing skills, let alone consider the acquisition of new ones and redeployment options. A general vocational assessment, covering all aspects of their experience, and testing to ascertain their potential gave a more accurate picture. Occupational psychologists with experience of working with visually disabled people were able to ensure that, despite the lack of vocational evaluation instruments designed for visually disabled people, test

results reflected the abilities, interests and aptitudes of individuals, and not their visual handicap (Botterbusch and Michael, 1985). The general technical assessment helped individuals to understand more about how the range of technology available could increase their independence. Even when such an assessment was their first introduction to technology and individuals were able to apply this general information to their specific employment situations.

Assessments were offered to all visually disabled staff who wanted to make career changes. Initially the community assessment approach described in Chapter 4 was adopted, so practitioners travelled to an individual's place of work to conduct the assessment. However, a number of problems were encountered with this approach. Transporting the array of equipment necessary for demonstration and testing in technical assessments was time consuming and expensive. A large proportion of staff time was given to travel due to the distances between service provider and employer locations. The responsibility for ensuring that colleagues and supervisors of visually disabled staff were not disturbed during assessment rested with practitioners. Extra preparation was required in order to ensure that the employer was not inconvenienced by the assessment process, understood what it involved and had realistic expectations of the space and time required. In addition some visually disabled individuals requested that their assessment be conducted in a neutral location, away from their work place and colleagues, to maintain confidentiality. These factors led to the decision to conduct assessments at service provider premises where possible.

When a vacancy became available in the redeployment programme time was often very short. Sometimes, when working with other employers, there will be time to analyse jobs, assess individuals, and then perform a best match exercise but there is a need for an alternative strategy when time does not allow for this. In the redeployment programme the general vocational and technical assessment proved invaluable, providing background information about an individual's aspirations, potential to benefit from training and capacity to develop the skills highlighted in the general job analysis. The general assessment provided sufficient information to enable the case manager and the individual to carry out a preliminary match with brief vacancy details. In several cases individuals were able to secure an interview on the strength of their general assessment results. Job analysis based on the job description, interviews with supervisor, job incumbent and technical analysis could then take place.

**17.2.4 Job analysis**

The process of job analysis began with a review of the different fields of work available in the organisation. Documentation was consulted but the redeployment programme with NWB highlighted problems with out of date job descriptions.

Some jobs were evaluated using the job analysis instrument to provide data on possible job opportunities for the visually disabled individuals involved. The results of this general job analysis were useful and could be compared with employees' interests and skills as revealed through the initial general assessment to indicate occupational areas for the focus of job

search and staff development efforts. This exercise identified some jobs that could offer redeployment opportunities immediately and individuals were given the details to enable them to consider their options. It also highlighted the need for prolonged technical investigation of some jobs to ensure adaptive equipment could be incorporated before offering a realistic option for visually disabled staff. Although it is often the case that such investigations take place only when an individual has been displaced by the introduction of new equipment there are examples in this research of the necessary investigations being carried out to broaden rather than salvage jobs. The process of NWB restructuring took several years so the opportunity was taken to enhance individuals' current jobs by adding new duties and integrating transferable skills such as word processing and data extraction into their current jobs, because job analysis had indicated that these skills were likely to be useful after restructuring. At the very least such skills would enhance a CV should an individual seek alternative employment in the future.

As the skills and aspirations of the individuals involved were understood through individual vocational and technical assessment, specific job analysis of vacancies, that is job analyses on behalf of an individual, became important and meaningful for matching purposes. The job analyses and individual assessments were conducted using different criteria and so matching was based upon aspiration and skills. As actual and potential vacancies became available they were reviewed with visually disabled staff, who were encouraged to apply for those offering a good match. Further job analysis was required when an individual secured a job in order to assess their exact need for job modifications and accommodations. However job analysis alone could not address the range of barriers experienced by NWB visually

disabled staff. Some supervisors expressed concern regarding dealing with day to day management of visually disabled employees or coping with more unusual situations such as changes in job requirements or unsatisfactory performance. Case managers were able to provide information or assistance in handling actual situations and reassurance to supervisors of the support available to enable them to deal with potential situations. This helped to build both the confidence and willingness of supervisors to get involved in the redeployment programme and to welcome visually disabled staff into their team.

### 17.2.4.1 Strengths and weaknesses of job analysis in redeployment

Job analysis was one of the key elements of the redeployment programme. Initially the instrument was used solely by service provider staff but other forms of data collection, such as the administration of the instrument by NWB personnel, were tested. Use of the instrument by a range of personnel proved very effective, providing a common format for presentation of job details including data that was specifically relevant to visually disabled people and enabling easy transfer of data between professionals with different backgrounds and from different organisations. Results of job analyses were also discussed with visually disabled individuals who were encouraged to add their own insights into possible job accommodations.

The job analysis instrument does not provide very detailed occupational data but it was found to be sufficient to aid matching in the redeployment programme, though a much more detailed job analysis was required once the individual had secured a position in order to

implement job accommodations. In many instances vacancies were replicated across the country so there was no need to visit the work place each time to understand the job. However, in the majority of instances, case managers found it necessary to meet with prospective supervisors to answer their queries and act as advocates on behalf on the disabled individuals before a position was secured.

If the results of a general assessment were available for job seekers these could be used for initial matching with vacancies and as supporting evidence for job applications. If a more specific job analysis is required to achieve the best match in a particular circumstance the amount of extra work required will vary but could be considerable in terms of time and cost if new technology, testing and training are required. The job seeker should be aware of this possibility in order to give an account of funding and support sources available during a job interview. It could be that employers who recognise a possible delay before their new employee is fully operational may think twice before offering a visually disabled person a job. There was no evidence of this in the redeployment programme with NWB, possibly because of the programme's high profile and growing awareness of senior staff. Other employers may require support to comply with the DDA and assistance to make jobs accessible to visually disabled applicants.

Despite the value of job analysis and use of the instrument as a method of data collection there were aspects of the redeployment process that job analysis did not consider and could not address. Service providers are advised to adopt a broader approach that includes individual assessment and consideration of the wider support needs of the visually disabled

at work, such as the need to raise awareness of colleagues and managers, sharing of job accommodation data, and recognition of the importance of technology.

Redeployment would have been made easier if the employer had identified a technologist from within their organisation to work with service providers to supply internal information, specifications, security clearance and to assist with testing. It is recommended that employers formalise the role of co-ordination of access technology for all disabled employees by allocating this responsibility to one of their staff. This person could maintain a list of appropriate access solutions for internal systems, provide appropriate technical support, develop standards, avoid duplication of testing and promote effective, ongoing sharing of information.

A solution that suits one individual may not suit another who has similar needs, yet there may be common aspects. In this redeployment programme a blind person wanted to move into a TLO role. Extensive testing had already been done to make this job accessible to a partially sighted person but testing began again based on the different requirements of this blind individual. However once this preparation work had been done for both blind and partially sighted individuals it was possible to describe a standard framework on which to base tailored solutions for visually disabled TLOs. Compatibility testing may limit the choice of access technology so rather than assume that every aspect of a solution is unique there may be common features to be drawn out that may be useful to a wide range of disabled people, service providers and employers. A database of job accommodations could be used to disseminate this data.

When setting budgets it is important to remember that jobs tend not to be static so support requirements vary over time and to make allowance for follow up and provision of on going support. In this research follow up was necessary to check on implementation of solutions such as the delivery and installation of equipment and to gain feedback on training courses.

### 17.2.4.2 Adaptation of the job analysis instrument for individual assessment

In view of the the limitations of using the job analysis instrument alone and the crucial role of individual assessment, the job analysis instrument was adapted so that it could be used for assessment of individuals. Thus it becomes a basic Multi-purpose Assessment Instrument (M-pAI). Figure 4 gives a brief summary of the instrument and a full version is given in Appendix 11. The check list format is retained but each prompt encourages the practitioner to consider either aspects of the job they are evaluating or the skills and abilities of the individual undergoing assessment.

Job Title:
Company name:
Contact:
Evaluator's name:
Date of visit:
Introduction to company (for job analysis only)

- Tasks – actual or in work history
- Skills and qualifications/experience
- Work environment – actual/ preferred
- Organisational and social aspects – actual/ work experience or preferred by job seekers
- Conditions – actual/work experience or preferred
- Standards
- Physical requirements of job/physical capacities
- Cognitive aspects of the work/cognitive skills
- Sensory aspects of the work/sensory abilities
- Satisfaction and dislikes in the work (as reported by job incumbent or preferred by job seekers)
- Possible modifications in the work place or of use to the individual

Figure 4. Multi-purpose Assessment Instrument

## 17.3 Conclusions drawn from the redeployment programme with NWB

A wide range of professional staff were involved in this redeployment programme from both service provider and employer organisations. The complexity of the issues and the time it takes to establish redeployment should not be underestimated. Key factors in the process were found to be:

- Job analysis

Job analysis based on the use of the job analysis instrument gave a clear, shared understanding of opportunities.

- Assessment

People may be able to develop beyond the initial expectations of their employer and make significant alternations to their working methods, as NWB staff demonstrated. Assessment gave an indication of individuals' potential

- Technology

The installation of appropriate access devices may only be possible after extensive compatibility testing with systems in the work place, and with the individual to ascertain what meets their particular needs. Such testing is labour intensive and time consuming. The sharing of solutions can cut down on duplication and save time in some cases and individuals should also be made aware of sources of technical assistance such as PACTs, local societies for the blind and other local organisations.

- Training

Vocational training provided by the employer, to ensure employees were aware of business developments and products, plus specialist technology training were required to open the door to redeployment. It was also important to provide training for the employer to enable them to understand the barriers to development experienced by visually disabled people in the work place.

- Provision of information in accessible media

Visually disabled staff were unable to progress into new opportunities until they had access to the same information that sighted colleagues used during the course of their work.

- Specialist support

It is likely that specialist help will be needed at some point during the redeployment process but many NWB staff did not know which agencies could assist or how to contact them. Support may need to be given over an extended period before a successful redeployment is achieved, particularly if disabled staff need to retrain. The employer also required specialist support to deal with specific situations such as disabled employees with an unsatisfactory performance record, mobility within the work place and changing job requirements. Service providers must ensure that employers are aware of the support available to them in these situations and contact details need to be made easily available.

### 17.3.1 A model for redeployment

The process developed for redeployment in this research can be expressed as a flow chart, shown in Figure 5. The procedure for redeployment began with general job analysis, which provided information regarding occupations within the organisation, likely to offer opportunities, to those conducting assessments. Individual assessment comprised initial interviews, vocational and technical assessments. As details of individuals' aspirations and skills became available job analysis of vacancies enabled matching, based on skills and aspirations. This process led to identification of skill gaps and appropriate training was

arranged. A more detailed job analysis was undertaken if an individual secured a position to identify job accommodations including access technology. Factors facilitating redployment were internal support at board level, the team of multi-disciplined case managers, provision of awareness training for staff at all levels of the organisation, and the involvement of external experts.

Since the redeployment programme with NWB the introduction of the Disability Discrimination Act (1995) has placed an obligation upon employers to make reasonable adjustment to enable disabled employees to retain work. It is likely that more employers will be seeking assistance to retain and redeploy disabled staff as a result of this legislation and the model developed through this research could be more widely used to support other organisations.
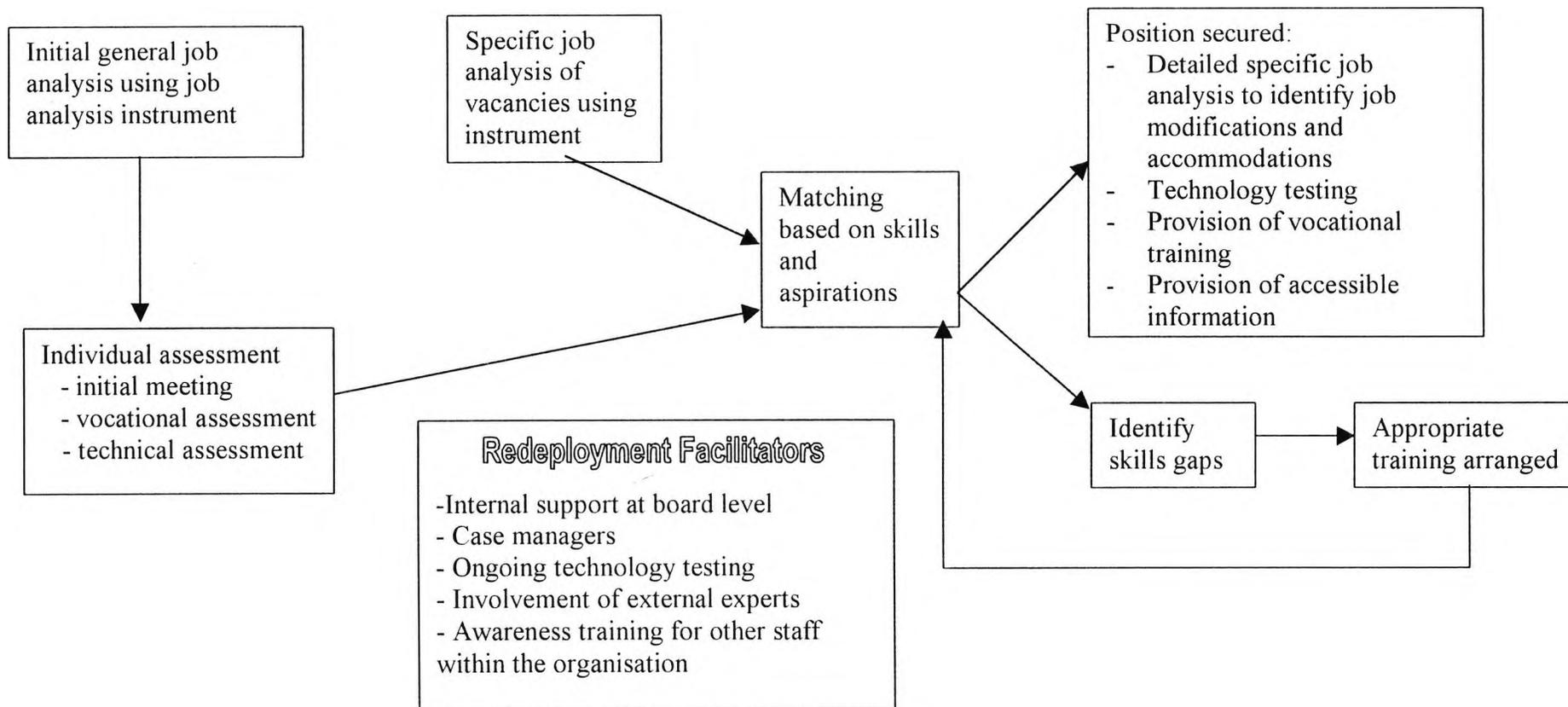
Figure 5. Model for redeployment

## 17.4 Lessons from the implementation of the vocational information database (GROW)

Literature reviewed in Chapter 4 suggested that the most important aspect of a job analysis and job matching system is the occupational information database. This element is still to be developed in the vocational information system model. It will include descriptions of occupations based on data supplied in job analysis reports provided by practitioners using the job analysis instrument, or the M-pAI as it has become. However, development and implementation of another element of the vocational information system, a vocational information database has been achieved. This database, called GROW (Gateway to Researching Opportunities for Work), was pilot tested by vocational service providers within RNIB.

Details of the occupational information and vocational support needs of potential users (disabled people, service providers and employers) were gathered and their requirements were categorised. These information categories form the basis of the computerised vocational information database developed to assist visually disabled people to make informed choices for personal development through education, training and employment. This database has been tested and is in use. RNIB supports ongoing maintenance and updating of the database. The network of Access Points at different locations around the country is small so the system is not yet widely available to those without accessible Internet but GROW has the potential to provide information to more

people than service providers can deal with individually. Increasing the number of

Access Points is one of the areas for further work, highlighted below.

### 17.4.1 Reasons for slow take up of the vocational information database

Although GROW has been well received by pilot testers however the number of

locations becoming Access Points has been lower than expected. Three main reasons

for this have been identified and these are discussed in turn.

### 1. Administrative weaknesses

Development of the system took longer than anticipated due to procedural difficulties

regarding the addition of new material to the site. These were solved but were a drain

on scarce resources. Internal communication within RNIB, the service provider

organisation testing the system, was slow. A system of representation of service

provider staff to give input at all stages of development and to pass information to

colleagues could have been more efficient.

### 2. Technical weaknesses

Technical limitations with the RNIB server restricted information transfer. In addition

the server crashed for two months causing delays in development and testing. The

possibility of using another server was discussed but since RNIB would be responsible for maintaining GROW after DfEE funding ceased this option was discounted.

## 3. Organisational Change

Changes within the voluntary sector as a whole, such as the shift from direct to indirect service provision, are not popular with staff who believe these changes are not client centred. This unrest can dampen enthusiasm for enterprise. In addition staff development needs have often not kept pace with these changes so lack of computing skills and failure to recognise systematic methods could limit potential users' recognition of the value of a vocational information database.

Within RNIB the regional mode of operation, with little communication between teams made it difficult to agree standards for information provision, for instance in the proposed development of employment examples, and there is confusion regarding how development and operations staff relate and work together.

## 17.5 Issues to be addressed in service provision to visually disabled people

Visually disabled people have indicated that they find gaining access to relevant occupational information and vocational support difficult. Many visually disabled people are now seeking independent access to occupational information, facilitated by

service providers rather than dependent upon them. Visually disabled people have criticised service providers for making too many assumptions on their behalf. Although there will always be a need to maintain provision of support through individual contact, a computerised vocational information system that is accessible to visually disabled people can give them the opportunity to explore options for themselves.

Provision of vocational service to people with disabilities is spread over a number of different service providers and agencies and there is confusion regarding division of responsibilities. Information sharing is hampered by the lack of standard terminology, poor guidance and training in the use of occupational information, professionals focusing upon their own discipline rather than working effectively in multi-disciplinary teams and the absence of a central source of up to date, relevant occupational data.

The research with NWB and other employers showed the need for easily accessible occupational information specifically related to disabled people. Employers discount visually disabled job applicants unnecessarily because they are not aware of work undertaken by visually disabled people in other organisations or possible job accommodations. There is a need for a better understanding of good practice with regard to recruitment, selection, training and employment of visually disabled people, particularly in the light of the 1995 Disability Discrimination Act, so dialogue between service providers, disabled people and employers needs to be encouraged. Many employers are not aware of their knowledge deficit with regard to disability and occupational handicaps and may be unlikely to seek out information for themselves.

Personal contact between employers and service providers has advantages in these instances.

The review of the literature in Chapters 3 and 4 revealed a lack of evaluation material regarding the use of job analysis techniques with disabled individuals and this research has highlighted the lack of understanding amongst service providers of the value of job analysis for diverse applications and uses. In light of this current research the job analysis methods reviewed in Chapter 4 seem removed from real situations. They fail to consider the practicalities of data collection, storage and presentation and the lack of training available for those conducting the analysis. Detailed guidance like that given in The Revised Handbook for Analysing Jobs (US Department of Labor, 1991) would be useful for vocational service providers. This needs to be delivered as part of a training strategy within the context of national standards and qualifications for the vocational rehabilitation profession.

This research has shown that job analysis, even with the use of a standard instrument such as the one proposed here, cannot provide all the information required to meet the occupational information and vocational support needs of disabled people, employers and service providers. Although more effective use of occupational information is crucial, reliance upon job analysis alone is unlikely to significantly improve vocational opportunities for disabled people. Job matching based upon analysis of occupations and actual vacancies within NWB did make a significant contribution to successful redeployment of visually disabled telephonists but other factors were also important.

These include the attitude of employers and the availability of support in the work place. Provision of occupational information in a vacuum does not address these wider issues and fails to recognise that jobs are context sensitive. Occupational information must be integrated into a wider system of service provision and users (service providers, disabled people and employers) must be able to understand and apply in their own context.

Reviewing the literature on organisational theory indicated that the culture of a potential employing organisation is an influential factor when considering opportunities for disabled people within the organisation (Sabousky et al., 1993), yet none of the job analysis methodologies reviewed considered organisational factors. The job analysis instrument, or the Multi-purpose Assessment Instrument (M-pAI) as it has become, does begin by directing analysts to consider some organisational factors. The need for technical adaptation was demonstrated through the redeployment programme but none of the job analysis methods reviewed are very useful in pinpointing the need for adaptations for job accommodations. The redeployment programme also highlighted gaps in provision. Vocational information specifically related to visually disabled people was required throughout the project but was not readily available. Case managers spent a good deal of time researching accessible training courses, where to purchase access equipment and so on. Individuals frequently had no idea of possible job accommodations or sources of funding available to finance them. Each of the job analysis approaches reviewed in this research and the instrument developed and tested provide a snapshot, a picture of a job at a point in time. Regular updating of data is

required to maintain an accurate understanding of the labour market as occupations change.

## 17.6 A new vocational information system

In view of the lack of standardised vocational assessment and job analysis provision for visually disabled people a new job analysis instrument for use with visually disabled people was developed. This has been tested and refined. Adoption of this M-pAI is recommended to encourage information sharing between service providers, employers and disabled people, since it will promote use of the same terminology and provide a shared basis for definition of terms. The M-pAI can act as the tool used to gather information for an occupational information database.

Investigation of the occupational information and vocational support requirements of disabled people, employers and service providers through interview, observation, testing in practice and comparison with service provision in the Netherlands have highlighted the limitations of this approach to improving vocational opportunities for visually disabled people. Findings led to the conclusion that a vocational information system is required with the occupational information database acting as the hub. A review of the literature was undertaken to compare and contrast existing systems, and to obtain guidance for the design of the new system, suggestions for information to include, operating procedures, reliability and validity, quality standards and data collection techniques. Research with disabled people, service providers and employers

has highlighted some specific information requirements and some more general expectations.

### 17.6.1 Design of the vocational information system

The term vocational information system describes the data and systems that need to be in place to ensure that all parties involved in vocational rehabilitation (the individual, the employer and service providers) have their information and support needs addressed throughout the process. This system is not simply about accumulation of occupational data but the presentation and use of occupational and vocational information, in a way that improves opportunities for disabled people. For example it offers information about possible solutions for disabled people such as further training, job accommodations and adaptive equipment, sources of specialist advice to assist with assessment and job retention are given and employers can advertise their vacancies to attract disabled job applicants.

A diagrammatic representation of the model, based on the Internet, and linking various databases with individual assessment and job analysis is given in Figure 6. It has a national occupational database at the hub that reflects actual jobs so that occupational information based on the national economy is available for use in vocational guidance. The system also includes a variety of other databases and a job matching element to compare information about vacancies and job seekers, as assessed using the M-pAI. The report resulting from the

matching process should indicate the level of concordance of these factors and give a complete description of the variables used.

This research has shown that occupational information and vocational support should be available across all age groups and provision should not be dependent upon factors such as educational background or severity of disability. The vocational information system needs to present data in a manner that is easy to understand by people from a range of disciplines or backgrounds, though it may be necessary to provide a mediator for those with particular needs or those accessing the system for the first time. The vocational information system must consider a wide range of access requirements if it is to be used by people with different disabilities. The system must be compatible with special aids so that it is accessible to disabled users. For example text alternatives must be given if any on-screen graphics are used in databases. In order to make the system user friendly any print outs must present information clearly, with a minimum of acronyms.
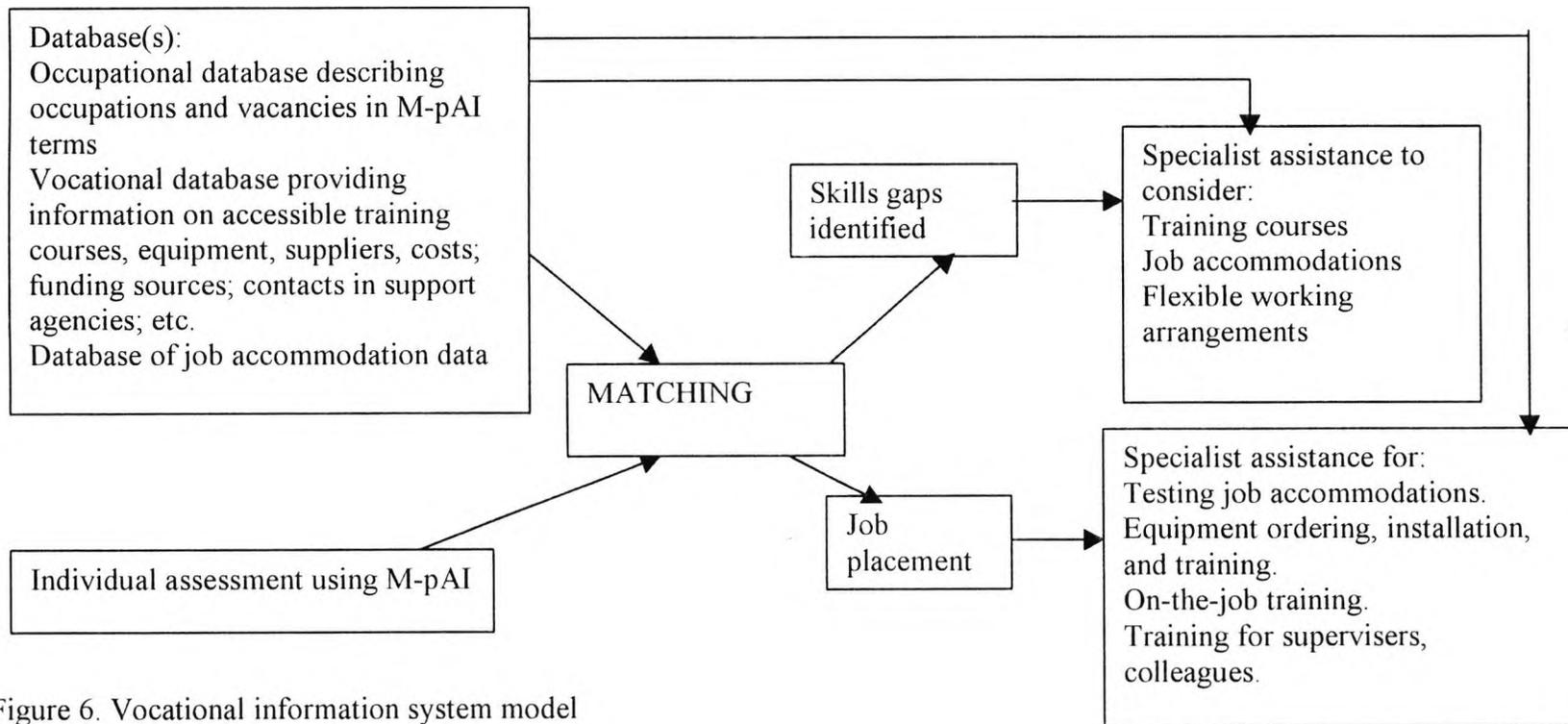
Figure 6. Vocational information system model

### 17.6.2 Elements of the vocational information system model

**a)  Occupational database**

As funding became available various components of the vocational information system shown in Figure 6. have been developed. Although the database of occupations is of central importance each aspect of the system can function independently. Development of components can be managed to suit finances and resources. Plans were made for development of a database of occupations describing them in terms that are relevant and useful to visually disabled people but the employer follow up visits yielded insufficient data so further work is required to build the database. Use of the M-pAI for job analysis would elicit data describing jobs in terms of skills and factors relevant to visually disabled people for entry onto the occupational database within the system, offering users access to occupational information reflecting the national labour market.

**b) Vocational information database**

The existing vocational information database (GROW) acts as a signpost to many of the aspects of occupational information and vocational support requested by potential users such as details of training courses, equipment and sources of advice and funding. Its implementation is of strategic importance since this database can act as a stage in the development of a much broader system.

## c) Job accommodation data

Throughout the testing of GROW it became clear that a wide range of users consider the provision of information about jobs that visually disabled people are doing, with examples of the job accommodations and special equipment that enable them to function in a variety of occupations, is of primary importance. Data regarding job accommodations is also important in the light of the 1995 Disability Discrimination Act, which places an emphasis on 'reasonable adjustment'. In order to define 'reasonable adjustment' it is necessary to maintain an ongoing study of job accommodations that have been adopted successfully. Employers can then be given information about adapting jobs and the work place to enable them to comply with the Act. This service is offered in the US by the Job Accommodation Network, reviewed in Chapter 4, developed to support the Americans with Disabilities Act.

Negotiations with RNIB Employment Consultants for the supply of suitable job accommodation data have progressed slowly. Presentation of information about a wide range of job accommodations avoids the development of standardised modifications for all people with visual disabilities and could help to combat the underemployment of visually disabled people by encouraging employers to accommodate non-standard print users at work. An on-line form for GROW users to complete, giving information about their own jobs, examples of good or bad practice and details of adaptations to jobs or special equipment has been designed and added to the database. Answers can be sent electronically to a System Manager who will check that no names or companies are mentioned and then add them to the site. This aspect of the system requires further development to encourage user dialogue on a broader range of topics such as new fields

of employment and summaries of experiences of students at colleges and universities. Consideration must be given to how this data can be catalogued to aid searching and whether links between individuals should be facilitated, through provision of contact details, so that job seekers can contact others who are already working in occupations that interest them.

**d) Job matching**

Boreham and Arthur (1993) found that occupational information is most useful if it is linked to the prospect of employment. The redeployment programme with NWB showed that job analysis and job matching are most useful if they form part of a much broader vocational occupational information system. Systematic job matching adds an objective contribution where traditionally subjective judgement has been a major factor in making recommendations. Provision of occupational and vacancy information with advice on possible matches is important to users and individuals will be more motivated to use a service that offers this combination of features. In addition the issue of lack of disabled applicants amongst employers, particularly if they are generally regarded as sympathetic to the employment of disabled people, is of particular interest. A system to facilitate links between disabled job seekers and interested employers is required and inclusion of a job matching service within the vocational system could achieve this.

The Mulit-purpose Assessment Instrument (M-pAI) was designed to facilitate matching since this uses the same criteria to assess both the individual and the job. The M-pAI should be used to define occupations in terms of skills, with consideration of possible job accommodations and the visual implications of the work for entry into the occupational

information database. Another part of the system would contain the results of individual assessments of job seekers, again based on the M-pAI. Matching could be achieved by comparing the two sets of results, that is job requirements and job seeker details. Matching individual assessments against occupation profiles in the national labour market would be useful for vocational guidance and planning rehabilitation and training programmes. Job seekers matching their profile against job vacancies would need to know the requirements of the employer in question. Processes and procedures need to be developed and tested to facilitate matches. The system operators must be prepared to collect, edit and enter job profiles and job vacancy details as they become known. This implies the ability to use the Multi-purpose Assessment Instrument to carry out job analyses at an employer's premises, and to perform a job analysis on vacancies. In addition specialists interpreting results of matches with national occupational data for use in vocational guidance would need to exercise judgement to apply results to the local labour market. A certain level of expertise is required by those acting as mediators for the system and there will be a need to train the practitioners involved.

Although it is recognised that individuals' aspirations and interests may be the first determining factor in vocational decision making, in order to develop appropriate matching 'rules' for visually disabled people more information about successful job accommodation information is required. There is a need to ensure that this supporting data is available before development of services like job matching, and the job accommodation aspect of the vocational information system needs to be a focus for development.

Preliminary investigations have been made regarding partnership with the private sector to develop the job matching element of the system. The possibility of working with ICL to develop a job matching service for visually disabled job seekers was investigated. ICL operates one of the largest contract employment agencies in the UK and uses Resumix, a computerised 'Human Skills Management System' as a tool for matching job requirements for placement of their own staff. A job matching service is also offered to other companies on a commercial basis. In view of the high cost of developing new software (the Resumix organisation has already invested £2 million in development) the possibility of using an existing package to support a job matching service for visually disabled people is attractive. It was envisaged that ICL would provide a matching service, using Resumix to maintain a database of both the details of job seekers and of employment opportunities and match one against the other. In turn the service provider offering the job matching service would be responsible for providing the information to create and maintain the databases, establishing the rules for the matching process and for supporting the individual job applications that follow. Further development is dependent upon funding. The matching process itself needs to be tested to clarify the role of service providers in supporting individuals. It may be that matches proposed by the system require further sifting by service providers and yet the individual must be enabled to take responsibility for their own choices.

## 17.6 3 Introduction of new system

This research has shown the need for an awareness of the culture of professionals involved in implementing a new system and the potential barriers to the application of standardised assessment techniques. Present provision can only change if practitioners

are prepared to adopt new working methods and agree common aims so it is important to secure the support of service providers. All staff involved in maintaining and updating the system need training in the application of the methodology and interpretation of results.

The literature reviewed in Chapter 4 criticised the inaccurate data held in some existing systems. Service providers should be aware that the relevance and accuracy of information passed on to others depends upon the quality of data gathered and input. Consideration must be given to the standards applied to these activities and the training of staff involved. Procedures to ensure the consistency and accuracy of data entered must be developed. Quality control might be achieved by insisting that only persons trained in job analysis may submit job analyses for entry. With this in mind and recognition that many service providers are already over burdened with administrative activities it may be that the central administration of the system is preferable.

A wide variety of users had the opportunity to feed suggestions into the design of the vocational information system. It will be necessary to facilitate their involvement during further development and testing in order to ensure that the system remains relevant. A process for gathering feedback from users for formative evaluation should be devised and evaluation material should be published and disseminated to encourage new users.

### 17.7 Wider applications of the vocational information system model and suggestions for further development

Stage 1 of the strategy devised to guide design and implementation of the new vocational information system, described in Chapter 9, is complete. A job analysis instrument has been designed, tested, piloted and refined. The Multi-purpose Assessment Instrument encourages consideration of the variables that need to be included in a job analysis to elicit information that can be of use to visually disabled people. Practical methods for data collection have been tested with both service providers and employers administering the tool. Further research is suggested to test administration by disabled job incumbents and adaptation of the instrument for use by other disability groups. Stage 2 of the implementation strategy referred to the design of a system structure for storage and presentation of occupational data, related data such as job accommodations and support services, and a methodology for comparing individual assessments to job requirements. This stage of development has been completed in part. The vocational information system model is the proposed structure to link the various databases and job matching service. Although occupational data related to jobs has not been collected a methodology for data collection based on use of the M-pAI has been developed. Related data requested by potential users is presented via the Internet in the vocational information database, GROW, and suggestions have been offered for expansion of GROW to include job accommodation information. The M-pAI has been developed to enable comparison of individual assessments and job requirements but this has yet to be tested and the procedures for matching the two evaluations (individual and job) have yet to be developed. Stage 3 referred to development of a strategy for progressive implementation of the model. The implementation of the system needs to take account of the changing

roles of voluntary and statutory agencies and the culture of professionals in the disability field, since these were identified as barriers to adopting new approaches to job analysis.

The service need not be limited to visually disabled people and indeed the topics covered are relevant to anyone interested in education, training and the world of work. Users of the vocational information database have contributed a variety of ideas for development such as extending it to offer more self-employment information or linking the service more closely with employers through the Employers Forum on Disability. The possibility of the vocational information database becoming a pan-disability service could be considered, with a common home page and other disability organisations maintaining pages for their client groups, which users could select from the home page. The service could be extended to offer information that is relevant to other disability groups provided due consideration is given to other access issues. It may be that other groups have a different network of potential access points that could broaden the network of access points for all potential users. Several vocational service providers have seen demonstrations of GROW and have been impressed by the ease of use of the site and accessibility of information and other disability organisations such as Scope have shown an interest in this idea. It may be possible to 'sell' other voluntary organisations a stake in the service, get commercial sponsorship, or the service could be taken over by the Employment Service and extended to become a pan-disability resource.

One of the obvious remaining gaps is the lack of a national database of occupational data, a UK equivalent to the US Dictionary of Occupational Titles. It could be argued that the responsibility for development of such a database should rest with central Government, but the cost of development has acted as a disincentive. However, it would

be possible to begin work on a relatively small scale by concentrating on one sector of the population, such as the visually disabled population, with a view to extending the work to other groups at a later date. Ongoing job analysis (using the M-pAI) based on systematic sampling techniques will be necessary ensure that occupational information is current and represents various segments of the economy. Innovative data collection techniques could be tested by enlisting the assistance of visually disabled people in work to gather occupational information, analysing their own job by following a simplified version of the M-pAI. If the vocational information system develops a pan-disability focus the M-pAI could be adapted to provide data of relevance to other disability groups. Thus a vocational information system tailored to the needs of visually disabled people could be customised to meet a broader spectrum of need.

A variety of good practice was uncovered during follow-up visits to employers in areas as diverse as monitoring, implementation of equal opportunities policies, job retention and awareness of disability issues. The vocational information system could be used to alleviate some of the discrepancy in provision due to lack of local services by disseminating examples of good practice identified. It may be possible to develop some of the good practice examples further, for example some employers accepted individuals for work experience, through liaison with a local schools and colleges. These arrangements could be extended to include specialist colleges.

In view of the use made of personal contacts, family and friends to find work by visually disabled focus group participants users of the vocational information system could be encouraged to develop their own network to assist one another in job search. Dialogue between users could be encouraged. For example it might be possible to establish a pool of

disabled people willing to work with others as mentors or users could contact one another through news groups or a bulletin board. This option raises questions regarding freedom of expression for users and the organisation maintaining the system will need to consider the degree of user dialogue it is prepared to support and whether or not comments need to be filtered before becoming generally available.

A requirement of the system designed to improve vocational opportunities for disabled people is that potential users are made aware of its existence. It is necessary to alert the vocational rehabilitation community to the conclusions of this research. Some papers, attached in Appendix 12, have already been published. What Next? (Simkiss, Garner and Dryden, 1998) was used as evidence of the needs of disabled students in a presentation to a recent Government Select Committee on education.

# Discussion

# Chapter 18. Organisations and organisational change

## 18.1 Introduction

This chapter considers how organisational change impacts upon opportunities for visually disabled people. It looks at application of organisational theory to both service provider organisations and organisations that could employ disabled people. In particular it discusses management of organisational change and reactions to change within RNIB and National Westminster Bank.

Literature reviewed in Chapter 5 indicated that voluntary organisations have an opportunity for the quality improvement if they pursue change by the application of quality improvement techniques and seek to systematically improve performance. A model entitled 'Change <=> Quality Improvement', based upon the work of Albin (1992), is presented to encourage quality improvement through change. It is applied to the voluntary sector in general in order to highlight possible areas for improvement. The discussion also incorporates lessons from the literature on organisational theory and management of change in order to identify barriers to change and quality improvement within voluntary organisations.

The extent to which the Change <=> Quality Improvement model can be useful in helping voluntary organisations and employers overcome these barriers is demonstrated by applying it to the RNIB Employment Network and the National Westminster Bank. This exercise also highlights some gaps in the literature and lessons learned are applied to the wider arena. Related organisational barriers, such as the structure of rehabilitation profession in this country, are also considered.

## 18.2 A model for change and quality improvement in the voluntary sector

Voluntary organisations have the difficult job of trying to balance service provision with the desire to maintain independence from third party funding agencies. They must manage the change in their service provision and their identity in an environment in which service contract agreements, income generation targets and business plans blur the boundary between voluntary and commercial sectors. Those providing services to disabled people need to manage the change in their roles and deal with the tensions that exist between servicing their contract and responding to individuals. Service providers need to respond to the changing face of the disability movement and consider how to work more closely with disabled people in design and delivery of services. Further work is required to examine whether service contracts are meeting the full range of needs of disabled people, for instance the need to respond to informal inquiries, the role that disabled people play in defining contracts, and the opportunities they are given to evaluate provision and influence developments.

**Before change**

Improve culture

Habits → Culture

Behaviour → Culture

History Tradition → Culture

Culture → **Agree mission**

Personnel systems Staffing issues → Management

Strategy and systems → Management

Structure → Management

Management → **Agree mission**

*Improve management*

**During change**

**Cultural facilitators**

Staff commitment & contribution:
*teamwork
*pride in achievement
*dispel fear
*strong leadership

Define customers and products

Define improvement processes

**QUALITY**

**IMPROVEMENT**

Disseminate knowledge:
*staff training
*use systematic methods
*integrate experts
*flexible staff roles

**Management facilitators**

Figure 7. Change⇔Quality Improvement Model

In order to manage these changes to introduce quality improvement voluntary

organisations can apply the model, based upon Albin's work (1992), presented in Figure

7. The title, Change <=> Quality Improvement shows that in this model these two

processes are synonymous. The model shows how the mission serves as a link for

aspects of management (personnel, structure, strategy and systems ) and culture (habits,

behaviour and history). Staff in voluntary organisations can work together to develop

their mission which will help them to consider how the various aspects of culture and

management can be improved. They must then define customers and their needs, and

identify processes for performance improvement. Cultural factors such as teamwork,

pride in individual and organisational achievements and strong leadership that dispels fear

can be encouraged to improve staff commitment and contribution. Management factors

such as staff training, integration of experts to promote flexible staff roles, and

recognition of the importance of systematic methods can work to improve dissemination

of knowledge. These factors act as facilitators of change and support quality

improvement throughout the process.


### 18. 3 Application of Change  <=> Quality Improvement Model to the RNIB Employment Network

In order to demonstrate the value of the model to individual voluntary organisations it is

applied to the RNIB Employment Network. Although the particular circumstances of

the Employment Network may not be duplicated exactly elsewhere in the voluntary

sector lessons can be drawn from the management of change within this micro-

organisation because so many of the changes impacting upon the Network are experienced by other organisations.

Encouraging Employment Network staff to adopt the job analysis instrument as a useful tool for understanding jobs, investigating labour market opportunities and gathering occupational information for use when advising visually disabled people can be regarded as a practical example of trying to introduce organisational change. Despite attempts the Network has not adopted a standard approach to job analysis. Some reasons for the failure of this proposed change and quality improvement are suggested as the various aspects of the model are considered.

### 18.3.1 Culture

The RNIB has 100 years of history and a number of employees have been in post for many years so changes in culture of the Employment Network are likely to be difficult to achieve. There is a need to develop a more professional approach to deal with service contracts but the introduction of service standards and accountability is hampered by the lack of standards and professional qualifications in the rehabilitation profession. In addition staff interviewed expressed different views regarding what they considered the emphasis of the Network should be, ranging from charity to professional business. This lack of clarity has resulted in field staff feeling compromised in their ability to provide the service they believe visually disabled people need. The mission statement has a crucial role in encouraging collaboration within an organisation and it is suggested that Network staff address afresh their mission statement as a starting point for change.

### 18.3.2 Management

#### a) Strategy and systems

Rather than working alone managers can involve field staff in strategic planing exercises to decide what the objectives of the organisation are, and gain their commitment to achieve them.

New recording and monitoring systems for income generation have resulted in increased paperwork for managers and field staff such that they are burdened by administration. Reviews of management information requirements and administration procedures are necessary to develop more effective ways of recording useful data.

#### b) Structure

The development of multi-service teams could be based on an analysis of the role of each specialist and an understanding of the relationship between them including overlaps, complementary and discrete areas of work. An analysis of how activities and decision making can be shared between the centre and the regions could provide guidance to the Network Manager and regional staff. The Network Manager could encourage regional staff to contribute their knowledge of local conditions while retaining responsibility for Network policy. A process for information sharing between field staff is necessary to counteract the lack of inter-region communication and facilitate information sharing between team members. Training can be used to encourage

integration of experts into regional teams and equip staff to deal with a broader range of referrals as their roles have developed due to restructuring.

Restructuring is a common organisational response to change ( Albin, 1992; Handy, 1988). Application of Schon's theory (1971) suggests that the merger of Employment Consultants and Student Advisers threatened staff identity. The uncertainty of role, geographic location, management structure and salary scales has added to the unease. The Network restructuring could have caused staff to stick to familiar tasks rather than seek involvement in innovation, such as job analysis research. The consultation for restructuring began with a call for comments on the future structure of the Network and individual work roles rather than an investigation of the Network's mission and objectives. Managers can support staff identity during this change by engaging them in discussion to agree the mission, objectives and strategy. The most appropriate structure to support these factors should then become clear (Butler and Wilson, 1990), and then staff can collaborate to define appropriate staff roles to suit the new environment.

Senior managers support the use of matrix management for project work and some national services. Matrix management requires co-operation on the part of managers regarding resource allocation. When resources are scarce work that generates income usually takes preference over research and development, so that activities like employer follow up visits are well supported.

## c) Personnel systems

Within the Network responsibility for selection and recruitment of new staff rests largely with management, supported by the personnel department. Greater teamwork on the recruitment and selection of staff may reduce staff turnover. If more consideration was given to the culture of the Network this information could be used in the recruitment process so that candidates could be made more aware of the organisational ethos before accepting a job. For example applicants who want to spend most of their time counselling and supporting individuals may choose not to join an organisation moving towards indirect service provision.

## d) Staffing Issues

Pressure upon managers to meet income generation targets and operate within tight budgets and decreasing subsidies may encourage a focus upon financial issues rather than other aspects of service provision and development. Albin suggests that for quality improvement the role of the manager needs to become one of facilitator, ensuring the availability of resources, removing unnecessary bureaucratic and structural barriers and devolving decision making to team members. Managers need training to enable them to practice these new management skills rather than traditional management techniques and field staff also require support if they are to contribute to this process.

**e) Mission**

The lack of agreed mission has repercussions in all aspects of the work undertaken by the Network and has led to tensions based on differing approaches and emphases of service delivery. Collaboration to reach consensus on the mission could serve to unify the Network.

**18.3.3 Defining customers**

Free market competition might act as an incentive to focusing on understanding and meeting customer expectations. It is likely, however, that Employment Consultants will be able offer a visually disabled individual only one option for their vocational development. For example the range of accessible training courses may be very limited leaving the individual with little choice. This option may or may not meet their needs but since it is the only option perhaps there seems little point in examining customer needs further. However, if the Employment Network is to use change as an opportunity for quality improvement it must be clear about who its customers are. There is confusion surrounding the make up of the visually disabled population, disagreement over definitions and data and there is very little analysis of what this 'primary customer' wants and needs. For instance the majority of working age visually disabled people are not in work but Network staff have only minimal contact with unemployed people, directing efforts to supporting those in employment. In addition field staff who deal with individual visually disabled people, managers who negotiate contracts with statutory agencies and committee members representing groups of blind and partially sighted people each have different customer loyalties.

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Despite fears of an unhealthy dependency on one customer the Network continues to service the Employment Service to the extent that Employment Consultants have little time for involvement in development work (such as job analysis research). The pressure upon Employment Network staff to generate income encourages them to view contact with employers as an opportunity to sell services rather than first consider what employers needs are and how productive information exchange can be established. Network staff could do this by enabling business and industry to influence how they practice (Perry, 1995), and by taking part in joint research and development programmes.

Staff will require training to develop a customer focus and this could include visits to employers, other voluntary and statutory organisations and discussions with visually disabled people themselves. Greater overlap and increased flow of information between committee members, managers and field staff could help with the development of a customer focus. Network field staff could be given the responsibility of customer satisfaction research, using Albin's (1992) definition of the customer as whoever is next in line.

### 18.3.4 Understanding the product

The Employment Network offers a diverse range of services including assessment, vocational guidance and legal advocacy. Defining a service that is likely to evolve during delivery, as Employment Consultants advise individuals, is inherently difficult and deciding when a service has been delivered is equally problematic. Visually disabled people do not pay for services received but continually ask for support. Staff feel a

tension between the requirement to work within their contractual obligations and the desire to maintain ongoing service to visually disabled people. In the short term the introduction of waiting lists and agreement of optimum caseloads could help staff who struggle with volume of work. In the longer term clarification of customers and a consideration of issues posed by the finite resources of the Network and which services take priority is required.

## 18.3.5 Improve Staff Commitment and Contribution

Open discussion between Network managers and field staff could encourage information flow throughout the organisation and encourage employee commitment. Perhaps Network managers should use their skills to encourage staff to highlight problems and develop team performance throughout the year rather than in annual appraisal meetings.

Performance standards can be used to developing pride in achievement and encourage team activity. The introduction of new measures of performance as an alternative to the financial measures used currently could improve staff commitment and contribution.

The attempt to introduce widespread use of the job analysis instrument showed that potential barriers to change include securing staff and management support in practice. A better solution could have been to encourage the involvement of a few by selecting a small number of staff to work with.

### 18.3.6 Disseminate knowledge

A review of the communication systems within the Network, both within and between teams at field staff and managerial level could encourage staff to suggest processes for improving communications. A recognition of colleagues as customers (Albin, 1992) could add incentive to share information, for instance data gathered from employer visits. In order for experts to distribute their knowledge throughout the Network managers could cultivate joint working programmes and facilitate development work for Employment Consultants.

Staff training and development is another way to disseminate knowledge within an organisation. Unlike colleagues in the Dutch rehabilitation system practitioners in the UK do not have a formal training programme. Although Employment Consultants are expected to carry out a wide range of tasks these tasks are not well defined and there is no programme of training to develop the skills required. (As suggested in the literature (Albin, 1992; Butler and Wilson 1990) the structure and staff roles necessary to support the introduction of the new job analysis instrument and new working practices were identified but assumptions based upon job descriptions led to an underestimation of staff training needs. Network staff may have questioned the point of gaining new skills, such as those promoted by the job analysis training course, since there is no structure for professional development. Indeed the course had little effect upon the working practice of field staff because systems and priorities remained unchanged upon return to the office). The Employment Network could address these issues by designing programmes for induction and mentoring for new staff and of professional development to equip

existing staff to meet new demands and perform well within the new structure. Training can be based upon analyses of job roles and training needs.

### 18.3.7 Recognition of systematic methods

The use of systematic methods can aid dissemination of knowledge but this is not a common approach in the voluntary sector. Multiple approaches to assessment and evaluation works against the development and adoption of standard techniques for information gathering, such as use of job analysis instruments for data collection. Employment Consultants for example have developed their own ways of working. However, recognition of the value of systematic methods and some development work to implement them could encourage dissemination of knowledge between colleagues and assist new staff.

If the Employment Network is to pursue quality improvement, the change process requires information: demographic information about visually disabled people; occupational information regarding staff roles; labour market information from the business world and details of customers. This implies the need for a more rigorous research and market research programme than is currently in place.

### 18.5 National Westminster Bank (NWB)

The redeployment of visually disabled telephonists to other positions throughout the organisation represented a change for NWB. The Change <=> Quality Improvement model is applied to consider the challenges during this change.

- Matrix management

The literature (Schon, 1971; Brager and Holloway, 1978) describes the limitations of matrix management. Ambiguity of reporting lines led to confusion as managers attempted to share scarce resources. Flexible staff roles could have eased these difficulties.

- Disseminate knowledge through staff training

Although many of the tasks required to progress action plans for visually disabled individuals were familiar to NWB regional personnel staff they were generally reluctant to get involved. This reluctance persisted until a specially designed training course addressed their concerns.

- Disseminate knowledge through accessible information

The problem of access to NWB product information in alternative media was solved by employing a displaced visually disabled telephonist to create and distribute new formats of all product information in a range of media to other visually disabled staff.

- Improve staff commitment and contribution by encouraging teamwork

Networking amongst visually disabled staff facilitated information exchange and staff were encouraged to take more responsibility for their own development. During the project several visually disabled staff travelled to different parts of the country to meet with a colleague for an equipment demonstration or to observe working methods. In-house demonstrations enabled frank discussion rather than a biased presentation from suppliers.

- Improve staff commitment and contribution by combating underemployment

Visually disabled telephonists were often not given the opportunity at work to use any additional skills they had or training to develop them further. Apart from ensuring that internal training is accessible to all staff NWB could offer support to disabled staff wishing to take opportunities to develop through external courses.

### 18.6 Conclusion

The management of organisational change in both employer and service provider organisations can act as a barrier to improving employment opportunities for visually disabled people if change does not equate with quality improvement. The Change <=> Quality Improvement model is helpful in identifying aspects of organisations that could be developed to facilitate quality improvement. These include clarification of the mission and linking with activity, the development of a customer focus by clearly defining who the customers are and how they should be treated, a belief in team work by focusing on performance measures other than individual income targets and implementing systems to encourage information sharing. Recognition of the importance of data and systematic

methods can be encouraged by addressing the need for useful management information. Examination of processes and systems before criticising individuals for poor team performance can help to dispel fear and encourage early identification of problems. Allocation of resources for staff training is needed to equip staff working in a changing environment and those who are taking on new responsibilities.

Albin's work (1992), which was adapted to provide the basis for this Change <=> Quality Improvement model, was based upon observation of a centre based rehabilitation service as it changed to become a community based rehabilitation service. Although the model is useful there are aspects where Albin's theory is not applicable. For example Albin favours the structure of multidisciplinary work teams, which the RNIB Employment Network has adopted. However, her assertion that such a structure will necessarily enhance integration and knowledge has not been the experience of Network members. A mixture of direct and matrix management has caused confusion over resource allocation. Individual income generation targets militate against sharing knowledge and referrals. Albin draws upon her experience in the US where various disciplines within the rehabilitation profession are well established. In the UK practitioners lack any professional qualification and the absence of standards, relevant qualifications and appropriate training courses hinders professional development. The new professional body has no funding or resources to monitor standards of practice and co-ordinate information sharing. Thus the level of service available to a disabled person may depend upon where they live, the organisations they contact and the individuals advising them.

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Literature reviewed in Chapter 5 gives advice on how to encourage change, become a learning organisation and pursue quality improvement but it seems to assume that the driving force for change within organisations comes from managers. It advises that managers should work with staff to develop the organisational mission and strategy, that managers should ensure that staff are trained to meet new demands and continue to act as a support as they assist staff to develop. Clearly staff at all levels within an organisation require training and support to develop their new role in times of change and organisations should recognise the need to equip managers to enable them to manage change for quality improvement.

# Conclusions

# Chapter 19. Reflections upon this research and potential for further work

## 19.1 Introduction

This final chapter presents a summary of the contribution to knowledge resulting from this research. The original research objectives are considered in turn to examine how they have been satisfied. The chapter concludes with some reflections upon the research as a whole.

## 19.2 Contribution to knowledge

This research set out to investigate how occupational information could be used to improve vocational opportunities for disabled people. Studies of the occupational information and vocational support needs of disabled people, service providers and employers confirmed that this topic required further consideration since gaps in understanding were identified, often due to a lack of accessible data. Disabled people themselves may not have had the opportunity to access information independently but are now requesting the choice to do so.

There was a low recognition of the value of occupational information despite the existing literature discussing disabled people and employment. The limited understanding in the voluntary sector of the labour market has been demonstrated. The original research brief (RNIB, 1991) suggested focusing efforts on the identification of a particular job that could be made accessible for visually disabled people. This research has shown that it is necessary to consider both individual aspirations and barriers blocking employment within organisations in order to improve vocational opportunities. Solutions could include a requirement for service provider organisations to develop a more coherent approach to working with employers and to apply systematic methods rather than rely upon experience to make subjective judgements when analysing jobs or developing client profiles. The literature review identified a lack of evaluative material linking job analysis approaches with disabled people. Research indicated that employers are confused about possible job accommodations and although discrimination persists there are employers who consider the lack of disabled job applicants to be a barrier. However, due to lack of standards and training in vocational service provision, providers are ill equipped to provide the clarification and support required by employers.

Initially research focused upon job analysis as a suitable method to gather occupational data for subsequent application to improve vocational opportunities for visually disabled people. Formulation and testing of a new job analysis instrument showed that useful information could be gathered by this method but also identified some limitations to this approach. It was also necessary to consider how data could be presented to the wide range of potential users and how it could be linked coherently. A nationally networked computerised vocational information system that records and presents information in a structured fashion and gives quick and easy access could contribute to the improvement

of vocational opportunities for visually disabled people. An examination of the literature and potential user requirements has served as the focus for design of a vocational information system model, specification of the content and guided the plan for how the system could be incorporated into existing rehabilitation provision.

A vocational information system, comprising different elements that can function separately but link together to form a single system, based upon the adoption of a common methodology for assessment of individuals and jobs and ongoing collection of occupational data, using a specially designed instrument, is presented. The model, which includes a job matching process, provides a systematic progression through the complex system of vocational rehabilitation service provision by facilitating access to information via the Internet, either directly by users themselves or with the support of rehabilitation staff. Operating procedures will ensure provision of up to date, reliable, relevant occupational and vocational data.

Additional contributions to knowledge are a model to assist with successful job re-deployment and a detailed examination of how organisational change management in the voluntary sector and employer organisations can act as a barrier to improving opportunities for disabled people.

## 19.3 Research objectives

In order to investigate how occupational information can be used to improve vocational opportunities for visually disabled people this thesis has examined the occupational

information and vocational support needs of those involved in the vocational rehabilitation process, namely visually disabled people, employers and service providers. The research objectives are considered in turn:

- Examine current vocational opportunities for visually disabled people and the models of support applied to assist them to progress through the system of vocational provision.

Current vocational opportunities for visually disabled people have been investigated through a review of the literature, a survey of employers and interviews with visually disabled people. Models of support and intervention to assist visually disabled people to progress through the system of vocational provision have been examined through literature review and studies of vocational service provision in the UK and the Netherlands.

- Examine how occupational information is gathered and used by vocational service providers and how this is incorporated into vocational service provision to visually disabled people.

Service providers were interviewed and work practices observed. The collection and use of occupational information by vocational service providers was found to be limited. Although service providers rely upon occupational information as they work with visually disabled people the role of occupational information in the services they provide is often not recognised by practitioners. Sharing of occupational information amongst

service providers, even those in the same organisation, is restricted by the absence of mechanisms for sharing this data and the lack of commonly accepted terminology.

- Consider the occupational information and vocational support needs of those involved in the vocational rehabilitation process (visually disabled people, employers, service provider agencies).

The occupational information and vocational support needs of visually disabled people were examined using a telephone survey and focus groups discussions. A postal survey, and follow up visits for face to face interviews and work site observation were used to investigate the occupational information and vocational support needs of employers. Group discussions, individual interviews and review of documentation, such as work diaries, were used to investigate the occupational information and vocational support needs of service providers.

- Formulate and test a model for the use of occupational information to improve vocational opportunities for visually disabled people based on these information needs and relevant literature.

The use of job analysis as an approach to gathering occupational data was tested. A job analysis instrument, based on the literature and the identified information needs of visually disabled people, service providers and employers, was designed to assist service providers to gather occupational data. This instrument was tested and refined.

- Comment on the value of occupational information as an approach to improving vocational opportunities for visually disabled people, suggesting any revisions, additions or alternative approaches to the current use of occupational information in vocational service provision.

Findings indicated that reliance upon job analysis and occupational information alone was not sufficient to improve vocational opportunities for visually disabled people. Other elements such as assessment of individuals, job accommodation data and job matching were recognised as important. A vocational information system that incorporates these aspects is presented.

- Comment on the application of findings to improve vocational opportunities for other groups of people.

Possible applications of the vocational information system to improve vocational opportunities for other groups of people have been discussed.

## 19.4 Limitations of this research

The results of research are dependent upon the methods used and the assumptions underpinning the work. The literature criticises much of the research in the disability field because of the way in which it is carried out (Oliver, 1992; Barnes, Thornton and Maynard Cambell, 1999), particularly if the research has been based upon a medical model of disability. Typically such research would adopt the stance of deciding what is

wrong with people and assess their needs in order to provide information on the type of support required. Alternative approaches, based upon the social model, might involve asking disabled people about the services that they need and examining why facilities and services are not accessible to disabled people. Oliver (1992) calls into question the validity of research in the disability field if it has alienated disabled people by not consulting them about the focus for the work and how it should be carried out. Although this research has taken account of the occupational handicap of disabled people caused by their functional limitations, for example, in parts of the Multi-purpose Assessment Instrument, there has been a recognition throughout that barriers faced by disabled people in the labour market are also caused by the attitude of others. It is argued that this research does not therefore reinforce the medical model of disability or rely solely on the social model but treads a path between the two. In addition potential users were consulted extensively throughout this research and their responses informed the content and design of the vocational information database and also the design of and implementation plan for the vocational information system. If adopted widely the model could have a significant impact upon services for disabled people. Further development of the vocational information system would need to continue to adopt and develop a pattern of accountability to users.

Unlike experimental research, in which there is as much control over variables as possible, action research seeks to identify variables and assess their interaction. Traditional research determines the problem and data collection procedures ahead of time. In action research results may be used to refine a process. This research has followed the pattern of action research. It has focused upon the collection and use of occupational data to improve vocational opportunities for visually disabled people. It

has aimed to improve access to information and hence increase independence for visually disabled people, improve professional functioning and efficiency, and promote greater awareness amongst employers. Throughout the research traditional techniques were adopted, such as precise sampling procedures and a concern to generalise the findings beyond the immediate population. Thus some of the criticisms of action research, that samples are unrepresentative and that findings cannot be generalised but are restricted to the original research environment, are refuted.

Both quantitative and qualitative methods of data collection were used to influence the design of the vocational information system and ensure that it is relevant to a wide range of users. In qualitative research the researcher may introduce error by influencing participants to respond in a certain way. It could be argued that RNIB staff interviewed, as service providers, felt free to comment on the organisation in ways that they might not have done to an external researcher. Conversely the presence of the author, an RNIB staff member may have inhibited some visually disabled people in their criticism of service provider organisations in general and RNIB in particular, though effort was made to reduce this influence in the focus groups by using an independent visually disabled facilitator. It is also recognised that individuals present their own perception, which may differ from the true situation. For example it may be that what staff said in interviews about organisational change within RNIB was not true, or not reliable, but it is their perception that is important in this instance so their comments are valid.

Chapter 13 discussed the influence of observer error as various practitioners tested the job analysis instrument. It is possible to discuss other factors that have been influential by considering the reliability and validity of the research. (The author would like to point

out that although much of the field work was conducted under the auspices of RNIB, while in the post of Research Officer, the literature review, additional analysis of data and writing up has been done in the author's own time and RNIB did not pay course fees). Research is valid if the researcher is measuring what s/he thinks s/he is. Postal questionnaires were piloted in order to test that respondents did understand questions as intended and the use of ambiguous terms was avoided. In the qualitative aspects of this research direct contact with respondents has enabled ongoing clarification if required, to assure validity. Inadequate sampling such as too few observations or too many in too brief a time can potentially weaken validity. The views of approximately 200 potential users were considered for the specification of the vocational information system and it is argued that this sample is sufficient to present a picture of their information and support needs. Although 194 organisations responded to the employer survey the number offering information about staff with disabilities was small. Thus findings regarding employer knowledge and practice can be analysed using statistical tests whereas data related to treatment of disabled staff cannot and this is made clear in the results. Results also make it clear that the sample for the survey of visually disabled college and university leavers was not representative of visually disabled people in the population at large because only visually disabled people who had contact with RNIB were represented. The biases introduced were highlighted and discussed as results were presented in Chapter 11.

Research is intra-reliable if the author would classify data in the same way if re-analysed in the future. One threat to intra-reliability could be the way personal bias has influenced synthesis of information. Although this author has given opinions on data gathered this has always been when comparing results with the literature, which has

acted as a safe guard against excess subjectivity. Some disability research has been criticised for attributing disability itself as the major influence upon results while ignoring other variables (Oliver, 1992). This criticism cannot be levelled at this research which has considered many other factors such as the attitudes of employers, services offered by service providers and organisational change.

Research is inter-reliable if another researcher could repeat the methods used and have a reasonable chance of getting similar results and classifying them in a similar way. Although the author cannot verify the inter-reliability of her own work it is possible to consider potential weaknesses. For example although participants in focus groups reflected a wide range of backgrounds, educational attainment, employment status and level of sight loss they were not representative. Care has been taken to acknowledge the source of results and indicate when findings have been drawn from focus groups. These findings have influenced the specification of the vocational information system and were used, along with other results, to draw upon the list of user requirements for inclusion in the vocational information database. In this sense the results from non-representative groups have been generalised but it is argued that user requirements have been sufficiently well researched through interviews with other potential users. In addition an on-line feedback form has been incorporated into the vocational information database in order to enable users to continue to comment upon the service. Another example of a possible threat to inter-reliability is the author's personal connection, as a member of RNIB staff albeit removed from the restructuring and subsequent change, with some of the data. This author has been employed by RNIB for ten years and has first hand experience of how changes in the organisation have affected field staff and managers. No doubt this experience has influenced interpretation of results and a researcher

unconnected with RNIB might not draw the same conclusions. It could be argued that this experience offers useful insight and adds to the value of the recommendations given here, however, the connection with one organisation could prove a disadvantage when applying findings to the voluntary sector in general if the author assumes that all voluntary sector organisations operate in a similar manner. It is argued that this thesis has demonstrated, through literature review and research, that the voluntary sector as a whole is experiencing cultural, social and economic change and, that the use of occupational information to improve vocational opportunities for disabled people is inadequate in the voluntary sector in general. Therefore attempts have been made to generalise the findings from RNIB to the voluntary sector to provide guidance on how to improve the use of occupational information for the benefit of service users.

A potential danger for research undertaken by one person is the possibility that results are fitted to a pre-conceived idea. The action research approach taken throughout this work has prevented this error. It was recognised at an early stage that the original brief was too narrow and there was a need for a broader examination of how to improve vocational opportunities for visually disabled people. A study of support systems in the United States and the Netherlands led to a focus upon job analysis as a tool to achieve this. Experimentation with job analysis led to development of a vocational information system and work with large organisations led to the examination of barriers to opportunity such as organisational change and the attitudes and knowledge of employers. Findings have shown that organisational change on behalf of employers is necessary if they are to view their jobs in terms of potential opportunities for disabled people and on behalf of service providers if they are to clarify their mission and define their customers and services.

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It is recognised that there are many confounding variables in the surveys of employers and visually disabled college and university graduates such as local labour market considerations and severity of visual disability. The difficulties disabled people experience in getting work may take several forms, including individual characteristics such as lack of confidence, lack of appropriate access technology, inefficient support services, structural and institutional barriers, and discrimination. Some of the services requested by potential users of the vocational information system are dependent upon interaction with a person rather than simply provision of information by a computer could provide. The vocational information system could direct people to a specialist who can offer the service required but publicising information about what is available may be insufficient for disabled people who are reluctant to ask for assistance or lack the confidence to approach professionals. There will always be a need for people seeking assistance with vocational decision making to have the opportunity to talk through their situation with others who can help but the vocational information system can offer people the opportunity to begin exploring the options for themselves. It could play a part in improving vocational opportunities, in conjunction with other services. It is recognised that the process of assisting disabled people with vocational decision making may depend upon a complex interaction between the individual, their family, the environment, their employer and the multiplicity of service providers involved. The vocational information system attempts to provide a simple guide through the rehabilitation process. The system does not presume to take the place of personal advice and assistance but offers independent access for disabled people, who want it, to the information they need.

# References

ABBERLEY, P. (1992). Counting Us Out: a discussion of the OPCS disability Surveys. Disability, Handicap and Society. (7)2:139-155.

ALBIN, J. (1992). Quality Improvement in Employment and Other Human Services Managing Quality Through Change. (Baltimore, Maryland: Paul H Brookes).

APDOT. (1992). Interim Report. (Washington DC: US Department of Labor).

AUDIT COMMISSION/HMI. (1992). Getting in on the Act: Provision for pupils with special educational needs. (London: HMSO).

BALCHIN, A. (1996). The Disability Discrimination Act: What it means for employers. Working Brief. April: 20-22.

BALCHIN, A. (1996). Unemployment in the South West: An Untapped Resource. Working Brief. February:10-12.

BARNES, H., THORNTON, P. and MAYNARD CAMBELL, S. (1999). Disabled people and Employment: A review of research and development work. (West Sussex: Policy Press).

BARRICK, A. (1993). Letter to principal Medical Adviser, DSS.RNIB Internal document.

BELL, S. (1990). Methods and forms of rehabilitation of visually impaired persons. The British Journal of Visual Impairment. June: 276-277.

BIEFANG, S. and POTTHOFF, P. (1995). Assessment methods for rehabilitation. International Journal of Rehabilitation Research. 18(3): 201-213.

BOCHEL, C. and BOCHEL, H. (1994). Researching disability: insights from and on the social model. International Journal of Rehabilitation Research. 17: 82-86.

BOCKTING, A. and HULSMAN, T. (1990). The Link Between Disability Assessment and Rehabilitation: The System in the Netherlands. Forging Linkages. 94-119.

BOREHAM, N.C. and ARTHUR, T.A.A. (1993). Information required in Occupational Decision Making. Employment Department, Research Series no.8. (Manchester: School of Education, University of Manchester).

BORGIA, S. and CROWDER, M. (1996). Research into barriers faced by people with a disability wishing to participate in employment and/or training. (Sheffield: Sheffield TEC).

BOTTERBUSCH, K. F. (1978). A Guide to Job Site Evaluation. (Menomonie, WI: Materials Development Centre, University of Wisconsin-Stout).

BOTTERBUSCH, K. F. (1982). A Comparison of Commercial Vocational Evaluation Systems. (Menomonie, WI: Materials Development Centre, University of Wisconsin-Stout).

BOTTERBUSCH, K.F. (1986). A Comparison of Computerised Job Matching systems (2nd edition). (Menomonie, WI: Materials Development Centre, University of Wisconsin-Stout).

BOTTERBUSCH, K.F. (1986a). Databases and Vocational Decision Making. In: National Forum on Issues in Vocational Assessment. 4<sup>th</sup>. Menomonie,WI. 1986. Proceedings. Menomonie,WI: Materials Development Centre, University of Wisconsin-Stout, pp. 207 –213.

BOTTERBUSCH, K.F. (1990). Job Analysis: Where do we go from here? In: National Forum on Issues in Vocational Assessment. 5<sup>th</sup>. Menomonie,WI. 1986. Proceedings. Menomonie,WI: Materials Development Centre, University of Wisconsin-Stout, pp. 119-123.

BOTTERBUSCH, K.F. (1992). Suggestions For Revisions in the Dictionary of Occupational Titles. Unpublished paper, prepared for DOT Review, US Department of Labor.

BOTTERBUSH, K. F. and MICHAEL, N. (1985). Testing and test modification in vocational evaluation. (Menomonie, WI: Material Development Centre, University of Wisconsin-Stout.).

BRADFIELD, A. and TUCKER, L. (1988). Workplace Visual Functioning Assessment for Job Modification and Accommodation. (Mississippi State, MS: Rehabilitation Research and training Centre on Blindness and Low Vision, Mississippi State University).

BRADING, J. (1997). The Information Needs of Careers Officers Working with Students with Disabilities. Newscheck. 7(4): 6.

BRADLEY, J. and HEGARTY, S. (1982). Stretching the System: FE and Related Responses to Students with Special Needs. (London: FEU).

BRADLEY, J., DEE, L. and WILENIUS, F. (1994). Students with Disabilities and/or Learning Difficulties in Further Education: A review of Research carried out by the National Foundation for Educational Research. (Slough: National Foundation for Educational Research).

BRAGER, G. and HOLLOWAY, S. (1978). Changing Human Service Organisations: politics and practice. (New York: Free Press).

BRENNAN, M.E. and KNOX, E.G. (1973). An investigation into the purposes, accuracy and effective uses of the blind register in England. British Journal of Preventative Social Medicine. 27: 149-154.

BROWN, P. (1991). Schooling and Employment in the UK. In: Making their Way, ed. by D. Ashton and G. Lowe (Milton Keynes: Open University Press).

BRUCE, I.W, MCKENNELL, A. and WALKER, E. (1991). Blind and Partially Sighted Adults in Britain: the RNIB survey. (London: HMSO)

BRUCE, I.W. and LEAT, D. (1993). Management for Tomorrow. (London: Volprof, City University Business School).

BUTLER, M. (1986). Visually Handicapped Students - a Survey 1969-85. (London: RNIB).

BUTLER, R.J. and WILSON, D.C. (1990). Managing voluntary and non-profit organisations. (London: Routledge).

CAMPBELL, L. (1996). A Global view: Personal reflections on rehabilitation practice world wide. The British Journal of visual Impairment. 14(3):109-113.

CAREERS SERVICE ANNUAL REPORT. (1995-6). (1996). (Sheffield: DfEE/CSAR).

CASH, K. (1997). Professional Association. New Beacon. 81(949): 11.

CHAPLIN, J., EDWARDS, F. and FLOYD, M. (1992). Towards a framework for appropriate and safe job placement. (London: Rehabilitation Resource Centre, City University).

CHAPLIN, J., GILLIBRAND, B., and NOLTE, D. (1993). Putting the horse before the cart: the transplanting of U.S. vocational assessment methods into the U.K. In: National Forum on Issues in Vocational Assessment, 6th, Menomonie 1993 Proceedings. Wisconsin: Materials Development Centre, University of Wisconsin-Stout. pp. 17-21

CHESTER, L. (1956). The Employment of the Blind in Great Britain in Industry and commerce. Paper presented to the World Council for Welfare of the Blind European Seminar, Paris, May 1956.

CLASSIFICATION OF OCCUPATIONS AND DIRECTORY OF OCCUPATIONAL TITLES. (1972). Employment department group. (London: HMSO).

COHEN, L. and MANION, L. (1989). Research Methods in Education. 2nd Edition. (London: Routledge).

CORBETT, J. (1990). No longer enough: developing the curriculum in special school/college link courses. (London: Skill/Employment Department).

CORBETT, J. (1993). Entitlement and ownership: assessment in further and higher education. In: Assessing special educational needs, ed. by S. Wolfendale. (London: Cassell).

CULLINAN, T.R. (1977). The Epidemeology of Visual Disability – Studies of visually disabled people in the community. University of Kent Health Services Unit Report No. 28.

DALLEY, G. (1991). Disability and Social Policy. In: Disability and Social Policy, ed. by G. Dalley. (London: Policy Studies Institute).

DAVEY, C., CORNES, P. and AITKEN, C. (1993). Evaluating a rehabilitation co-ordinator service for personal injury claimants. Interational Journal of Rehabilitation Research .16: 49-53.

DE JONG, P., HERWEIJER, M. and DE WILDT J. (1996). Form and Reform of the Dutch Social Security System. (Netherlands: Ministerie van Sociale Zaken en Werkgelegenheid).

DEARING. (1997). Higher Education in the Learning Society: report to the National Committee. (London: Stationary Office).

DEMING, W. E. (1986). Out of a Crises. (Cambridge, Ma: Massachusetts Institute of Technology, Centre for Advanced Engineering Study).

DENCH, S., Meager, N. and Morris, S. (1996). The Recruitment and Retention of People with Disabilities. IES Report 301.(Brighton: Microgen UK Limited).

DEPARTMENT OF HEALTH. (1997). Registered Blind and Partially Sighted People at 31 March 1997. England. (London: Stationary Office).

DfE. (1991). Employment and Training for People with Disabilities: Consultative Document. (Sheffield: Department for Employment).

DfEE. (1995). New initiative prepares graduates for Work. Labour Market Trends. November: 401.

DfEE. (1996). Careers Service Annual report 1995-6. DfEE/CSAR 95. (Sheffield: DfEE).

DfEE. (1996a). The Disability Discrimination Act 1995. What Employers need to know. DL 170. (Sheffield: DfEE).

DfEE. (1996b) Education Statistics for the United Kingdom 1995. (London: HMSO).

DfEE. (1997). Remploy Limited: Audit Report, National Audit Office, HC 267 Session 1996-1997. (Sheffield: DfEE).

DIMAGGIO, P. (1988). Non profit managers in different fields of service: managerial tasks and management training. In, Education Managers of Non Profit Organisations, ed. by N. O'Neill and D. R. Young. (New York: Praeger).

DISABILITY DISCRIMINATION ACT, 1995. (1995). (London: HMSO).

DISABLED PERSONS (EMPLOYMENT) ACT, 1944. (1944). (London: HMSO).

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DODDS, A.G., FLANNIGAN, H., and NG, L. (1993). The Nottingham Adjustment Scale: a validation study. International Journal of Rehabilitation Research. 16(3):177-85.

EARL, B. and GORMLY, A. (1990). Assessment of Employment Capacity in invalid pension and sickness benefit - an Automated and integrated approach. Unpublished report.

EDUCATION ACT, 1976. (1976). (London: HMSO).

EDUCATION ACT, 1981. (1981). (London: HMSO).

EDUCATION ACT, 1993. (1993). (London: HMSO).

EDUCATION ACT, 1997. (1997). (London: Stationary Office).

EEGA. (1997). Promotional leaflet. Borne, Netherlands.

EMPLOYERS FORUM. (1997). Briefing Paper: A practical guide to adjustments in employment. (London: Employers Forum on Disability).

EMPLOYERS FORUM. (1997a). Briefing Paper: A practical guide to employment adjustments for people with visual impairment. (London: Employers Forum on Disability).

EMPLOYMENT DEPARTMENT. (1978). CAPITOL Manual. (Sheffield: Employment Department).

EXECUTIVE OFFICE OF THE PRESIDENT. (1987). Standard Industrial Classification Manual. (Springfield, US: National Technical Information Service).

FEFC. (1996). Inclusive Learning: Principles and Recommendations. A summary of the findings of the Learning Difficulties and/or disabilities Committee. (London: HMSO)

FEFC. (1997). Consultation Document: The Widening Participation Committee. (Coventry: FEFC).

FINKLESTEIN, V. (1980). Attitudes and Disabled People. (New York: World Rehabilitation Fund.)

FLOYD, M. (1995). Overcoming Barriers to Employment. In: Disability and Social Policy, ed, by G. Dalley. (London: Policy Studies Institute).

FLOYD, M. (1997). Vocational Rehabilitation Services in the UK. In: Vocational Rehabilitation and Europe, ed. by M. Floyd. (London: Jessica Kingsley).

FLOYD, M., CHAPLIN, J., ESPIR, M. and KURTZ, Z. (1988). Managing Epilepsy at work. International Journal of Rehabilitation Research. 11: 3-10.

FLOYD, M., CORNES, P. and BOECKENFOERDE, G. (1993). New Technology training for people with disabilities in Great Britain. International Journal of Rehabilitation Research. 16: 39-44.

FLOYD, M., GREGORY, E., MURRAY, H. and WELCHMAN, R. (1983). Occasional Paper No. 5: Schizophrenia and Employment (London: Tavistock Institute of Human Relations).

FRY, E.(1986). An Equal Chance for Disabled People? (London: The Spastics Society).

FURTHER AND HIGHER EDUCATION ACT, 1992. (1992). (London: HMSO).

GALLAGHER, J. and MOYNIHAN, C. (1992). Work Starter Survey – The Training Needs of people with disabilities within the Birmingham Area. (Birmingham: Birmingham TEC).

GAUGLER, B. and THORNTON, G. (1990). Matching Job previews to individual applicants needs. Psychological Reports. 66: 643-652.

GEORGE, M. (1992). Further education and special needs. The Guardian. 19 May.

GEYER, P. and HUNTER, J. (1992). Issues of reliability and validity in ratings of occupational characteristics in the Dictionary of Occupational Titles. (Michigan: Michigan State University).

GLEESON, D. (1990). Training and its Alternatives. (Buckingham: Open University Press).

GOODING, C. (1995). Employment and Disabled people: equal rights or positive action. In: Removing Disabling Barriers. Ed. by G. Zarb. (London: Policy Studies Institute).

GRANDJEAN, E. (1988). Fitting the task to the Man. (London:Taylor and Francis).

GRAVES, W. (1986). Technology and Ecology: Matching Job Tasks, Access Technology and the Individual with Visual Disability. Paper presented at Opening Doors Conference, Ontario, 1986.

HAGEMOSER, S.D. (1996). The Relationship of Personality Traits to the Employment Status of Persons who are blind. Journal of Visual Impairment and Blindness (Mar-Apr):134-143.

HALL, S. (1989). The Voluntary Sector Under Attack. (London: Islington Voluntary Action Council).

HALLIDAY, J. (1992). The Future of Technology. The Braille Monitor. Jan: 42-47.

HALPERN, A.S., YOVANOFF, P., DOREN, B. and BENZ, M.R. (1995). Predicting Participation in Post-secondary education for school leavers with disabilities. Exceptional Children. 62(2): 151-164.

HANDY, C. (1988) Understanding Voluntary Organisations. (Harmondsworth :Penguin).

HARRINGTON, M. and O'SHEA, T. (1984). The Guide for Occupational Exploration. (Menomonie, WI: Materials Development Centre, University of Wisconsin-Stout).

HEGARTY, S. (1993). Meeting Special Needs in Ordinary Schools. (London: Cassell).

HEGARTY, S. and JOWETT, S. (1985). 'Four disabled young people from St. Loyes College - Exeter, England. In. Handicapped at Work: Personal Experiences of School Leavers, ed. by OECD/CERI. (Paris: OECD).

HESA. (1997). Students in Higher Education Institutions 1995/96. (Cheltenham: Higher Education Statistics Agency).

HESKETH, B., ADAMS, A. and ALLWORTH, E. (1993). Cognitive and Physical Requirements. Psychological Perspectives on Occupational Health and Rehabilitation. In: Ability, ed. by B. Hesketh and A. Adams. (Australia: Harcourt Brace Jovanovich Group).

HMI. (1991). Transition from School to Further Education for Students with Learning Difficulties. (London: DES).

HMI. (1992) Equal Opportunities in Further Education: a Survey of Good Practice in England and Wales 1990-91. (London: DES).

HONEY, S., MEAGER, N. and WILLIAMS, M. (1993). Employers' Attitudes Towards People with Disabilities. Institute of Manpower Studies Report 245. (Brighton: IMS).

HOWIESON,C. and CROXFORD, L. (1996). Using the YCS to analyse the outcomes of careers education and guidance . DfEE Research Brief RS40. (Sheffield: DfEE).

HURST, A. (1993). Steps Towards Graduation: Access to Higher Education for People with Disabilities. (Aldershot: Avebury).

ILO. (1984). Adaptation of Jobs and the Employment of the Disabled. (Geneva: ILO).

INCOME DATA SERVICES. (1992). Study 508: Employing Disabled People. (London: Income Data Services).

JAMISON, J. (1995). Visually impaired candidates for employment: NFER research Summary. (London: Blind In Business).

JAN WEBSITE. (1999). http//janweb.icdi.wvu.edu.

JVIB NEWS SERVICE. (1995). Accommodating a disabled employees. 89(4):1

KENDREW, R. (1997). Making Work Experience Count. Visibility. 19: 11-12.

KENNEDY, H. (1997). Learning Works: Widening Participation in Further Education. (Coventry: FEFC).

KEPHART, W. M., and BRESSLER, M. (1958). Increasing response to mail questionnaires. Public Opinion Quarterly. 22:123-132.

KIRCHNER, C., JOHNSON, G. and HARKINS, D. (1997). Research to Improve Vocational Rehabilitation: Employment Barriers and Strategies for Clients who are Blind. Journal of Visual Impairment and Blindness. July-August: 377-392.

KLUGMAN, K., GRANT, B., MCGUIGAN, A. and LAMBERTON, D. (1991). From Isolation to opportunity: applying communication and information technology to facilitate the placement of people with disabilities into open employment. In: Working Paper Series 1991/92, Ed. by D. Lamberton. (Melbourne: CIRCIT).

LAKEY, J. and SIMPKINS, R. (1997). Employment Rehabilitation for Disabled People: Identifying the Issues. (London: Policy Studies Institute).

LAWRIE, A. (1996). Quality of Service: Measuring Performance for Voluntary Organisations. (London: NCVO and Directory of Social Change).

LOMAS, G. (1986). Employment Trends and the Visually Handicapped. Unpublished report for RNIB.

LOW, C. (1993). The Social Model of Disability? Rehab Network. Winter: 5-7.

LOW, C. (1994). After the Rhetoric – Equal Opportunities Policy in the 1990s. Rehab Network. 35:14-19.

MANAGER, BROOK STREET BUREAU. (1995). Personal communication.

MARTIN, J., MELTZER, H. and ELLIOTT, D. (1988).The Prevalence of Disability amongst Adults. Report 1. (London: HMSO).

MAY, D. (1993). Vocational Evaluation: issues in working with clients who are blind and visually impaired. In: National Forum on Issues in Vocational Assessment, 6th, Menomonie,WI, 1986. Proceedings. Menomonie,WI: Materials Development Centre, University of Wisconsin-Stout, pp. 255-263.

MCCORMICK, E. J. and SANDERS, M. (1987). Human Factors in engineering. (New York: McGraw-Hill)

MCDANIEL R., and MCCLANAHAN, M. (1993). Selecting Vocational Evaluation tools. In: National Forum on Issues in Vocational Assessment, 6th, Menomonie,WI,

1986. Proceedings. Menomonie,WI: Materials Development Centre, University of Wisconsin-Stout, pp. 39-44

MCGINTY, J. and FISH, J.(1992). Learning Support for Young People in Transition. (Buckingham: Open University Press).

MEAGER, N. and HIBBETT, A. (1999). Disability and the labour market: findings from the DfEE Baseline Disability Survey. Labour Market Trends. September: 467-476.

MEAGER, N., EVANS, C. and DENCH, S. (1996). Mapping Provision: The Provision of and Participation in Further Education by Students with Learning Difficulties and/or Disabilities. (London: Stationary Office).

MELLOR, S. (1997). Careers Education and Guidance: The New Legislation. Newscheck. 7(6): 5-6.

MILLER, G. and ROSSI, P. (1988). Placement of Visually Impaired Persons. A Survey of Current Practices. Journal of Visual Impairment and Blindness. October: 318 - 324.

NATFHE. (1993). Learning Difficulties and Disabilities: a report of a Survey of Post-16 Provision carried out during 1992. (London: NATFHE).

NATIONAL ASSISTANCE ACT, 1920. (1920). (London: HMSO).

NATIONAL ASSISTANCE ACT, 1948. (1948). (London: HMSO).

NCVO. (1992). On trust. A report of a working party on trustee training set up by NCVO and The Charity Commission. (London: NCVO).

NCVO. (1997). Meeting the Challenge of Change: Voluntary Action Into the 21st Century. (London: NCVO).

NEWMAN, S., WERTHEIMER, A., DROMGOOLE, D. and STATHAM, J. (1990). Workmates; A study of employment opportunities for disabled people. (London: Mainstream).

NIACE. (1992). Preparation for Leisure, Education, Self/Personal Development and Employment. (Leicester: NIACE)

OFFER, M. (1992). Careers Software Review. (Coventry: National Council for Educational Technology).

OFFICE OF POPULATION AND CENSUSES AND SURVEYS. (1990). Standard Occupational Classification. (London: HMSO).

OFFICE OF POPULATION AND CENSUSES AND SURVEYS. (1991).1991 Census- report for Great Britain. (London: HMSO).

OLIVER, M. (1992). Changing the Social Relations of Research Production? Disability, Handicap and Society. 7(2):101-114.

PATTON, R. and HOOKER, C. (1990). Managers and their development in voluntary organisations: trends and issues in the UK. In: Towards the 21st Century: challenges for the voluntary sector, ed. by Association of Voluntary Action Scholars. (London: Centre for Voluntary Organisations).

PERROT, R. (1992). Jobmatch: A first for Hackney Council. Press Release.

PERRY, D. (1995). The information age: what it means for business and vocational rehabilitation. National Rehabilitation Association Switzer Monograph. 24 – 35.

PETERSON, M. (1995). Vocational Evaluation of Blind and Visually Impaired Persons for Technical, professional and managerial positions. Journal of Visual Impairment and Blindness. December: 478-80

PRESCOTT-CLARKE, P. (1990). Employment and Handicap. (London: SCPR).

PRUITT, W. (1983). Work Adjustment. (Wisconsin: University of Wisconsin-Stout, Walter Pruitt Associates).

RAILLAND, A. (1994). Job matching within a framework of sheltered employment in the UK. Remploy internal document.

REID, J. (1994). Assessing the numeracy and literacy skills of visually impaired adults. The British Journal of Visual Impairment. 12(2): 60-62

REITER, S. and PALNIZY, A. (1996). Transition from school to work of students with developmental disabilities and mental retardation: an Israeli perspective. International Journal of Rehabilitation Research. 19:27-38.

RIDDLE, H. (1986). A Question of Technology. Paper presented at Open Doors Conference, Ontario, 1986.

RIESER, R. (1994). The Social Model of Disability. New Learning Together 1(April): 40.

RNIB. (1991). Investigation of employment opportunities for blind and partially sighted people with manual skills: project brief. Unpublished internal document.

RNIB. (1995). Strategy for 1994-95. Unpublished internal document.

RNIB. (1996). Listening to students: A survey of the views of older visually impaired students. (London. RNIB).

RNIB. (1997). An Introduction to RNIB Employment and Student Support Services. (London: RNIB).

RNIB and RADAR. (1995). Access to Equality: An analysis of the effectiveness of the Access to Work Scheme. (London: RNIB).

ROBERTS, J. (1982). Making Progress? The function of assessment for students with moderate learning difficulties. (London: FEU).

ROGAN, P. and HAGNER, D. (1990). Vocational evaluation in supported employment. General Rehabilitation. Jan-Mar: 45-51.

RUMRILL, P.D., SCHUYLER, B.R. and LONGDEN, J.C. (1997). Profiles of On-the-Job Accommodations Needed by Professional Employees who are Blind. Journal of Visual Impairment and Blindness. Jan-Feb: 66-76

SABOUSKY, R., FLEXER, R. and SHELL, D. (1993). Assessing Needs, Supports and Environments in Vocational Evaluation. . In: National Forum on Issues in Vocational Assessment, 6th, Menomonie,WI. 1986. Proceedings. Menomonie,WI: Materials Development Centre, University of Wisconsin-Stout, pp. 161-166.

SCHON, D. (1971). Beyond the Stable State. (London: Temple Smith).

SCHUNTERMANN. M.F. (1996). The International Classification of impairments, disabilities and handicaps (ICIDH) – results and problems. International Journal of Rehabilitation Research. 19: 1-11.

SCOTT-PARKER, S. (1996). Lack of Understanding is still a major problem. Employers Forum Update. 1996-7: 8.

SIMKISS, P., GARNER, S., DRYDEN, G. (1998). What Next? The experience of transition. (London: RNIB)

SINGLETON, W., DEBNY, L. and PAPWORTH, C. (1979). Occupational Disability Assessment. AP Report 88. (Birmingham: Department of Applied Psychology, Aston University).

SIPERSTEIN, G. (1988). Students with learning disabilities in college: the need for a programmatic approach to critical transactions. Journal of Learning Disabilities. 21: 431-436.

SKILL. (1996). Student Voices: The Views of Further Education Students with Learning Difficulties and Disabilities. (London: Skill).

SLY, F. and DUXBURY, R. (1995). Disability and the labour market: findings from the Labour Force Survey. Labour Market Trends. December: 439-459.

SLY, F., THAIR, T. and RISDON, A. (1999). Disability and the labour market: results from the winter 1998/9 LFS. Labour Market Trends. September: 455-466

SMITH, B., POVALL, M. and FLOYD, M. (1991). Managing Disability at Work: Improving Practice in Organisations. (London: Jessica Kingsley).

SMITH, S. (1992). Wasted Opportunities: the practice of Training and Enterprise Councils as viewed by training providers and advocates for disabled people. (London: Spastics Society).

SMITH, S. (1992a). Disabled People in the Labour Market. (London: Employment Policy Institute).

SNOWDON COMMITTEE. (1976). Report on Integrating the Disabled. (London. HMSO).

STEVENSON, J. and SUTTON, D. (1982). Physically Disabled People in Computing - an exploratory study of opportunities, problems and strategies. (Manchester: Department of Social Administration, University of Manchester).

STEWART COMMITTEE. (1962). Workshops for the Blind. (London. HMSO).

TALBOT, P. and FARBEY, E. (1997). Commentary: The future of the non-maintained special schools for visually impaired children. The British Journal of Visual Impairment. 15(2): 75-77.

TAYLOR COMMITTEE. (1951). Report on Employment of Blind Persons. (London. HMSO).

THOMAS, S., BOWERS, C., BATTEN, D. and REED, B. (1993). The Americans with Disabilities Act: resources for implementation through vocational evaluation. In: National Forum on Issues in Vocational Assessment, 6th, Menomonie,WI, 1986. Proceedings. Menomonie,WI: Materials Development Centre, University of Wisconsin-Stout, pp. 39-44.

THOMAS, C. and KYLE, J. (1990). Vocational assessment for deaf people. Rehab Network. Autumn/Winter: 10-12

THOMPSON, P. (1994). So who is 'incapable of work'? The DIG Journal. 3:7-8.

TILLSLEY, C. (1997). Gaining Access to Employment Opportunities. The British Journal of Visual Impairment. 15(2): 67-71.

TILSTONE, C. and UPTON,G. (1993). Enhancing the quality of provision. In: Special Education in Britain after Warnock, ed. by D. Visser and G. Upton. (London: Fulton).

TOBIN, M.J. (1995). Blindness in later life: myths, attitudes and reality. British Journal of Visual Impairment. 13 (2): 69-75

TOBIN, M. J. (1994). Assessing Visually Handicapped People – An introduction to Test Procedures. (London: David Fulton).

TOBIN, M.J. and PITCHERS, B.J. (1993). Draft Guidelines for Consideration by those Bodies Responsible for the Provision of a High Quality Educational Service for Blind Children. (London: Royal London Society for the Blind).

TOMLINSON COMMITTEE. (1943). Report on the Rehabilitation and Resettlement of Disabled Persons. (London. HMSO).

TOMLINSON, S. (1982). A sociology of special education. (London: Routledge and Kegan Paul).

TREMLETT, N. and PARK, A. (1995) Individual Commitment to Learning: Comparative findings from the surveys of Individuals', Employers' and Providers' Attitudes. Research Series No. 68. (Sheffield: DfEE).

TRUTHAN, J. (1993). The 1991 Revised DOT: What's new and different and its impact on traditional evaluation techniques. . In: National Forum on Issues in Vocational Assessment. 6th. Menomonie,WI, 1986. Proceedings. Menomonie,WI: Materials Development Centre, University of Wisconsin-Stout, pp. 123-131.

UCAS. (1996). Statistical Summary – 1995 edition. (Cheltenham: U.C.A.S)

US DEPARTMENT OF LABOR . (1991). The Revised Handbook for Analyzing Jobs. (Indianapolis: JIST Works).

VINCENT, T. (1996). Communication: Information technology: expectations and realisations. The British Journal of Visual Impairment.14 (3): 102 – 104.

WATERHOUSE, R. (1994). Medical tests Unfair. Disability Times. March 15.

WATSON, H. and CORNES, P. (1985). Occupational Assessment. In: Employers' Guide to Disabilities, ed. by M. Kettle and B. Massie. (Cambridge: Woodhead-Faulkner in assoc. with RADAR).

WATTERS, G. M. (1985). Vocational Computer Systems and the Dictionary of Occupational Titles: A critical analysis. Journal of Applied Rehabilitation Counselling. 16(4): 10-14.

WESOLEK, J. and MCFARLANE, F. (1992). Vocational Assessment and Evaluation in the USA. REHAB Network. Spring :15-19.

WESTGATE, A. (1986). Job Preservation and Accommodation of Blind and Visually Impaired Employees. Paper presented at Opening Doors Conference, Ontario, 1986.

WESTON, P., CHRISTOPHERS, U., SCHAGEN, I. and LINES, A. (1996). Core Skills at Work; Evaluating the impact of pre-16 work experience on the core skills of young people. DfEE Research Brief RS21. (Sheffield: DfEE).

WHO. (1980). International Classification of Impairments, Disabilities and Handicaps. pp. 25-31 (Geneva: WHO).

WONG, D., CHAN, F., GAY, D., CHALONG, H. and HATTORI, K. (1992). Toward the Development of a second generation computerised job-matching system for persons with disabilities: a conceptual fame work. Journal of Rehabilitation. Jan/Feb/Mar: 70-77.

YOUTH EMPLOYMENT AND TRAINING RESOURCE UNIT. (1992). No Choice, No Training. (Birmingham: YEARTU).

YUILLE, M. (1996). DDA: Danger for employers. The Mail on Sunday. 24 November.

ZARB, G. (1995). Disability , Empowerment and the Inclusive Society. In: Removing Disabling Barriers, ed. by G. Zarb. (London: Policy Studies Institute).

# Appendices

## *Appendix 1. Telephone survey of college and university leavers*

### Introduction

Hello, am I speaking to.........I am ringing on behalf of RNIB and I would like to ask you some questions about your experiences in education and employment. This will take about...minutes. Is this a convenient time to talk or can I call you back later? [Rearrange time if necessary. Call back on....... at......]

Interview date:          time:

We hope to interview visually impaired university and college leavers in order to find out what information and support they need to find work. The information you give will be treated confidentially and individuals will not be identified without their permission.

**ID (1-4)**
## SECTION ONE RESPONDENT DETAILS
Firstly some questions about yourself.

1. Can I confirm your contact telephone number ?

3. Which county do you live in? (6-7)

## SECTION TWO EDUCATION
The next section is about your education.

### Part one: School
Firstly some questions about your school.

4.　　Was your school (8)
　　　　mainstream　　(1) or
　　　　specialist (2)

4a.　　If specialist please give name.... (9-10)

5.　　Were you residential? Yes(1)　No(2) (11)

6.　　Did you obtain, and could you say how many

　　　　CSEs ......................................... (12)
　　　　GCSEs ...................................... (13)
　　　　GCE 'O' levels............................. (14)
　　　　GCE 'A' levels............................. (15)
　　　　Other ..................................... (16)
　　　　None ..................................... (17)

7.　　Have you attended a further education college
　　　since you became visually impaired?
　　　(18)
　　　　Yes　　(1)...........Go to question 9
　　　　No　　(2)...........Go to question 8

8.　　Have you studied with a university or higher
　　　education college since you became visually impaired?
　　　(19)
　　　　Yes　　(1).......go to question 19
　　　　No　　(2).......go to question 27

**Part Two: Further education**

9. Was your college                                   (20)
         mainstream      (1) or
         specialist         (2)

         If specialist please give name:                   (21)

10.        What course(s) did you take?                 (22-23)

11.        Was this     full time   (1)   or               (24)
                        part time   (2)

12.        What was your employment aim?            (25-26)

13.        Did you have any work experience whilst
         on the course?

         Yes    (1)   or    No  (2)                  (27)

13a.      If yes, was this satisfactory?

         Yes      (1)   or    No  (2)                (28)

14         Were you offered any careers guidance?

         Yes    (1)   or    No  (2)                  (29)

         If yes was this satisfactory?

         Yes    (1)   or    No  (2)                  (30)

15.        What qualifications did you obtain?          (31-32)

16.        Did you go on to higher education?
         (33)
         Yes      (1)...........Go to question 17
         No        (2)...........Go to question 24

**Part Three: Higher Education**

17.        Which university and/or college of higher
         education did you attend?                  (34-36)

18.    What course(s) did you take?                                      (37-38)


19.    Did you study                                                      (39)
       Full time          (1)
       or part time       (2)

20.    What was your employment aim?                                      (40-41)


21.        Did you have any work experience whilst
           on the course?

       Yes    (1) or  No              (2)                                 (42)

           If yes was this satisfactory?

       Yes    (1) or  No              (2)                                 (43)

22     Were you offered any careers guidance?

       Yes    (1) or  No              (2)                                 (44)

       If yes was this satisfactory?

       Yes    (1) or  No              (2)                                 (45)

23     What qualifications did you get?                                   (46-47)


**Part Four: Where you are now.**
The last few questions in the education section are about where you are now.

24. Are you currently still studying or training?                        (48)

              Yes        (1)........Go to question 25
              No         (2)........Go to question 28

25.        If not already given please give brief details
       of your college/training venue.                                   (49-51)


25a.   and course                                                        (52-53)


26.        Have your employment aims changed?

Yes   (1)   or  No                (2)                                              (54)

26a.   If yes, what is your employment aim now?                          (55-56)

27.          If you have any other qualifications not previously mentioned, could you tell
       me what they are?
          (57-58)

## SECTION THREE LOOKING FOR WORK
Now for some questions about looking for work.

28.          Have you looked for work since you became
       visually impaired?                                                    (59)

       Yes    (1).....Go to question 29
       No     (2).....Go to question 35

29.          Did you have contact with any of the following?
          (Tick which ever apply)

          Job Centre staff
          eg.DEA (Disability Employment Adviser)......                     (60)
       PACT (Placing, Assessment and Counselling Teams).                   (61)
       Job Club.......................................                       (62)
       TEC (Training and Enterprise Council)...........                     (63)
       Careers Service................................                      (64)
       Private training organisation...................                     (65)
       RNIB Employment Services.......................                      (66)
       Social Services................................                      (67)
       Other (please describe).........................                     (68)

30.    Have you done any work experience?

       Yes   (1)  or  No                (2)                                  (69)

31.          Where have you looked for job vacancies?  (tick all that apply)

          Newspapers...................................                      (70)
          Job Centre...................................                      (71)
          Job Club.....................................                      (72)
          Recruitment Agencies.........................                     (73)
          Careers Service..............................                     (74)
          Other (please describe)......................                     (75)

32.    How many job applications have you made?                             (76)
       None   (1)

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32. How many job applications have you made? (76)
    None (1)
    1-5 (2)
    6-10 (3)
    11-20 (4)
    20-50 (5)
    50+ (6)

33. How many interviews have you had? (77)
    None (1)
    1-5 (2)
    6-10 (3)
    10+ (4)

34. Do you declare your disability when you apply (78)
    for a job?

    Yes(1)
    No(2)
    Sometimes(3)

                                              ID2 (1-4)

35.     At the moment are you:- (Tick one only)
        (5)
    employed.................. (1) Go to question 36
    waiting to start employment     (2) Go to question 36
    unemployed.................. (3) Go to question 43
    other (please describe)....     (4) Go to question 43

36.     Is your job:
        (6)
    Full time                   (1)
    Part time (less than 16 hours per week)   (2)

37.  What is you job title?                               (7-8)

38.  Are you paid                                         (9)
        weekly     (1) or
        monthly    (2)

38a.      What is your salary range? (tick one box)
          (10)
£50 - £100        (1)
£101 - £300       (2)
over £300         (3)

OR      Under £5,000        (4)
          £5,000 - £10,000    (5)
£10,001 - £15,000   (6)
          £15,001 - £20,000   (7)
Over £20,000      (8)

39.      Please describe any special equipment you use
at work.                                                    (11)
          (12)

40.      How did you get this equipment?                      (13)

41.      How long did you have to wait for your equipment?    (14)

42.      At the moment are you (tick one box)

satisfied with this job for now...........................(15)
seeking promotion within the same company.........(16)
          looking for alternative work with another company..(17)
          other (please describe).....................................(18)

GO TO SECTION FOUR

43.      Have you had any employment since you became visually impaired?
Yes    (1)....go to question 44                             (19)
No    (2)....go to section four

44.      What was your last job title?                        (20-21)

45.      How long were you in this job?                        (22)
          0-6 months ............(1)
          6 months - 1 year....(2)
          1-3 years ...............(3)
          over 3 years ..........(4)

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46.     Why did you leave this job? (tick one box)                                   (23-24)

            Did not like it................................(1)
            Not enough money.........................(2)
            Did not like travelling involved.........(3)
            Dismissed due to redundancy............(4)
            Dismissed due to visual impairment...(5)
            Dismissed for other reasons..............(6)
            Left due to visual impairment...........(7)
            Left due to injury at work................(8)
            Left for family reasons.....................(9)
            Business closed..............................(10)
            Retired.........................................(11)
            Other (please describe)...................(12)


## SECTION FOUR    EQUAL OPPORTUNITIES

We want to ensure that everyone receives assistance in looking for work so this last section
is about equal opportunities. It would help us if you can answer these questions but if you
prefer not to please feel free not to.

47.     Are you male or female?                                                        (25)
            Male      (1)
            Female    (2)

48. What is your age range ?                                                           (26)

            18 - 20   (1)
            21 - 25   (2)
            26 - 30   (3)
                 31 - 40    (4)
            41 - 50   (5)
            51 - 60   (6)
            Over 60          (7)

49.         To which of the following groups would you
        say you belong? (tick one box)                                                 (27)

            African-Caribbean.....................(1)
            Arab.......................................(2)
            Bangladeshi.............................(3)
            Chinese...................................(4)
            Indian.....................................(5)
            White European........................(6)
            Mixed parentage.......................(7)
            Other(please say what)...............(8)

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50.       Are you registered with Social Services as :
(tick one box)                                                    (28)

       blind...............................(1)
       partially sighted....................(2)
       not registered........................(3)
       don't know............................(4)

51.       How old were you when your visual impairment started?
(29)
       At birth.............................(1)
       under 5...............................(2)
       between 5 and 16................(3)
       16 - 20.............................(4)
       21 - 25.............................(5)
       26 - 40.............................(6)
       41 - 60.............................(7)
       over 60.............................(8)

52.       What is your preferred medium in which to
receive information? (tick one)                                   (30-31)

       braille..............................(1)
       large print..........................(2)
       standard print....................(3)
       tape.................................(4)
       disc.................................(5)

53.    Do you have a guide dog?                                      (32)

       Yes     (1)
       No      (2)

54.    Do you use a white cane?                                      (33)

       Long    (1)
       Symbol  (2)
       No     (3)

55.    Do you have any other disabilities or health                  (34)
       problems apart from your visual impairment?

       Yes     (1)
       No      (2)

55a.   If yes, please describe:-                                     (35-36)

56.     Would you be interested in taking part in a
more in depth study in the future?                              (37)

        Yes     (1)
        No      (2)

57.     Do you live on your own?                                (38)

        Yes     (1)
        No      (2)


Thank you for you time in answering these questions.

Are there any comments you wish to make? (not coded)

## Appendix 2. Topic guide for focus group discussions

**ACCESS TO OCCUPATIONAL INFORMATION FOR VISUALLY DISABLED PEOPLE**

**Overall objective**

- To consider how occupational information is accessed and used by blind and partially sighted people
- To assess respondents views on the vocational support they have received to date and gather suggestions for improvement of provision

**1.        Introduction**
- About the researcher
- Purpose of the research
- Discussion to be tape-recorded
- Confidentiality

**2.        Background**
- Respondents name
- Course(s) undertaken
- Current status

**3.        Use of occupational information**

**3a.       Education - experience of learning and being taught**

- Education history:
  Statutory/further/higher education – qualifications, where, segregated/integrated
  Nature of course(s), length, part time/full time, qualifications, where

- Educational Experience:
  Securing places on courses – EXPLORE reasons for choosing particular course and college
  Induction onto course
  Assessment of support needs; materials, equipment, information, flexible assessment and examinations; EXPLORE unmet support needs
  EXPLORE perceptions of skills of teachers and advisers in meeting support needs, views on advantages and disadvantages of segregated/ integrated education.
  Vocational advice and guidance during education; work experience

**3b.       Transition to FE/HE**

- Choices made:
  Availability and quality of educational/vocational information and transition support
  Ideas about good and ineffective practice in educational/vocational information provision.

EXPLORE reasons

**3c.          Transition from education into employment**

- Information and support:
  What is available?
  From whom?
  EXPLORE access to occupational information about their chosen area
  EXPLORE realistic assessment of personal opportunities
  EXPLORE views on the quality of provision

**3d.          Employment**

- Work histories

- job/career choice:
  EXPLORE how the decision was reached
  EXPLORE availability and usefulness of information

- Job search:
  EXPLORE information / support available - sources, perceived usefulness, what
  else would have helped
  EXPLORE access to vacancy information, application forms, interviews
  EXPLORE what motivates/ deters job seekers

**3e          At work**

- Prepared for work:
  EXPLORE feelings towards starting work and understanding what their job
  entailed
  EXPLORE what would help to be better prepared –
- Special equipment:
      EXPLORE experiences of acquiring information, funding, appropriate
equipment, training
- Support at work:
      EXPLORE examples and unmet needs
      EXPLORE perceptions of employer awareness of information and support
services

**4.          Barriers and facilitators**

      EXPLORE perceived influences on success or failure in obtaining qualifications
      or employment
      EXPLORE perceived impact of visual disability on careers
      EXPLORE motivational barriers
            EXPLORE perceived information gaps
            EXPLORE perceived skill gaps – social skills, self-presentation

**Future developments**

- What needs to change for occupational information to be more useful and vocational support more appropriate?

## Appendix 3. Service Provider Interview schedule

Job title

- Role and responsibilities
Perceived role
Main areas of work – tasks and duties, objectives
Skills, knowledge required
Background and qualifications
Performance standards

- Information
Information sources used: occupational, vocational, labour market information.
Why and how are they accessed?
What systems are used – e.g. vocational guidance packages?
How is the information used?
How is information present to clients? How clients are supported to access it themselves?
What information sources would you like access to? What information is lacking?
Constraints/problems with accessing information sources

- Assessment of individuals and occupations
Basis for judgements made when analysing jobs/assessing clients
Standard paperwork
Referral systems
Use of standard tests – modifications?
Any factors which have special significance when assessing a visually impaired clients?

- Difficulties and solutions
Problems/difficulties/ limitations with their job
What would help vocational rehabilitation professionals to do their job better?
Training needs

- Comments
Any other comments?
Suggestions for proposed occupational information system

## Appendix 4. Interview Schedule for GMD staff

**Manager of the Central Office of Joint medical Council (GMD)**

- Update on legal framework

Sickness Benefits Act (ZW), General Disablement Benefits Act (AAW), Disablement Insurance Act (WAO)

- Institutions providing assessment and rehabilitation services

Roles, responsibilities and the links between them.
Industrial Insurance Associations, the Joint Administration Office (GAK) and the Joint Medical Service (GMD)

- Key rehabilitation staff

Roles and responsibilities of Labour Expert Analyst (LEA), Labour Expert
Organisational structure
Staff training

- Occupational Database

Development history, current use, procedures, maintenance, quality control
How is it integrated into the overall service provision?
User training
Job Data Bank – contents of job descriptions, selection, maintenance
What is it used for and how is it used?

- Assessment of Incapacity

Definition of Incapacity
How is Incapacity for Work calculated in practice?
How is the occupational database used?

- Rehabilitation activities

What services are provided and by whom?
Links with private agencies
Links with employers
Role of Technology in the process
Where does vacancy data come from, how is it stored, presented to clients?
Follow up?

Any difficulties with the present system

**Interview Schedule for Senior Occupational Physician, GMD.**

- Role and responsibilities of occupational physicians

Organisational structure
Training
Liaison with others – medical specialists, other disciplines/colleagues
Limitations/difficulties with their job

- Assessment

Definition of incapacity for work
Assessment format in practice
Standard paperwork
Legal/social framework - Government policy on rehabilitation
Use of occupational database

- Rehabilitation

Definition of Rehabilitation
How Rehabilitation is implemented
Role of employers and industrial insurance associations
Results of Re-integration policies

- New developments

Any problems/weaknesses/limitations with current system

Interview Schedule for Labour Expert, GMD

- Role and responsibilities of Labour Experts

Organisational structure
Training
Knowledge of job accommodation and special equipment
Liaison with others – medical specialists, other disciplines, colleagues
Performance targets
Limitations/difficulties with their job
Methods and instruments used by GMD staff to support assessment/rehabilitation
activities

- Rehabilitation

Who is responsible?
Relationships with employers
How long do clients wait for an appointment?

- FIS Demonstration

Administration/maintenance procedures
Quality control procedures
How Labour Expert uses it in assessment and rehabilitation
Design points to note

- Company visit

Reasons for visits
Standard paperwork
Discussions with whom
Information gathered
Conclusion of visit

Interview Schedule for Director of a Rehabilitation Team

- Rehabilitation Labour Experts

Role and responsibilities

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Organisational structure
Referral system
Methods of job placement
Follow up of placements made, ongoing support
Targets/ standards for rehabilitation teams

- Occupational information
How is labour market/ vacancy information gathered?
How are these two used?
Links with employers

- Use of technology
Management information  - client record systems
Vakverk job matching database

- Demonstration of Vakverk
System specification
User training
Design points to note - customisation
Future development plans
Procedures for use and quality control
Information entered/held within system – client related, job/employer related
Process used for matching job seekers with vacancies
Results of introducing new technology

*Appendix 5. Employer Questionnaire*

## SURVEY OF EMPLOYERS

### The purpose of this Survey

To look at the needs of employers and the employment of people who have eyesight problems which cause difficulties at work.

**Definition:** For the purpose of this questionnaire "blind and partially sighted" refers to any eyesight condition not fully correctable with spectacles or contact lenses except colour blindness. Employees who have not registered their condition should be included.

### How to fill in your Questionnaire

The topics covered are your company, your workforce, recruitment and training, employment opportunities and support for employers.

RNIB needs to know more about employers views and experiences whether or not they employ any blind or partially sighted people so we hope that all questions will be completed by all respondents. However if a question causes particular difficulty please pass on and complete the remainder. Tests have shown that completion should not take up too much of your time.

Just tick the relevant boxes or write in your answers as appropriate.  If you have any queries contact Philippa Simkiss Tel: 021 631 3372.

**IMPORTANT:**   The information you provide will be treated in confidence and used for the purposes of this survey only. Individual organisations will not be identified unless express permission is given.

### How to return it

Please use the stamped, addressed envelop provided to return the completed questionnaire **by September 15th 1991** to:-

Philippa Simkiss
RNIB Employment Development Officer
1 The Square, 111 Broad Street
Edgbaston, Birmingham
B15 1AF

Telephone: 021 6313372

**Thank you for your help. All respondents will be sent a summary of results.**

**SECTION ONE: Your company**

**Q1.1** **The name of your firm or company (please write in block capitals).**

(1-4

................................................................

**Q1.2** **Your company's address**

(5-7

................................................................

................................................................

................................................................

**Q1.3** **Is this site the only one operated by your company in the UK?**

(8

Yes ☐ 1    No ☐ 2

Please use the back page of the questionnaire to advise us of other sites able to respond to this survey so that we can send a copy for completion.

**Q1.4** **Which of the following descriptions do you feel best fits your company?**

(9-1

(a) Agriculture   • crops and nurseries.................. ☐ 1
                  • livestock........................... ☐ 2
                  • forestry............................ ☐ 3

(b) Manufacture   • food and beverage products......... ☐ 4
                  • electronic/electrical.............. ☐ 5
                  • printing/publishing................ ☐ 6
                  • metal, glass, ceramic products...... ☐ 7
                  • wood, paper, leather products....... ☐ 8

(c) Transport and Communication • media................. ☐ 9
                                • road/rail transport.. ☐ 10
                                • air transport........ ☐ 11
                                • telecommunication.... ☐ 12

(d) Retail  • department stores/shops................... ☐ 13
            • eating/drinking places................... ☐ 14
            • equipment................................ ☐ 15

(e) Services • hotels................................... ☐ 16
             • laundry/cleaning/maintenance............ ☐ 17
             • business services/advertising........... ☐ 18
             • residential care........................ ☐ 19
             • entertainment/sport/leisure............. ☐ 20
             • laboratory work......................... ☐ 21
                                                          22
(f) Other (please write in)............................ 23

*Information given will be treated in confidence*

**ECTION TWO:   Your Workforce**

**2.1    Approximately how many staff do you have at this site?
       (Please write in)**

   a)  Full time........................  [          ]     (13-17)

   b)  Part time (working less .........  [          ]     (18-22)
       than 30 hours per week)

**2.2    Approximately how many of these fall into the 'manual work'
       category ie. non-clerical, non-managerial? (Please write in
       or tick part (b)**

   a)  Number.............................  [          ]     (23-27)

   b)  None  [   ] 1  **or**  Unable to say  [   ] 2          (28)

**2.3    Of the current staff total, how many are disabled?   Please
       write in or tick part (b)**

   a)  Number.............................  [          ]     (29-31)

   b)  None  [   ] 1  **or**  Unable to say  [   ] 2          (32)

**2.4    How many of these are registered as disabled with
       the Department of Employment?**

   a)  Number.............................  [          ]     (33-35)

   b)  None  [   ] 1  **or**  Unable to say  [   ] 2          (36)

**2.5    How many disabled staff are...** (for definitions see front)

   **a)  Blind.................................**Number [      ]  (37-39)

       None  [   ] 1  **or**  Unable to say  [   ] 2          (40)

   **b)  Partially.............................**Number [      ]  (41-43)
       **sighted**

       None  [   ] 1  **or**  Unable to say  [   ] 2          (44)

**Q2.6   Has your company employed any people with any kind of disabilities in the past five years who have now left?**

Yes [ ] 1   No [ ] 2   Unable to say [ ] 3

## SECTION THREE: Recruitment and Training

**Q3.1   This question lists ways of recruiting. Please tick the three ways you use most to recruit all your staff.**

a)   Advertisements in national and local press...... [ ]

b)   Advertising through Job Centres................ [ ]

c)   Recruitment agencies.......................... [ ]

d)   Word of mouth................................. [ ]

e)   Notices on the front door..................... [ ]

f)   Schools, colleges, universities............... [ ]

g)   Through work experience programs.............. [ ]

h)   Others (Please write in)

.................................................

**Q3.2   Which are the three main ways you use to train any of your manual workers ? (Please tick THREE).**

a)   on the job.................................... [ ]

b)   use of external trainers/courses.............. [ ]

c)   use company training courses.................. [ ]

d)   apprentice scheme............................. [ ]

e)   none.......................................... [ ]

f)   other (please write in)........................

.................................................

3.3  **Do the main training methods for any manual job include any**
    **of the following? (Please tick all that apply)**

    a) language skills eg. recording written information..☐     (64)

    b) numeracy skills eg. measuring and recording........☐     (65)

    c)  use of equipment/machinery (give three examples)

       ..........................................................     (66)
            (67)
       ..........................................................     (68)

    d)  use of computers.................................☐     (69)

    e)  inspection of finished goods.....................☐     (70)

    f)  customer relations...............................☐     (71)

    g)  telephone skills.................................☐     (72)

    h)  other (please specify)...........................    (73)

       ..........................................................     (74)
            (75)
       ..........................................................     (76)

       (1-4)

       ☐☐☐ 2

Q3.4  **Has your company taken any steps to implement equal**
    **opportunities ? (Tick all that apply)**

    a) Has a written statement..............................☐     (5)

    b) Looked at  • work practices.............................☐     (6)
               • recruitment practices.....................☐     (7)
               • training practices........................☐     (8)
               • employment of people with disabilities..☐     (9)

    c) Monitors the workforce to evaluate progress........☐     (10)

    d) Has an Equal Opportunities Officer..................☐     (11)

    e) Publicises equal opportunities internally..........☐     (12)

    f) Other (please write in)..............................    (13)
           (14)
       .......................................................     (15)

Offi

**SECTION FOUR:** Employment opportunities for blind and partially sighted people.

**Q4.1** Of the total work force on site how many have a sight problem that is not fully correctable with spectacles or contact lenses (do not include colour blindness)? Please write in or tick part (b).

a) Number........................ ┌─────────┐ ──→Go to Q4.2     (16-1

b) None........................ ☐ 1 ──→Go to Q4.11     (1

Unable to say ............. ☐ 2 ──→Go to Q4.11

**Q4.2** Of the total identified in 4.1 how many are employed in jobs you would describe as manual? Please write in or tick part (b).

a) Number........................ ┌─────────┐     (20-2

b) None ☐ 1 **or** Unable to say ☐ 2     (2

**Q4.3** Using the framework below please fill in the positions occupied by staff with a non-correctable sight problem, briefly describing their duties as shown in the example. Please continue on a separate sheet if you wish.

| JOB TITLE | BRIEF DESCRIPTION OF MAIN DUTIES | OFFICE USE |
|---|---|---|
| Kitchen Assistant | Prepares vegetables   (EXAMPLE) | |
| | | (24-25) |
| | | (26-27) |
| | | (28-29) |
| | | (30-31) |
| | | (32-33) |
| | | (34-35) |
| | | (36-37) |

4.4  **Did any of these staff develop a sight problem when already working for you?   (Please tick appropriate box).**

(38)

Yes          ☐ 1 ──────▶Go to Q4.5

No           ☐ 2 ──────▶Go to Q4.7

Unable to say      ☐ 3 ──────▶Go to Q4.7

Q4.5  **If "YES", how many have changed their job in any way since the onset of their sight condition? Please write in or tick part (b).**

a) Number............................... ☐            (39-41)

b) None ☐ 1 **or** Unable to say ☐ 2            (42)

Q4.6  **For up to three people identified in 4.5 please indicate if their job has changed by ticking the appropriate box(es).**

|  | Person 1 | Person 2 | Person 3 |
|---|---|---|---|
| Still original job | ☐ 43 | ☐ 50 | ☐ 57 |
| Shorter working hours | ☐ 44 | ☐ 51 | ☐ 58 |
| Modified workload | ☐ 45 | ☐ 52 | ☐ 59 |
| Using special equipment | ☐ 46 | ☐ 53 | ☐ 60 |
| Retrained for another job within the company | ☐ 47 | ☐ 54 | ☐ 61 |
| Moved to another job without retraining | ☐ 48 | ☐ 55 | ☐ 62 |
| On long term sick leave | ☐ 49 | ☐ 56 | ☐ 63 |

Off

**Q4.7** **Which of these factor(s) influenced your decision to employ a blind or partially sighted person? (Please tick the main TWO that apply).**

    (a)    Person suitable for the job/best applicant......... ( 

    (b)    Equal Opportunities Policy......................... ( 

    (c)    Positive action policies........................... ( 

    (d)    Suggested by RNIB.................................. ( 

    (e)    Suggested by Department of Employment.............. ( 

    (f)    Other (please outline)............................. ( 

              ....................................................... ( 

**Q4.8** **Thinking of your blind and partially sighted staff, and the work they undertake, do they receive or use any of the following? (Please tick the appropriate boxes).**

    (a)    Help with their job from a colleague.............. ( 

    (b)    Extra training ................................... ( 

    (c)    A special aid or piece of equipment............... ( 

    (d)    Support from Department of Employment............. ( 

    (e)    Support from RNIB................................. ( 

    (f)    Other (please outline)........................... ( 

              ....................................................... ( 

              ....................................................... ( 

(1

**Q4.9** **In your opinion, how does the level of performance of these staff generally compare to that of their sighted colleagues, in comparable jobs?**

Better [ ] 1   Worse [ ] 2   Same [ ] 3   Unable to say [ ] 4

**Q4.10**  **In your opinion how does their attendance record compare to
that of their sighted colleagues?**                                            (6)

Better [ ] 1    worse [ ] 2    same [ ] 3    unable to say [ ] 4


**Do you wish to make any comments in connection with
questions 4.9 and 4.10?**

................................................................

................................................................


**Q4.11**  **Has your company employed any blind or partially sighted
people in the past five years who have since left?
(Please tick the appropriate box).**                                          (7)

Yes [ ] 1    No [ ] 2    Unable to say [ ] 3


**Q4.12**  **If "YES", did they leave for any of the following reasons?
(Please tick all that apply)**

a)   Got a better job...................................[ ]                      (8)

b)   Resignation due to • problems in performing job.....[ ]                    (9)
                        • their disability...............[ ]                    (10)
                        • other health reasons...........[ ]                    (11)
                        • other reasons (please specify)

                        ...............................                         (12)

c)   Retirement • took early retirement..................[ ]                    (13)
                • retired at usual age...................[ ]                    (14)

d)   Dismissal due to • problems in performing job......[ ]                     (15)
                      • their disability................[ ]                     (16)
                      • other health reasons............[ ]                     (17)
                      • redundancy......................[ ]                     (18)
                      • other reasons (please specify)

                      ...............................                           (19)

e)   Death.............................................[ ]                      (20)

f)   Other (Please write in)...........................                        (21)

................................................................

**Q4.13** **In some companies employing a blind or partially sighted person is not so simple, in others few problems arise. For each of the items listed say how much a problem it would cause <u>you</u> in employing a blind or partially sighted person by marking a circle around the appropriate number.**

|  | No Problem at all |  |  |  | Lots of Problems |  |
|---|---|---|---|---|---|---|
| Health and Safety regulations | 1 | 2 | 3 | 4 | 5 | (2 |
| No suitable jobs | 1 | 2 | 3 | 4 | 5 | (2 |
| Lack of applicants | 1 | 2 | 3 | 4 | 5 | (2 |
| Unsuitable premises | 1 | 2 | 3 | 4 | 5 | (2 |
| Awareness of managers | 1 | 2 | 3 | 4 | 5 | (2 |

Other (please write in)....................................

.....................................

**SECTION FIVE: Support for Employers and their employees**

**Q5.1** **The following schemes and services provide financial and practical help to employers of people with disabilities. Please tick those you were aware of before this survey.**

a) Grants for assessment and training at
   Employment Rehabilitation Centres..................☐    (2

b) Salary subsidues for employees whose
   productivity is affected by their disability
   (Sheltered Placement Scheme).......................☐    (2

c) Supply of special aids (tools and
   equipment for use in employment)...................☐    (2

d) Free reading service for clerical support..........☐    (3

e) Advice and help enabling people to retain
   their jobs if they become disabled.................☐    (3

f) A salary subsidy for new employees on a
   trial period (Job Introduction Scheme).............☐    (3

g) Special on site training for
   employees with disabilities........................☐    (3

h) Recruitment advice.................................☐    (3

**Q5.1 continued..**

   i)   Counselling and advise for
       employees who become disabled........................☐    (35)

   j)   Training in Disability Awareness and Vision
       Awareness.........................................☐    (36)

**Q5.2  Thinking of the help and services outlined above can you
think of any specific manual jobs in your company which a
blind or partially sighted person could do with this help
(all jobs; not just current vacancies)?**    (37)

Yes ☐ 1     No ☐ 2     Unable to say ☐ 3

**Q5.3 If answering "YES" to question 5.3 it would help us if you
could give brief details in the tables below.**

a) Jobs which could be done by a partially sighted person:-

| JOB TITLE | BRIEF DESCRIPTION OF MAIN DUTIES | OFFICE USE |
|---|---|---|
| | | (38-39) |
| | | (40-41) |
| | | (42-43) |
| | | (44-45) |

b) Jobs which could be done by a blind person:-

| JOB TITLE | BRIEF DESCRIPTION OF MAIN DUTIES | OFFICE USE |
|---|---|---|
| | | (46-47) |
| | | (48-49) |
| | | (50-51) |
| | | (52-53) |

**Q5.4  Would you like us to send you some information about RNIB
employment and training services?**    (54)

Yes ☐ 1     No ☐ 2

**Q5.5    In the future we may wish to carry out a follow up
          survey; would you be willing to be contacted at a later
          date to assist us in any further research?**

Yes  ☐ 1        No  ☐ 2

It would help us if you print you name and title in the space provide
below.

This questionnaire was completed by :-

..................................................................

Position within company:-

..................................................................

That is the end of the questionnaire. Many thanks for your time and effort
in completing it.

Please return the completed form to us at RNIB, using the enclosed stamped
addressed envelop along with names and addresses of other sites to which w
can forward a copy of the survey. In the mean time if you have any queries
about the questionnaire or want more information about the services RNIB c
provide please contact:-

Philippa Simkiss
RNIB Employment Development Officer
1 The Square
111 Broad Street
Edgbaston
Birmingham
B15 1AF

Telephone: 021 6313372

## Appendix 6 Initial questionnaire for NWB staff

Pages 1 and 2 to be completed BEFORE interview using AS400

## 1. PERSONAL DETAILS

1.1 Name

1.2 Sex  M/F

1.3 D.o.b.

1.4 Branch

1.5 Name of Manager

1.6 Home  Address                    1.7 Branch address

Phone no.(work)                    Phone no. (home)

## 2. EDUCATION AND TRAINING

2.1          School and colleges attended (state whether mainstream or school for
        visually impaired students)

2.2 Qualifications gained at school or college

    Subject          Level          grade

2.3          List any other qualifications, academic and vocational.

## 3. CURRENT JOB

3.1          Job Title

3.2          Main purpose of the job

3.3          Length of time in this job

3.4          Grade

3.5          Salary

3.6          Number of hours worked each week

3.7          Is the job          part time
                     full time
                     shift work


3.8 Number of sick leave days in previous year.............

          ****************************************************************

Date of interview...........................................

Name of interviewer...........................................

## Introduction

My name is ........ I hope that you have received letters from the Bank explaining that Service Delivery Strategy will be affecting all Bank staff over the next few years. The Bank is committed to considering the needs of all its visually impaired staff. For this reason they have involved the RNIB in a project. to look at the options. Every visually impaired staff member will be visited before Christmas and asked their views. I have been asked by the Bank to go through a questionnaire with you to find out about your skills and interests. This will take about 1 hour. Please feel free to add any comments you wish as we go along.

Do you want to ask anything before we start?

## 4. WORK HISTORY

4.1    **First I'm going to ask you about any previous jobs and employers you have had.**

What other jobs have you done, including temporary and voluntary work? (Fill in table)

| Employer | Position held | From | To | Reason for leaving |
|----------|---------------|------|-----|--------------------|
|          |               |      |     |                    |
|          |               |      |     |                    |
|          |               |      |     |                    |

Notes.................................................................................................................................
......................

## 5.    **Now I'm going to ask you about your current job**

5.1    Thinking about you work, can you outline your all of your duties including any occasional jobs.

**[NB. Question 5.2 and 5.3 for switchboard operators only]**

5.2        Is your board busy?  Yes       No

5.3        Roughly how many calls do you get each day?  ..........  or     Don't know

5.4        Are you ever required to produce:

letters
memos
reports
other (specify)  .........................................

5.5        Are you a touch typist?  Yes     No

5.6        What sort of information do you need to know?

5.7        How do you look up information ?

5.8        What activities are you in charge of?

5.9        Can you think of any other tasks or jobs, including those done in other locations which you could mention?

5.10       Have you ever had to train others?     Yes     No

5.11       Whom?

**6.**        **Now, considering Bank training**

6.1    Can you tell me about any training or courses you have attended while working for the Bank?

**7.**    **Can I just check some details about you manager and any support you get at work**

7.1    What is your reporting line?

7.2    Can you describe any support from the Bank or colleagues you have to meet your particular needs for example flexible hours or breaks, assistance with reading or information on tape?

7.3    Do you think your manager understands your special needs?  Yes No

**8.**    **Thinking about your use of special equipment**

8.1    Can you name any vision aids or special equipment you use at work ? [Fill in table]

8.2    Is it your own or does it belong to the Bank or the Department of Employment? [Fill in table]

8.3    How often do you use it? [Fill in table overleaf]

Table for Questions 8.1, 8.2 and 8.3

| | Type | Owned by | | | Frequency of use |
|---|---|---|---|---|---|
| | | You | NWB | DoE | |
| Special Lamp | | | | | |
| Hand magnifier | | | | | |
| Hand held telescope | | | | | |
| Adapted switchboard | | | | | |
| Pocket memo | | | | | |
| Perkins brailler | | | | | |
| Note taker e.g. Braille 'n' Speak | | | | | |
| Braille shorthand machine | | | | | |
| Magnification with PC e.g. Lunar, Vista | | | | | |
| Speech with PC e.g.HAL, Frank Audio Data | | | | | |
| Braille display with PC | | | | | |
| Large monitor | | | | | |
| Magnifiers | | | | | |
| Scanner | | | | | |
| CCTV | | | | | |
| Other | | | | | |

**9.          Thinking about the other people you work with**

9.1          How many other people do the same job?


9.2          How much do you talk to customers face to face?


9.3          Do you attend team meetings at work ?     Yes     No


9.4          If No, why not?


9.5          Do you like working with people ?   Yes     No

405

**10.** **Can I just check some details about the area in which you work**

10.1    Can you describe it - for example, are you in an office with other staff, or on your own; is it quiet or noisy?

10.2    What sort of lighting do you prefer?

        Natural light
        Shaded window
        Fluorescent light
        Special desk lamp
        Very bright light

10.3    How much space do you need for any special equipment?

10.4    Do you need a power supply?   Yes        No

**11.** **Before we talk about other things**

11.1    Can you describe what you like about your job?

11.3    Can you describe any frustrating aspects of your job?

**12.** **Now thinking about your career ambitions**

12.1    Can you describe any areas of work you are interested in?

12.2    Can you describe any areas you would not be interested in?

12.3    What sort of further training are you interested if any? For example short courses, evening classes or other options.

**13.** **Now, thinking about you mobility and your journey to work.**

13.1    How long does it take you to get to work ?        ........hours.........minutes

13.2      How do you travel to work? (tick all relevant)

         Tube
         Bus
         Taxi
         Get a lift
         Walk

13.3 Have you got a guide dog?      Yes      No

13.4 What sort of white cane do you use ?    Long     Symbol       None

13.5      Are you comfortable travelling on your own -

      in familiar surroundings     Yes     No

      in unfamiliar surroundings   Yes     No

13.6      If an opportunity arose to transfer to another branch within travelling distance would you be prepared to consider this?

      Yes      No

**14.      Now I need to check some details about your visual impairment. This will be useful if you wish to use any new technology equipment in your job.**

14.1      Do you have any useful vision?   Yes    No

**If No go to Q. 14.3**

14.2      If yes describe what you can see.

14.3      What was the cause of your sight problem?

14.4      So can I check whether you had eyesight problems from birth or whether they started later - how old were you when they started?

14.5        Are you registration as:

Blind             Partially sighted              Not Registered
Don't know


14.6        Do you have a green card to register with the Department of Employment
?

Yes              No            Don't know


14.7        Is you eye condition stable?

Stable
Improving
Deteriorating
Don't known

14.8        Please look at these cards - which size print do you prefer? (Use booklets
with varying print size)

No reading sight
A20 print or better
N48 print or better
N24 print or better
N12 print or better
N8 print or better
Not tested


14.9 How do you prefer to receive documents?

braille
tape
disc
large print
standard print


14.10       Are you colour blind

Yes    No          Not applicable


14.11       Where have you had any recent sight tests for example at the eye hospital,
the opticians or the RNIB.

**(If already had an RNIB sight and technology test go to question 14.13)**

14.12    Would you be willing to take part in a sight and technology assessment at the RNIB to see what sort of technology suits you?

       Yes       No

14.13    Would you be willing to take part in a skills audit interview and ability test at the RNIB ?

       Yes       No

14.14    Can you describe any other special needs you have as a result of any other disability or health problem?

**15.       Can I just check any relevant outside interests or hobbies**

15.1    Can you describe any interests such as any computer equipment at home or hobbies you have, which might be useful for work.

16.    Before we finish are there any comments you wish to make?

**\*\*\* REMAINDER TO BE COMPLETED AFTER THE INTERVIEW \*\*\***

17.1 INTERVIEWERS COMMENTS

17.2 Nearest RNIB Centre for assessment:    Birmingham    Bristol    Darlington
       Edinburgh

       Liverpool    London    Peterborough    Torquay

## Appendix 7. Chi Square Calculation

Chi-square analysis to test whether the proportional split of respondents across industrial categories differs significantly from the expected (sample).

$d.f = (r-1)(k-1)$

O= an observed frequency (respondents)
E= an expected frequency (sample)
r and k = the number of rows and columns in the table below.

|  | Agric. | Manufac. | Transport | Retail | Services | Totals |
|---|---|---|---|---|---|---|
| Respondents | 7 | 141 | 9 | 12 | 25 | 194 |
| Non-respondents | 9 | 210 | 12 | 32 | 59 | 322 |
| Totals | 16 | 351 | 21 | 44 | 84 | 516 |

The expected frequencies for each cell are calculated by multiplying together the marginal totals common to it and dividing by N (total of respondents + non-respondents)

**Expected frequencies table**

|  | Agric. | Manufac. | Transport | Retail | Services |
|---|---|---|---|---|---|
| Respondents | (194x16)÷5 516 = 6.02 | 131.97 | 7.9 | 16.54 | 31.58 |
| Non-respondents | (322x16)÷ 516 = 9.98 | 219.03 | 13.10 | 27.46 | 52.42 |

The difference between the observed and expected frequencies is calculated, squared and divided by that expected frequency. The sum of the resulting values gives $\chi^2$.

$(7-6.02)^2 = 0.9604$;       $0.9604 \div 6.02 = 0.1595$
$(9-9.98)^2 = 0.9604$       $0.9604 \div 9.98 = 0.0962$
$(141-131.97)^2 = 81.5409$       $81.5409 \div 131.97 = 0.6179$
$(210-219.03)^2 = 81.5409$       $81.5409 \div 219.03 = 0.3723$
$(9-7.90)^2 = 1.21$       $1.21 \div 7.9 = 0.1532$
$(12-13.10)^2 = 1.21$       $1.21 \div 13.10 = 0.0924$
$(12-16.54)^2 = 20.6116$       $20.6116 \div 16.54 = 1.2462$
$(32-27.46)^2 = 20.6116$       $20.6116 \div 27.46 = 0.7506$
$(25-31.58)^2 = 43.2964$       $43.2964 \div 31.58 = 1.3710$
$(59-52.42)^2 = 43.2964$       $43.2964 \div 52.42 = \underline{0.8260}$

$$\chi^2 = 5.6853$$

d.f.=(2-1)(5-1)=4

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Consulting a table to find the critical value of $\chi^2$ for 4 d.f. for p=.05 gives a value of 9.49. The calculated value of $\chi^2$ is less than this critical value and therefore the discrepancy between the observed and expected frequencies is not significant. Thus the proportional split of respondents and non-respondents between SOC categories is not significantly different and the characteristics of respondents can be considered to be representative of the characteristics of the sample.

### *Appendix 8. Job Analysis Instrument*

**Prior to analysis:** read supporting documentation such as job description and person specification if available, however activities may differ from those stated on job description.

**During analysis**: Use the checklist during observation and interview of job incumbent and other relevant personnel such as supervisors, colleagues and personnel staff. In addition to making notes on the items listed note any difficulties in the following areas and possible solutions.

### Tasks
- equipment used
- material handled (size, form, weight, sharp edges)
- paperwork
- infrequent tasks

### Work environment
- lighting
- noise
- climate
- dust
- toxic substances
- mechanical vibrations.

### Organisational and social aspects
- pay
- working hours, any difference between contracted hours and actual hours worked?
- rest pauses
- group work
- how instructions are given
- reports to?
- responsible for?
- reaching the canteen, washrooms and work station
- existence or not of support services at work place e.g. Occupational Health
- location of the job and distance of travel to work

### Standards
- qualifications and experience required
- standards to meet
- method of worker assessment

### Physical aspects of the work
- mobility

**Sensory aspects of the work**
- near and far vision
- peripheral vision
- visual colour discrimination
- depth perception
- glare sensitivity and night vision

**Recruitment procedures, Equal Opportunities policies**

**High turnover jobs and skill shortages**

**Difficulties and satisfaction in the work as reported by job incumbent**

<u>**After Interview**</u>

Consider **Possible Modifications** for example:
- use and location of any printed material
- access to the work station
- lighting (experimenting with lighting to reduce glare with screens, fitting blinds to windows, locating the work station near a source of natural light, avoid polished machine parts, flickering light sources)
- contrast (improving contrast is particularly important in areas where build up of dirt is likely. Items such as tools, materials and equipment should be kept clean and painted in contrasting colours)
- communication methods
- working from home, part-time work

Evaluate modifications for cost, simplicity, acceptability and impact on the work site and other employees as well as the effect they have on the disabled individual.

### Appendix 9. Revised job analysis instrument

Job Title:

Company name:

Contact:

Evaluator's name:

Date of visit:

**Introduction to company**
- type of organisation and activity
- number of employees
- number of sites
- turnover
- high turnover jobs and skill shortages
- recruitment procedures
- equal opportunities policies and policy on disability

**Tasks**
- duties/ role
- any additional duties
- equipment used
- material handled (size, form, weight, sharp edges)
- paperwork
- infrequent tasks

**Skills and Qualifications/experience required**
- qualifications
- experience
- knowledge
- training given
- skills and abilities

**Work environment**
- lighting
- noise
- climate
- dust
- toxic substances
- mechanical vibrations

## Organisational and social aspects

- group work
- how instructions are given
- reports to?
- responsible for?
- Progression to?
- reaching the canteen, washrooms and work station
- existence or not of support services at work place e.g. Occupational Health
- location of the job and distance of travel to work
- contact with colleagues, customers

## Conditions

- working hours
- rest pauses
- pay
- facilities

## Standards

- qualifications and experience required
- standards to meet  eg. speed
- method of worker assessment

## Physical requirements

- mobility; walking, running, kneeling, stooping
- lifting, raising arms above head
- climbing
- sitting
- standing
- pulling, pushing

## Cognitive aspects of the work

- memory
- judgement
- planning
- organising
- reasoning

## Sensory aspects of the work

- near and far vision
- peripheral vision
- visual colour discrimination
- depth perception
- glare sensitivity and night vision

## Satisfaction and dislikes in the work as reported by job incumbent

**Possible Modifications**

Consider:

- use and location of any printed material
- Access to the work station
- lighting (experimenting with lighting to reduce glare with screens, fitting blinds to windows, locating the work station near a source of natural light, avoid polished machine parts, flickering light sources)
- contrast (improving contrast is particularly important in areas where build up of dirt is likely. Items such as tools, materials and equipment should be kept clean and painted in contrasting colours)
- communication methods

Evaluate modifications for cost, simplicity, acceptability and impact on the work site and other employees as well as the effect they have on the disabled individual.

## Appendix 10. GROW

### Appendix 10.1  GROW Information Categories

1. Job Seeking
2. Careers Guidance
3. Education and training
4. Access to information
5. Special Equipment
6. Disability Discrimination Act 1995
7. Employment Examples
8. Employment Support
9. Money Matters
10. Useful contacts and other sites of interest
11. Help and Advice

Sub headings with some examples of links:

**1.**      <u>**JOB SEEKING**</u>

**1.1**      **Job vacancies**
1.1.1    Internet resources
1.1.1.1 Career Mosaic
Brief:      Job vacancies and careers guidance

Content:      Job advertisments, UK and worldwide. Details of leading companies. Option to post your CV, search newsgroups for vacancies.

Accessibility: Good

1.1.1.2      Cando Job vacancies Peoplebank
1.1.1.3      Reed Jobnet
1.1.1.4      The Times – classified job adverts
1.1.1.5      The Guardian – jobs page
1.1.1.6      Jobsite from Disability Access

**1.2**      **Work experience**
1.2.1      Organisations offering work experience placements
1.2.1.1 BTEC
1.2.1.2 Workable

**1.3**     **Labour market information**
1.3.1      Chambers of Commerce

**1.4**     **Self Employment**
1.4.1    Advice about becoming self employed
1.4.2      Sources of funding

**Appendix 10.2  Grow Home Page**

# GROW

## Gateway for opportunities for reaching work

**GROW, is online information that has been designed to assist people with serious sight problems to make informed choices for personal development through education, training and employment.**

- Education and training

- Career advice or guidance

- Financial support

- Supported employment

- Employing people who are blind or partially sighted - what the law says

- Looking for a job?

- Equipment to support your job or study

- Contacts and useful websites

- Help or advice

- Finding information on line

| **Home Page** | Looking for a Job? | Career Advice | Education or Training | On line information | Financial Support | Equipment | Supported Employment | Legislation | Contacts and websites | Help and Advice

# GROW User Guide

If you are using GROW for the first time, it will help you if you read this guide beforehand. For those who are already familiar with using the Internet, you will be able to easily navigate the GROW site using the same methods as with other sites.

### *How to access GROW*
Grow can be found at the following address:
http://www.rnib.org.uk/grow/welcome.htm
To access the site, enter the address at the prompt and wait for your server to connect you to the GROW site.

### *How to navigate the GROW site*
Internet sites allow you to jump straight to the areas you are most interested in using links. If you are visually navigating a site, links will usually appear in a different colour to the rest of the text on the page, and will change colour when you have used them to give you a record of where you have been within a site. To move around the site, just select a link you want to find out more about, either by clicking with the mouse, (or if you are using a speech package, by following the instructions given). For example, for more information about job seeking, select the job seeking link and you will be taken to a list of sites of interest.

### *What you will find on GROW*
GROW gathers together many useful sites provided by other organisations. When you select a page you will usually be presented with a list of sites of interest. To have a look at the information they provide, select the relevant link and you will be taken to their pages.

### *Getting back to GROW*
Because you are now beyond the GROW pages, there will not be links for you to navigate back to GROW. So, when you have finished reading the information on the current organisation's pages, navigate back to GROW using the 'back' function or re-entering the GROW address.

### *How to respond to us*
The GROW site has been designed in consultation with visually impaired people. We would like to continue to gather the views of users and you can feed your comments in to us in a number of ways:

On-line feedback forms. Select feedback to access the form. You can complete this while on the site and send it straight to us.
You can send comments by e-mail to GROWmaster@rnib.org.uk
If you prefer, use the GROW response line 0171-388 1266
Or you can write to The GROW System Manager at RNIB, 224 Great Portland Street, London W1N 6AA.

### *Common problems you may have with Internet sites.*

If you get an error message when you go to a site, there may be a problem with that site or with your Internet server. In most cases, if you try again later you will be able to gain access, if the problem persists, contact your Internet service provider.

**Appendix 10.4  Grow Quality promise**


*The* **GROW** *Quality Promise*

Because of the nature of the Grow site, which acts as a gateway to other useful information on the internet, the vast majority of the information linked to is contained within other organisations' sites that are beyond our control. Because we have no control over the information that appears on the pages we link to, or the amendments made to information stored there, the quality of our system and the maintenance of standards of information provision are dependent on regular checks being made of the sites that we access via our pages. Grow operates within quality parameters as defined below.

**Quality Standards**

**1. Information Provided**

Information contained within our own pages will be checked for accuracy. Regular searches of the information available on internet will take place to update our lists of useful links, and those we already link to will be regularly checked to ensure to the best of our knowledge that information held is current and regularly updated.

**2. User involvement**

The involvement of users has been central throughout the development phase GROW. This has ranged from extensive consultation of user requirements to representation on the GROW Steering Group, responsible for development of the site. Users will continue to have direct influence on the content and format of the service via the use of feedback forms.

**3. Effective redress**

If GROW is to offer a quality service it should respond effectively to and meet the needs of its users. When users feel that they have had poor service they will be able to comment directly to the System Manager either through the online feedback form or through the telephone support line which will offer a searching facility and a technical advice service. The System Manager has the authority to implement changes to the service and will do so as appropriate.

**4. Easy access**

Equality of access amongst users is a high priority. We have concentrated on accessible Web page design for text only browsers and incorporated testing of speech and large character Web access in to the project. A brief summary of the accessibility of the sites we link to is included on the GROW page.

# Appendix 10.5  GROW Press release

## PRESS RELEASE

31 October 1996

# SURF TO WORK WITH RNIB

A fabulous new way to net a job if you are blind or partially sighted is being launched by Royal National Institute for the Blind (RNIB).

GROW (Gateway to Researching Opportunities for Work) is a new vocational information service on the Internet, funded by the Employment Service and maintained by RNIB.

It consists of 10 main information areas:- Job Seeking; Careers Guidance; Education and Training; Access to Information; Special Equipment; Disability Discrimination Act 1995; Employment Examples; Employment Support Schemes; Money Matters and Useful Contacts and Other Sites of Interest.

Completely accessible with speech and magnification technology at all the GROW access points, the information service works two ways with users being able to input their own employment examples as well as access data about the latest job offers and equipment adaptations.

RNIB's Philippa Simkiss said: "One of the biggest barriers faced by blind and partially sighted people in the employment market is accessing information such as printed job adverts. This technology is easy to use allowing blind and partially sighted people the chance to surf GROW and the Web themselves."

GROW has been tested at RNIB's rehabilitation centre in Torquay and at RNIB's Vocational College in Loughborough giving blind and partially sighted people the chance to assist in the design and development of the site.

Anyone with access to the Internet can use the site and for people who are not connected GROW access points are available at RNIB's Head Office, 224 Great Portland Street, London, W1N 6AA and at RNIB Vocational College, Loughborough.

RNIB are looking to increase the number of access points in public places such as libraries and Cyber cafes. All you need is a computer with an Internet connection and access equipment which will cost about £400. For more information call Sharon Da Cunha on the GROW Response Line on 0171 388 1266 ext 2317.

**For more press information call Kate Pierce or Olivia Belle in the RNIB Press Office on 0171 636 1153 (Mobile: 0402 648 267) (Ref....)**

## *Appendix 11 Multi-purpose Assessment Instrument*

Job Title:
Company name:
Contact:
Evaluator's name:                                    Date of visit:

### Introduction to company (for job analysis only)
- type of organisation and activity
- number of employees
- number of sites
- turnover
- high turnover jobs and skill shortages
- recruitment procedures
- equal opportunities policies and policy on disability

### Tasks – actual or in work history
- duties/ role
- additional duties
- equipment used
- material handled (size, form, weight, sharp edges)
- paperwork
- infrequent tasks

### Skills and qualifications/experience
- qualifications
- experience
- knowledge
- training given
- skills and abilities

### Work environment – actual/ preferred
- lighting
- noise
- climate
- dust
- toxic substances
- mechanical vibrations

### Organisational and social aspects – actual/ work experience or preferred
- group work
- how instructions are given
- reports to?
- responsible for?
- progression to?
- reaching the canteen, washrooms and work station
- existence or not of support services at work place e.g. Occupational Health
- location of the job and distance of travel to work
- contact with colleagues, customers

**Conditions – actual/work experience or preferred**
- working hours
- rest pauses
- pay
- facilities

**Standards**
- qualifications and experience
- standards of job or demonstrated in previous work
- method of worker assessment – actual or preferred

**Physical requirements of job/physical capacities**
- mobility; walking, running, kneeling, stooping
- lifting, raising arms above head
- climbing
- sitting
- standing
- pulling, pushing

**cognitive aspects of the work/cognitive skills**
- memory
- judgement
- planning
- organising
- reasoning

**Sensory aspects of the work/sensory abilities**
- near and far vision
- peripheral vision
- visual colour discrimination
- depth perception
- glare sensitivity and night vision

**Satisfaction and dislikes in the work as reported by job incumbent or preferred**

**Possible Modifications in the work place or of use to the individual**
Consider:
- use and location of any printed material
- Access to the work station
- lighting (experimenting with lighting to reduce glare with screens, fitting blinds to windows, locating the work station near a source of natural light,avoid polished machine parts, flickering light sources)
- contrast (improving contrast is particularly important in areas where build up of dirt is likely. Items such as tools, materials and equipment should be kept clean and painted in contrasting colours)
- communication methods

Evaluate modifications for cost, simplicity, acceptability and impact on the work site and other employees as well as the effect they have on the disabled individual.

## Appendix 12. Published papers

Simkiss, P., Garner, S. and Dryden, G. (1998). What Next? The experience of transition. (London:RNIB). Pp 135.

Simkiss, P. (1997). The redeployment of blind and partially sighted staff in the banking industry. WORK. 8:197-200.

Simkiss, P. and Floyd, M. (1995). Developing a computerised information system for visually disabled people to assist with job placement. International Journal of Rehabilitation Research. 18:133-141.