

Accessible library services for people with disabilities

A model for Korean libraries

Young Sook Lee

A thesis submitted to the University of London in
fulfilment for the award of a Doctor of Philosophy Degree

University of London
University College London
2001



Dedication

O LORD my God,

I know that your hand was behind this work.

Through all the difficulties and hardships,

I have learned much in trusting you.

Acknowledgement

I owe a debt of gratitude to all who have directly or indirectly helped me in the completion of this thesis.

I am greatly indebted to Professor J.H. St. John McIlwaine and Professor Ia McIlwaine (my supervisors) whose helpful criticisms and comments led to many improvements. In particular, their painstaking review of my drafts helped me to see my way clear. I want to express my sincere appreciation for the wonderful guidance.

I am also grateful to Mrs. Kath Gaster at Linden Lodge School and staff of the Royal National Institution for the Blind and the staff from the Central Library of the London Borough of Islington for sharing their time and experiences so generously with me during interviews and periods of internship.

I am also thankful to Mr. Peter Craddock for providing me with useful documents and references during the early stage of the research. I am also grateful to Dr. Emmanuel Adjei. He assisted me in various ways during the final stage of this thesis. He had always been a source of inspiration.

My colleagues at the National Library of Korea also deserve to be acknowledged for their continuous encouragement and valuable documents they made available throughout the whole phases of the research. There are many others who have provided advice and consultation and I would like to express my sincere thanks to them for their involvement.

Finally to my family who endured patiently the long periods of selfish devotion I spent on the production of this work, I am profoundly grateful for their support. My sons, Moonsang (17) and Hansang (10), never ceased smiling even in difficult times.

Abstract

Particularly the past two decades have witnessed the integration of people with disabilities into mainstream society. This is one of the top political issues in many countries. For a long time disabled people have been excluded from mainstream education, employment and various community activities on the grounds of individual disabilities. As a result many of them have been left unproductive and dependent. That society to some extent has a negative attitude towards disabled people cannot be disputed. Until recently all attention to disabled people had focussed on their physical wellbeing rather than on how to integrate them effectively into mainstream society. This negative attitude coupled with less integration has in many respects prevented disabled people from developing their potential and using their ability to live an independent life.

In this respect library services for disabled people are regarded as part of the integration of disabled people into mainstream society. Especially public libraries can be seen as the most important institutes for the integration of disabled people into society.

The purpose of this research is to identify current problems faced by mainstream libraries for the provision of library services for disabled people and also to present practical solutions that are appropriate to the Korean situation.

Although the study covers other disabilities such as hearing and mobility impairment, it is mainly concerned with visual impairment. Visually impaired people are the most disadvantaged in libraries because they are unable to read printed materials.

For purpose of data collection, the study relied on literature review, observation and interview. The study is organised into three parts. The first part outlines the background information about the integration of disabled people, the characteristics and difficulties of disabled people, and the development of library services for disabled people from earliest time to the present. The second part presents the findings of research in the areas of physical, technological and human factors. The last part proposes solutions to problems and draws conclusions. The emphasis throughout the study is to create awareness among library professionals in Korea about the need of library services for disabled people in mainstream libraries.

Table of contents

Dedication	ii
Acknowledgement	iii
Abstract	iv
Table of contents	vi
Introduction	1
Chapter 1. Integration of people with disabilities	14
Introduction	14
1.1 What is integration ?	15
1.2 Purpose of Integration of people with disabilities	15
1.3 Populations	17
1.4 Background of integration of disabled people	20
1.4.1 Legal factors	20
1.4.1.1 International Level	21
1.4.1.2 National Level	24
1.4.2 Educational factors	27
1.4.3 Technological factors	30
1.4.4 Social factors	31
1.5 Practices and problems of integration in other sectors in Korea	36
1.5.1 Education sector	36
1.5.2 Religious sector	42
Conclusion	44
Chapter 2. People with disabilities	45
Introduction	45
2.1 Characteristics and problems of disabled people	46
2.1.1 Visual impairment	46

2.1.1.1	Problems associated with visual impairment	47
2.1.1.2	Communication Mode	48
2.1.1.3	Dos and Don'ts	50
2.1.2	Hearing Impairment	51
2.1.2.1	Problems associated with hearing impairment loss	52
2.1.2.2	Communication mode	54
2.1.2.3	Dos and Don'ts	56
2.1.3	Mobility impairment	56
2.1.3.1	Problems associated with mobility impairment	58
2.1.3.2	Dos and Don'ts	59
2.2	Negative attitudes toward people with disabilities	60
2.2.1	History of Discrimination	60
2.2.2	Practices of discrimination	62
2.3	Challenge to library professional for integration	65
2.3.1	Privatisation of library services	65
2.3.2	Less prepared librarians	67
	Conclusion	68
Chapter 3.	Development of library services for people with disabilities	69
	Introduction	69
3.1	Braille period	69
3.1.1	Emergence of library services for the blind	71
3.1.2	The establishment of national library services	74
3.2	Talking book Period	77
3.2.1	Involvement of public libraries	78
3.3	Digital Period	91
3.4	Mainstream library service for disabled people	94
	Conclusion	97
Chapter 4.	Overcoming physical barriers	99
	Introduction	99
4.1	The Case of physical libraries	100
4.2	Library buildings in Korea	102
4.2.1	Few architects in library projects	103
4.2.2	Lack of interest of library professionals	104
4.2.3	Poor perception of the public	105

4.3	Key issues in library constructions	106
4.3.1	Site	106
4.3.2	Identity	109
4.3.3	Form follows function	109
4.3.4	Design for All	110
4.4	Barriers for accessible library	112
4.5	Problems of physical barriers in Korean libraries	114
4.5.1	Enforcement of legal requirements	114
4.5.2	Consultancy with disabled people	115
4.5.3	Practical guide	115
4.6	Standards of an accessible library	118
4.6.1	Car parking	120
4.6.2	Ramps	121
4.6.3	Entrances door	121
4.6.4	Steps	122
4.6.5	Turnstiles and Entrance Barriers	123
4.6.6	Passenger Lifts	123
4.6.7	Toilets	125
4.6.8	Floors and Walls	126
4.6.9	Furnishings	127
4.6.10	Signs	129
4.6.11	Emergency signs	130
4.6.12	Colour	131
4.6.13	Print Guidelines	132
4.6.14	Provision of hearing impaired people	133
4.6.15	Provision of visually impaired people	134
	Conclusion	135

Chapter 5. Information Technology factors 137

	Introduction	137
5.1	The Impact of IT on people with disabilities	138
5.2	The impact of IT on mainstream library services	141
5.2.1	New approach	141
5.2.2	Opportunities	143
5.2.2.1	Current Access Technology	143
5.2.2.2	The existence of IT facilities	147
5.2.2.3	Visualisation	151
5.3	Good practices in mainstream libraries	153
5.3.1	National level (British model)	153
5.3.1.1	National Union Catalogue of Alternative Formats	154
5.3.1.2	Pilot Interlending Project (PIP)	155
5.3.2	International level (European Projects)	156

5.3.2.1	EXLIB (Expansion of European Library Systems for the Visually Disadvantaged)	157
5.3.2.2	TESTLAB	158
5.3.2.3	MIRACLE	163
5.3.2.4	DAISY (Digital Audio based Information System)	167
5.4	Accessibility and electronic resources	168
5.4.1	Accessibility of Web sites in university libraries	170
5.4.1.1	Methods	172
5.4.1.2	Scope	173
5.4.1.3	Findings and Conclusions	173
5.4.2	Accessibility of Web sites in public libraries (UK)	177
5.4.3	A model of accessible Web site (NLB, UK)	179
5.5	Web sites of libraries for people with visual impairment	182
5.6	Future development	184
	Conclusion	185
Chapter 6.	The human factors	186
	Introduction	187
6.1	Psychological Barriers	183
6.2	Staff training	190
6.2.1	In Korea	190
6.2.2	In the world	192
6.3	Key elements of designing staff training	201
6.3.1	Consultation with disability associations	201
6.3.2	A designated person for staff training	202
6.3.3	User training	203
6.4	Education in library schools	205
6.4.1	IFLA initiatives	205
6.4.2	Library schools in Korea	208
6.4.2.1	Library schools without libraries	209
6.4.2.2	Foreign library schools at Home	211
6.5	User development	212
6.5.1	The opportune of user development	212
6.5.2	Expanding and improving	216
6.6	Considerations for future	219
6.6.1	Children with disabilities	219
6.6.2	Easy-to-read materials	220
6.6.3	Copyright	222
	Conclusion	224
Chapter 7.	Proposals	226

Introduction	226
7.1 National Level	227
7.1.1 A national body for library services for people with disability	228
7.1.1.1 The structure of the national body	229
7.1.1.2 The organization of the national body	230
7.1.1.3 The key activities of the national body	230
7.1.1.4 Budget	234
7.1.2 The National Library of Korea	234
7.1.2.1 Making information services through Web site accessible	235
7.1.2.2 Allocating budget to services for disabled people	236
7.1.2.3 Introducing services for disabled people through Web site	236
7.1.2.4 Enforcing legal deposit to alternative materials format materials	236
7.1.2.5 Making a national union catalogue for alternative materials	237
7.1.2.6 Creating an interlibrary loan system	237
7.1.3 The Difficulties of an interlibrary loan in alternative materials	238
7.2 Local Level	239
7.2.1 Primary mission	239
7.2.2 Planning	240
7.2.3 Designated staff	241
7.2.4 User research	241
7.2.5 Physical access	242
7.2.6 Library provision for reading and information resources	242
7.2.7 Assistive technology and technical aids	244
7.2.8 Staff training	246
7.3 The Korean Library Association (KLA)	246
7.3.1 A forum	247
7.3.2 Establishing Section for library services for people with disabilities	247
7.3.3 Making a single unified membership association	247
7.3.4 Developing a programme of prizes and awards	248
7.3.5 Producing standards / guidelines	249
7.4 Library schools	250
7.5 Summary of recommendations	251
Conclusion	257

Conclusion	259
Bibliography	266
Abbreviations / Acronyms	281
Appendices	283

Introduction

The background of the study

Library services for the general public in the Republic of Korea (hereafter Korea) are almost a century old. Since the term 'Library' used in Western countries was first introduced in Korea in the late 19th century by some far-sighted political leaders who had had opportunities to contact different cultures, Korean public libraries have made their humble start. However, it is fair to say that the average Korean people have barely benefited from their local libraries since they were established. Only a very small proportion (approximately 2 per cent) of the population (43 million) currently is making use of their local libraries (380 public libraries).

From the perception of most average Korean people, public libraries are not regarded as indispensable institutions in society. On the contrary, those who had once lived abroad, especially in countries in which public libraries are well developed, experience inconvenience when they come back home where no such kind of provision exists. In the perception of these people, who used to benefit from the libraries when they lived abroad, public libraries are the backbone of society. But for those who have never benefited from them it is almost impossible to appreciate the value of their local libraries.

As educational institutes, library schools in Korea are nearly forty years

old and have grown to more than twice as many as those in Britain. There are 40 library schools in Korea but ironically the number of public libraries is 380 in Korea while there are 4260 in Britain¹ where over sixty per cent of the population (59 million) are making use of their local libraries.

There are many external factors including long lasting political and social unrest, which have contributed to less developed public libraries in Korea. But even under political stability, the increase of the nation's economic wealth and technological advancement which has lasted for two decades, library services are still far left behind compared to other areas. This means that there are more serious internal factors within the library community as a whole, which have hampered public libraries growth. As a consequence book stores and book lending shops are flourishing. This fact explains that the Korean library professionals have failed to be aware of the reading and information needs of the general public.

In this circumstance the level of library services for disabled people in Korea is absolutely indescribable. Although there are a number of special institutions which have been established for library services for disabled people, currently only a small proportion of visually impaired adults among the disabled population are members of these institutes. These people are provided with Braille and talking books in very limited subject areas through postal services. Most of these special libraries come under the disability organisations. Manpower in these libraries consists of social workers and volunteers. With the absence of a central coordinating body cooperation between these libraries is

¹ Alison Murphy (com.), 1999 Library & Information statistics Tables, Loughborough,

rare. Consequently financial loss and duplication of effort are rife. Indeed, these libraries are charitable in nature, therefore, they should make every effort to obtain outside funds to keep sustaining themselves by competing with others. Most disability organisations for visually impaired people set up a library first when the body was established. This means that the library is regarded as an important component to sustain the organisation. Actually this kind of library cannot be called a library. A blind reader said that the words *library* and *liberty* have more connections than similarities of spelling, for the library is an institution dedicated to many kinds of freedom — the freedom to inquire, to learn, to enjoy and to expand one's personality through all these and more. These libraries, however, are meaningful only to those who can make use of them.

Generally it is estimated that one in every ten of the population is disabled. Nevertheless, most societies have excluded this population from mainstream education, employment, and various programmes and activities. As a result of the separation and discrimination from society, disabled people have been left less taught, less skilled and less employed compared to their able bodied counterparts. Hence many societies have experienced the financial burden of supporting dependent disabled people for their lifetime. Recognising this problem, governments in many countries have changed their policies from separation to integration. Especially in the education sector in Korea the last decade has witnessed the movement of the integration of disabled children into mainstream schools. Many general schools have received disabled children and

put them either in general classes or special classes. Also, some higher education institutions have also received a number of disabled students under a special scheme, which gives priority to disabled students in the entrance exam to universities.

In particular in 1997 the Korean government enacted *The Act on Installation of Convenience Facilities for the Disabled* (AICFD) in order to help the more disabled people to be able to participate in various services, activities and programmes in mainstream sets. Although all these measures have come under the movement of the integration of disabled people into mainstream society, few library professionals read the current political and social climate and take measures to integrate disabled people into mainstream library services.

The purpose and aim

The prime purpose of the study is to raise the awareness of library professionals in Korea on the issue of the integration of disabled clients into mainstream library services. In my view this is the best time in the history of public libraries in Korea to make a big leap and to raise their status in society by integrating disabled people with the rest of their clients.

So far, since public libraries embarked on their services a century ago they have merely responded to those who come to the premises but have not paid much attention on potential users. Therefore it seems appropriate for public libraries to choose disabled people as the first objective for the intentional creation of users because the issue of disabilities has become the top political

issue nowadays at home and abroad. Besides, external environments such as educational, social and technological factors are favourable. This will be fully discussed in subsequent chapters.

Secondly, the purpose of the study is to create a viable platform for discussion on the issue of disabilities among all the sectors of library community and interest groups including library schools and library associations.

Lastly, the study aims to develop guidelines which will serve as a foundation for individual libraries to delineate definitive policy directives and create their own services guidelines and the government also draws policies and procedures for the integration of library services.

The objectives of the study

The objective of the study is to examine the extent to which disabled people in Korea have been integrated into mainstream library services, the problems preventing total integration and how best to introduce good practices observed abroad in Korea.

In this regard the study aims to make a series of recommendations (based upon findings) and to identify areas for further research which might contribute to improvement in the Korean situation.

Research methods

Among a number of methods through which research may be conducted this

study has considered the observation method appropriate. In conducting the research abroad it was decided that the most appropriate way of collecting data would be the field survey through interview and personal observation.

During the initial phase of the study in 1997 I took a one month public library tour across England, Wales and Scotland to get a general insight into the practices of British public library services. The number of libraries I visited was thirty three: 3 in Scotland, 4 in Wales and the other 26 in England including 8 in London. The tour provided me with an opportunity to observe at first hand the current British public library services in terms of physical buildings, facilities, reading and information resources, staff and clients and equally this gave me the opportunity to see problems which would have negative effects for accessible library services for disabled people. At all these library tours a lot of talks were held with library managers, front-line staff and all ages of library clients. This experience extended my horizon of library services abroad and also provided a basis for a clear understanding of the literature review which followed.

A literature review was done in several libraries in and around University College London including the British Library, Institute of Education, Senate House, School of Oriental & African Studies' Library and the Research Library at RNIB. All of these libraries are located within a few minutes walk from the UCL. In addition, some local libraries had good collections in government publications. It seems worthy for London to have such a title, 'Library City'.

Fortunately enough for the first period of my study, the entire collections of Librarianship of the British Library were housed in the premises of the Library

Association until 1998 before it moved to St. Pancras. All materials were placed on open-self stacks. Besides, the UCL's library provided an excellent interlibrary loan service. Many articles searched on the LISA (Library Information Science Abstracts) were acquired within a week through this service as FREE!

Besides, my supervisors, colleagues, friends and family members in Korea and the UK have continuously provided materials. Even a tiny piece of newspaper they provided became an indispensable source in my research.

The second phase of my research was accomplished through interview schedules and personal observation which focused more on the issue of disabilities. The subjects of the interviews I conducted came from various sectors including staff at special schools and disability institutions, library school educators, parents, disabled people as well as staff at special libraries and mainstream libraries which provide services for disabled people. In addition, discussions were held with IT technicians about the current assistive technology for visually impaired computer users both at special and mainstream sets. The interview questions were mainly open-ended questions. This was to allow respondents the freedom to express themselves as much as they wanted and to answer in their own words and in a form not limited to predetermined range of responses.

The central value of the face-to-face interviews as a research procedure I did was that it dealt with a variety of subject matter and any misunderstandings on the part of the interviewer or the interviewees were corrected immediately, which provided the researcher with confidence in the data. Although attention was paid on the selection of the interviewees who are in expertise on the topic

and reliability there were still limits and difficulties. For example when respondents felt sensitive about questions raised in the interview, the answers seemed to be biased and invalid. However, the interviews I conducted were not intended to provide quantitative statistically analysable comparable data but rather to get views, opinions, specific facts.

Besides the interviews, I collected information and data by many other methods including internship, workshops, meetings and exhibitions. I had one week internship at Linden Lodge School in London. This school has about 50 children aged from 4 to 18. All the pupils at the school have a visual impairment and some have additional impairments. One of the workshops I participated in was for awareness training for visually impaired people, which was designed for volunteer workers by the Barnet Borough Council in London. At that time I applied to be a volunteer at the Council. I also attended a consultative meeting which took place at the Central Library of the Borough of Islington in London. The library invited several library users with disabilities to discuss and consult on various matters on the issue of accessible library services for disabled populations. Besides, I went to several exhibitions to see up-to-date assistive computer technology, new devices for visually impaired people and to meet computer users with disabilities and vendors as well. The major exhibitions I viewed were the *RNIB' Vision '98* and the *RNIB' Vision 2000* held at the Kensington Town Hall in London and the *Sight Village* held at Alexandra College in Birmingham in 1998 and 2000.

At the last stage of the study the research was conducted in Korea for two months. During this period I also collected data by the same methods used

in Britain in order to find the differences between the two different environments. Besides, in Korea I held discussions and consultations with various groups of people from the library and other sectors in order to obtain objective views of issues.

During the period of writing up my thesis my supervisors arranged for me to attend a SEDODEL Seminar entitled 'The Right to Read: Visually Impaired Readers and the Rights Holders' held at Cristofori Salon, Amsterdam, 1 March 2000. The Secure Document Delivery for Blind and Partially Sighted People (SEDODEL) projects with the International Federation of Library Associations and Institutions (IFLA) Section for Libraries for the Blind held the conference to consider copyright issues in relation to visually impaired people in library services. This experience provided me with a good opportunity to contact many European library professionals in my research area and made me up-date myself on the current activities and projects taking place in Europe. Furthermore, I had a chance to visit the SVB (Studie - en Vakbibliotheek), Dutch Library for Visually Handicapped Students and Professionals, which undertakes several European projects for visually impaired people including Testing Electronic System using Telematics for Library Access for the Blind (TESTLAB) and Music Information Resources Assisted Computer Library Exchange (MIRACLE). The staff of the institution provided me with internal documents related to the projects. Without this visit I could not have completed my thesis.

Limitations

Although the study covers other disabilities such as hearing and mobility impairment, it is mainly concerned with visual impairments. Visually impaired people are the most disadvantaged in libraries because they are unable to read printed materials. Another limitation was that international experience was restricted to the UK only. This was because unexpected personal financial difficulties arising from the Korean currency crisis since the end of 1997 prevented me from conducting my research in other countries including Scandinavia which provide excellent example of integration. Therefore all data from outside Britain other than that from the Netherlands mentioned above was secured from the literature and correspondence².

Organisation of the study

The study is organised into three sections, the first two sections divided into a number of chapters. The third section is a proposal and is followed by the conclusion. Section 1 (Chapters 1-3) is a foundation section providing background information for the topic of this study. Section II (Chapters 4-6) sets out major issues on disabilities in mainstream library services. Section III (Chapter 7) puts forward recommendations for the solution of the problems identified in the study and suggestions for effective library services for disabled

² 1) <http://www.ifla.org>

2) The Swedish Library of Talking Books and Braille (TPB),
E-mail: bea.christensen@tpb.se

people. The conclusion summarises the main issues addressed in the study and suggests further research in this area.

Introduction the present chapter provides the background to the study in terms of motivation, its purpose, research methodology, limitations imposed on the study and a description of how the thesis is organised.

Chapter 1, Integration of people with disabilities, discusses various issues related to the integration of disabled people into mainstream society. These are definition of the integration, its purpose and the environmental factors which encourage mainstream libraries to integrate disabled people into the rest of their populations. Lastly the practice of integration of disabled people in other sectors in Korea is discussed.

Chapter 2, People with Disabilities, is divided into two parts. The first focuses on disabled people themselves, that is, the characteristics of disabilities and the problems and difficulties of disabled people. The second part discusses various discrimination and prejudices of society towards disabled people from a historical perspective. The current practice of discrimination against disabled people in mainstream libraries is also discussed.

Chapter 3, Development of library services for people with disabilities, summarises the evolution of library services for visually impaired people from earliest times to the present. This is discussed in the context of the

development of technology which is regarded as the most significant factor to bring changes in services and also to lead to integrating library services for disabled people into the mainstream.

Chapter 4, *Overcoming physical barriers*, investigates physical buildings and facilities of mainstream libraries. I have tried not only to identify the general problems of the library building projects in Korea but also to account for specific issues on disabilities in design of library buildings. Good practices in Britain for accessible library buildings are discussed.

Chapter 5, *Information and Technological factors*, looks at the impact of information technology on the lives of disabled people especially visually impaired people and discusses the possibility of mainstream libraries opening their doors to these people by using new technology. More importantly, given that accessibility of electronic information is dependent upon the design of Web sites, the issue of accessible Web sites will be discussed and also international efforts to discourage the inaccessible Web sites will be mentioned.

Chapter 6, *The human factors*, examines invisible psychological barriers caused mainly by librarians' attitudes towards disabled people and less prepared library practitioners which have the most negative impact on the integration of disabled people into mainstream libraries. In addition, problems which have contributed to the low status of Korean public libraries in society is discussed in the context of user development and the integration of disabled

people into mainstream libraries.

Chapter 7, Proposals, formulates guidelines in the form of recommendations for accessible library services in mainstream libraries both at national and local levels.

Conclusions, finally, the study draws general conclusions and identifies further areas of research which could contribute to improvement of the library services for disabled people.

(For visually impaired readers the text of the thesis is written in Ariel and very little use is made of visual data such as tables and figures other than text descriptions followed by tables and figures.)

Chapter 1

Integration of people with disabilities

Introduction

During the past two decades one of the top political issues in any society has probably been the integration of people with disabilities into mainstream society. Led by the proclamation of UN's International Year of Disabled Persons in 1981 nations have formulated various legal frameworks to prevent disabled people from being discriminated against or excluded from all sorts of works. For a long time disabled people have suffered from various prejudices, discrimination, segregation and exclusion from society and from individuals without disabilities. But disabled people are not simple recipients of whatever able-bodied people decide to do for them any more. They understand their rights and are taking joint actions for the issues concerning their welfare and future by setting up their own organisations. As a right disabled people request society for full participation and equal opportunities in education, employment and community activities the same as their able-bodied counterparts. Thus, especially the last two decades have witnessed the challenges and responses between disabled people and society on an issue of the integration of disabled people.

In this chapter several factors related to the integration of people with disabilities into mainstream society will be discussed. First, the purpose and benefit of integration will be briefly considered. This will be followed by a discussion of the population of disabled people. Then, various background forces that have stimulated the movement of the integration of disabled people

will be examined. Lastly, in order to get an insight into how to integrate disabled people, the practices of integration in other sectors will be introduced.

1.1 What is integration?

Integration may be described as the process of normalization of people with disabilities, that is, disabled people are not segregated or separated from mainstream society. They live in society as members of the community and participate at all sorts of society on an equal basis. For instance, children with disabilities go to the same school in a community as those for non-disabled children. Disabled people are also making use of their local libraries in the same way as non-disabled people. By doing so disabled people have equal opportunities to develop their full potential, to live independently and to play a full part as active citizens.

1.2 Purpose of integration of people with disabilities

The purpose of the integration of people with disabilities is to help disabled people to live independently and normally just like people without disabilities by participating fully in mainstream society and free from unfair discrimination. However, until recently, disabled people had been treated as less than human beings and experienced in varying degrees discrimination and exclusion from society. This is because the problems faced by disabled people have been understood to be solely an individual's own physical or mental impairment. In other words, disability was viewed mainly from an individual medical perspective rather than a societal problem. Disabled people thus have been isolated from society and left to be passive recipients of charity. As well as facing various architectural barriers disabled people have also faced strong psychological barriers created by society's negative attitudes towards them, which are more serious problems. Disabled people argued that 'in our view it is

society which disables ... impaired people'.¹ Disabilities can be frustrating but greater frustration comes from the societal and environmental barriers which keep a person from using his/her abilities. Therefore the ultimate goal of the integration of disabled people is to help disabled people to use their abilities and develop their potential by providing them with equal opportunities in all aspects of society.

On the economic front, as long as disabled people remain unproductive and dependent, society has to support them. Recognising the high cost of dependency by discriminating and excluding disabled people from education, employment and social activities that results in disabled people having to live dependently and unproductively, many countries changed their policies on disabled people. Governments are increasing expenditure on education, research and training for disabled people, that is, independence-oriented programmes. The money spent on independence-oriented programmes is actually investment. Becoming independent, disabled people are able to give the money spent on themselves back to the government by paying tax.

The cost of lifelong support to disabled people is high and even wasteful. Money spent simply to maintain dependency is essentially lost. As well as the cost in financial terms, the high cost to society in the waste of human resources is unacknowledged when potentially productive individuals remain uneducated, unemployed and isolated.² So the purpose of social integration of disabled people in a political context is to reduce government expenditure by making more disabled people independent.

In social benefit there were many problems in the past caused by putting disabled people into institutions or segregating them from society. Many disabled people experienced emotional and developmental problems by being

¹ Union of Physically Impaired Against Segregation (UPIAS), Fundamental Principles of Disability, London: UPIAS, 1970, p.2, cited in Caroline Gooding, Disabling Laws, Enabling Acts, Disability Rights in Britain and America, London: Pluto Press, 1994, p. on Introduction.

² Linda Walling and Marilyn H. Karrenbrock, Disabilities, Children, and Libraries: Mainstreaming Services in Public Libraries and School Library Media Centers, Englewood, New Jersey: Libraries Unlimited. Inc., 1993, p. on Introduction.

put into institutions. Living in a group, an individual was limited in his/her freedom and aspiration which caused him/her to become inert or sometimes misbehave.³ As a result, the level of adaptation of disabled people to society has dropped continuously and also disabled people have become more dependent. Besides, a lot of disabled people were left in poverty, illiteracy and crime etc. Having come to an understanding that when disabled people were segregated more social problems arose, many countries implemented de-segregation policies by providing disabled people with appropriate services and conditions in order to help them live independently and normally.

By integrating people with disabilities into mainstream education, employment and community activities, society aims not only to reduce the level of social problems but also to benefit from the abilities and creativity of disabled people.

1.3 Populations

It is important to get accurate data on the population of people with disabilities because on the basis of such data, policies, programmes, activities etc. are planned and implemented. From the individual perspective it is to prevent disabled people from being excluded from disability benefits. But in fact, it is not possible to state with precision the numbers of disabled people. Many people frequently become disabled at a later stage of their lives apart from those being disabled before or just after birth. In addition, having disabled family member(s) some families are afraid of exposing them publicly, because disabled people are still regarded as a disgrace in many countries. Therefore it is impossible to get accurate statistics of people with disabilities in any society. Estimated numbers are used universally.

According to the assessment of disabilities used by a country the

³ Korea Rehabilitation Association for People with Disabilities, The Direction of Welfare Policy for Disabled People 2000 [A report of WHO workshop], 1987, p.153-154.

number of disabled people is different from country to country. For instance, currently there are said to be 1 million disabled people in Korea (population of 43 million) while there are 10 million disabled people in Britain (population of 59 million). The difference is because the two countries use different assessment criteria to judge disabilities. In Korea disabilities are categorised in six areas: 1) mobility impairment; 2) visual impairment; 3) hearing impairment; 4) speech impairment; 5) mentally retarded and 6) additional impairment. In Britain within the Disability Discrimination Act (DDA)⁴ definition of disability the term 'Disability' is defined as a physical or mental impairment which has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities. According to this definition there are 8.5 million people currently who meet the DDA definition. In addition, around 1.5 million people have had a disability in the past and would also be protected by the DDA.⁵

The UN estimates there are 500 million people with disabilities in the world, and in the next 40 years the number will double in industrialised countries and increase fourfold in developing countries.⁶ The UN estimates that the prevalence rate of disabilities is one per ten of the population. When the United States of America enacted the Americans with Disabilities Act (ADA)⁷ in 1990 they estimated 43 million disabled people among 248.7 millions of the population in 1990. The estimated prevalence rate in the USA is one per five of the population. In UK the prevalence rate of disabilities is 197 per thousand in 1996/97 (estimated 135 in 1985 survey).⁸ In Korea the estimated prevalence rate is 22 per thousand.

⁴ Text of the Disability Discrimination Act 1995 is available at <http://www.hmso.gov.uk/acts/acts1995/95050.---a.htm#er>

⁵ Disability Rights Task Force, From Exclusion to Inclusion [Final Report of the Disability Rights Task Force, Britain], 1999, p.3. Text is available at <http://www.disability.gov.uk>

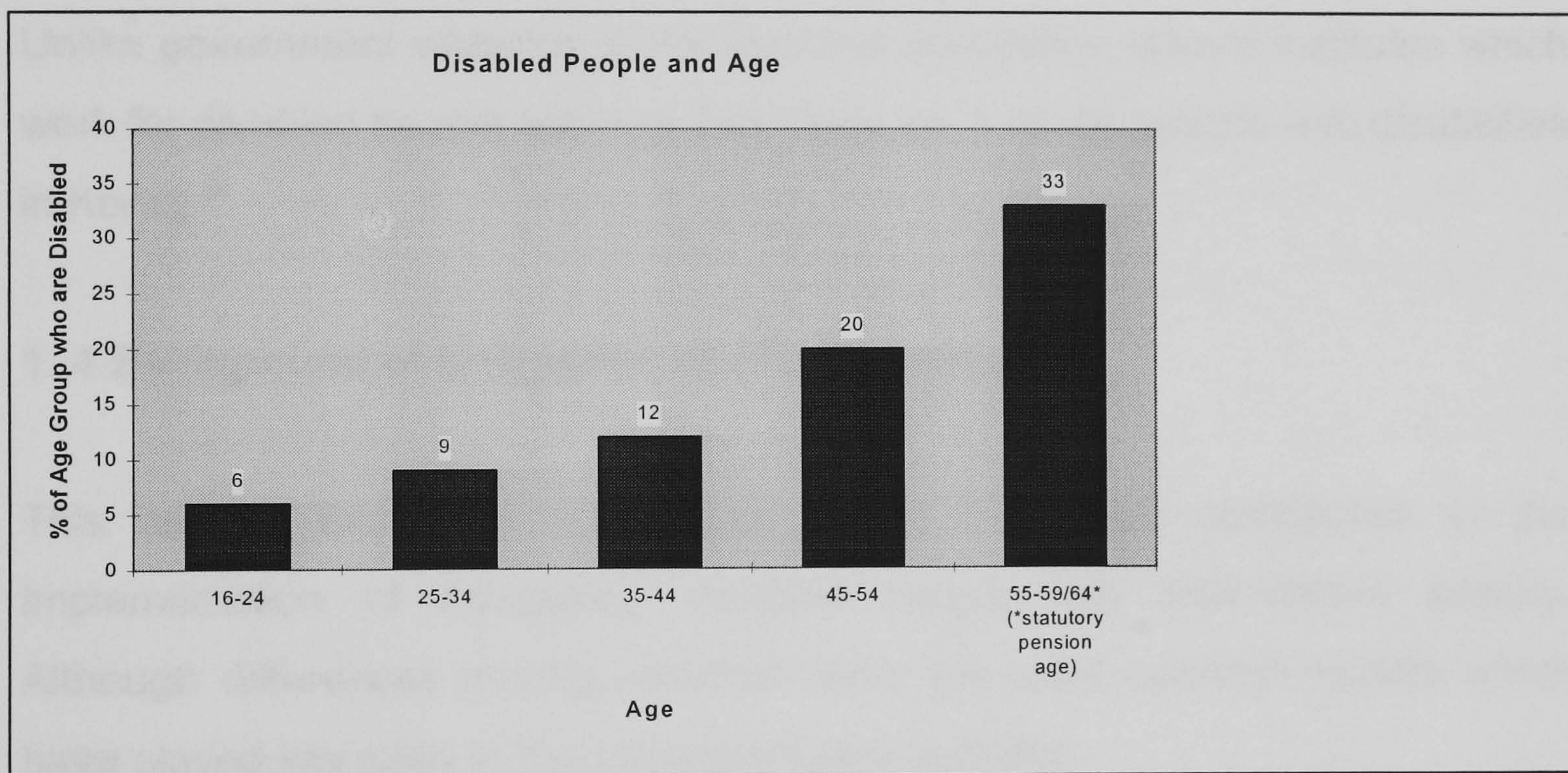
⁶ Human Rights Committee World Blind Union, The United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities, A User's Guide, 1995, Text is available at <http://fbraile.com.uy/hright>

⁷ Text of the Americans with Disabilities Act 1990 is available at <http://www.usdoj.gov/crt/ada/statute.htm>

⁸ Craig Donnellan (ed), Disabilities, Vol.17, Cambridge: Independences, Educational

Normally disability increases with age. In Britain the Disability Rights Commission (DRC) categorised people who are likely to become disabled into 5 age groups, of which those who are between 16 and 24 years old have a possibility to become disabled at the lowest rate, 6%, while those who are over 55 are at the highest rate, 33%. The others are 9%, 12% and 20 % for those who are between 25-34, 35-44 and 45-54, respectively.⁹ The following chart shows how disability increases with age in Britain.

Figure 1.1
Disabled People and Age in Britain



Source: Disability Rights Commission, 1999

In Korea the Ministry of Health & Welfare has conducted a census of disabled people once every five years since 1980. According to the statistics in 1995 there were 1 million disabled people, of which approximately 610 thousand

Publishers, 1998, p.27.

⁹ Disability Rights Task Force, *From Exclusion to Inclusion*, [Final Report of the Disability Rights Task Force, Britain], 1999, p.16.

Text available at: <http://www.disability.gov.uk>

people were mobility impaired; 60 thousand were visually impaired; 110 thousand hearing impaired. The rest of them had speech, mental and additional impairment. The following table shows the numbers of disabled people in Korea categorised in six groups.

Table1.1

The population of people with disabilities in Korea (1995)

	Physical	Visual	Hearing	Speech	Mental	Addition.
Number	608,760	57,540	111,460	22,260	32,070	196,740
P.rate(%)	1.40	0.13	0.26	0.05	0.07	0.45

Unlike government statistics of the disabled population, private institutes which work for disabled people estimate that there are 4 million people with disabilities in Korea.¹⁰

1. 4 Background of integration of disabled people

This section examines the various forces that have contributed to the implementation of integrating disabled people into mainstream society. Although differences among countries exist the most common factors which have played key roles in this movement can be drawn.

1.4.1 Legal factors

Legal factors will be discussed at two different levels: international and national. Both have progressed by influencing each other.

¹⁰ The data were estimated by those who work for disabled people and mentioned during a workshop for volunteer workers held at Hasang Welfare Center for People with Disabilities, Seoul in Korea on 3rd July 1999.

1.4.1.1 International level

International Year of Disabled Persons 1981

In 1981, the United Nations proclaimed the *International Year of Disabled Persons* (IYDP). The theme of IYDP is 'Full-participation and Equality'. Although it is said that the IYDP was aimed mostly at those who have mobility problems¹¹ the IYDP has increased greatly awareness of all sorts of disabled people. The general public has started to realise that disabled people have equal rights to access and participate in services, programmes and activities as themselves. Disabled people themselves have also become aware of their rights and have protested when their rights are infringed.

Undoubtedly, the year of 1981 played a great role in creating a new image of disabled people and in changing the general public's attitudes towards disabled people. The year challenged the governments in many countries to implement policies on integration of people with disabilities into education, employment, services, programmes etc.

At an international level the UN proclamation of the year seems to be the first formal declaration to regard disabled people as human beings with dignity and worth no less than non-disabled people. But the recognition of the dignity and worth of the disabled people as human persons dates back to the *Universal Declaration of Human Rights* proclaimed by the United Nations in 1948.

During the two world wars the world witnessed human dignity trampled down. Many people were tortured, imprisoned without trial, and discriminated against, and so on. In particular, during the 1939 – 45 war, a number of disabled people were killed in the Nazi death camps on the grounds of their disabilities.

¹¹ Paul E. Thiele, 'Libraries, The Blind and the International Year of Disabled Persons', Library Service for the Blind and Physically Handicapped: An International Approach, IFLA Publication 23, Vol.2, edited by Bruce E. Massis, München: K.G.Saur, 1982, pp.30-31.

The language of human rights is not necessary in a society where every one is fully recognised and respected but in the world that is not the case. Realising this cruelty and ill-treatment of human beings the United Nations proclaimed the *Universal Declaration of Human Rights* in 1948. The United Nations affirmed that human dignity should be supported by human rights by proclaiming this declaration.

The United Nations proclaimed this Declaration as a common standard of achievement for all peoples and all nations. Since the proclamation of the Declaration, many other treaties and human rights instruments have been formulated throughout the world. Obviously *the Universal Declaration of Human Rights* mobilised the proclamation of *the International Year of Disabled Persons*.

United Nations Standard Rules on the Equalization for Opportunities of Persons with Disabilities 1993

After the *International Year of Disabled Persons*, the United Nations designated the *Decade of Disabled Persons* from 1982 through to 1992. After the Decade, the UN General Conference approved the *United Nations Standard Rules on the Equalization for Opportunities of Persons with Disabilities* in late 1993.

The Standard Rules consist of 22 Rules. The first four Rules (Basic Requirement) acknowledge that there must be certain activities in place, for people with disabilities to have the chance to participate in community life on an equal basis. The next eight Rules (Target Areas) cover core targets. They take into account areas of life, including public, professional and family. In Rule 5, which is directly related to libraries access to all areas of society is essential for an equal opportunity. Physical barriers should be removed to enable entry to all public areas and public buildings. Access to communications should be available in a form people with disabilities can access e.g. Braille, audio or large print. The last ten Rules (Implementation Measures) are the tools to help governments make the Standard Rules work for all of their citizens with disabilities.

In Rule 14, in which the importance of co-operation with people with disabilities is stressed policy-making and planning should take account of the needs of people with disabilities and involve people with disabilities in decision making.¹² This Rule recognises that governments, in collaboration with individuals, organisations of people with disabilities and private sectors, should work towards the equalisation of opportunities. Policies concerning people with disabilities should focus on their abilities rather than their disabilities and should ensure their dignity as citizens.¹³ Therefore people with disabilities can contribute to and benefit from full participation in society.

Public Library Manifesto 1994

In the library community the International Federation of Library Associations and Institutions (IFLA) worked out the *Public Library Manifesto* upon the request of UNESCO, approved in 1994. The *Public Library Manifesto* is aimed at convincing local and national authorities of the fundamental values protected by public libraries and their important contribution to the community and democracy in general.¹⁴ The Manifesto states that :

Freedom, Prosperity and the Development of society and individuals are fundamental human values. They will only be attained through the ability of well-informed citizens to exercise their democratic rights and to play an active role in society. The public library, the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision making and cultural development of the individual and social groups.

¹² Graeme Innes, A User's guide: The United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities, 1995.

Text is available: <http://fbraile.com.uy/hright>

¹³ Hiroshi Kawamura, 'International Instruments for access to information for all', Paper to the 62nd IFLA General Conference, Beijing, China, 1996.

¹⁴ Marian Koren, 'The right of information as a condition for human development', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, 1997.

The Manifesto explicitly expressed freedom, prosperity, the development of society and individuals as fundamental human values. They are achieved only by well-informed citizens who are able to exercise their democratic rights and play an active role in society. That is, social development depends on the development of all individuals as members of the society. The development of individuals can be accomplished by playing an active role in society. The active role of individuals in society can be achieved only on the basis of full participation and equalisation of opportunity. The full participation and equal opportunity should be given to all members of society not as a grant but as a right.

In this context the Manifesto sets forth the principles of public library services, such as equal accessibility for all, without discrimination, as it claims that public library and information services ‘

...are provided on the basis of equality of access for all, regardless of age, race, sex, language or social status.

As directly related to disabled people, as early as 1990 the Section of Libraries for the Blind, one of the Sections of IFLA, started a discussion on a statement 'Access to Information for All' which was approved by IFLA General Conference in Barcelona 1993, as one of its professional resolutions.¹⁵ The resolution deals with the fundamental rights of access to information for the blind and other print disabled people.

1.4.1.2 National Level

Led by the initiatives of the United Nations especially, by *the International Year of Disabled Persons* 1981 many anti-discrimination acts of people with disabilities have been formulated throughout the world in order to integrate

¹⁵ Hiroshi Kawamura, 'International Instruments for Access to Information for All', Paper to the 62nd IFLA General Conference, Beijing, China, 1996.

these people into mainstream society. In 1990 the United States of America enacted the *Americans with Disabilities Act* (ADA) and it was followed by the *Disability Discrimination Act* in Australia 1992 and the *Disability Discrimination Act* (DDA) in Britain 1995. In Korea, though there is not an anti-discrimination act, in 1997 the Korean government enacted a law, the *Act on Installation of Convenience Facilities for the Disabled*. The purpose of the Act is to increase the participation of disabled people, elderly people and pregnant women in society and to improve social welfare by enabling them to make use of facilities and equipment safely and conveniently, and to access information independently.

The common characteristics of these acts are to ban discrimination against disabled people on the grounds of their disabilities. As core targets physical barriers should be removed to enable entry to all public area, public buildings and public transport. Access to all areas of society is considered essential for equal opportunity.

It is worth noting that in Britain, with the enactment of the DDA the British Government transferred the responsibility of the welfare of disabled people from the Department of Social Security to the Department for Education and Employment (DfEE). The Minister of Equal Opportunities at DfEE, Andrew Smith, said:

The transfer of responsibility from the Department of Social Security to the Department for Education and Employment means that we will be able to work towards ensuring that disabled people fulfil a wider role in society as people able to take advantage of education, training opportunities and the employment market.¹⁶

In the context of libraries, these laws apply to almost every library regardless of its kind, which provide services to the public. For example in the USA the Title II of the ADA applies to public services and covers all public entities. The public

¹⁶ Royal National Institute for the Blind, 'The new Ministers for disability issues' New Beacon, (955), July/August 1997, p.20.

entities are defined (Section 201) as all states and local governments and their departments agencies, special purpose districts, and other instrumentality of a State or States or local government. Therefore Title II applies to nearly all American public, academic, and school libraries, as most libraries are departments of state or local government.¹⁷ In order to comply with the Act almost every library in America should remove architectural or communicational barriers, or provide auxiliary aids and services for disabled clients to participate in services, programmes or activities. The term auxiliary aids and services in the library context means alternative forms or methods such as interpreters or captioned video tapes for hearing impaired people; Braille, large print, or talking books for visually impaired people. In addition, for libraries that receive state or local public funds (applied to even privately run libraries), if removing barriers from an existing facility constitutes an undue hardship, the programmes, activities, and services offered at that site must be made readily available by other means to people with disabilities.

In the UK, Part III (DDA) covers anyone providing goods, services or facilities directly to the public, and all employers (except those with fewer than 20 employees). The term 'anyone' defines all public and private sectors who deal with the public. The DDA places an obligation on those providing services to the general public not to refuse to serve a disabled person on the grounds of disability. Therefore all libraries in Britain are subject to the Act. The second stage of implementation of Part III came into force in 1999, and the final stage, which allowed providers time to remove all physical barriers to access comes into force in 2004.

In Korea the *Act on Installation of Convenience Facilities for the Disabled* covers all facilities and equipment which are provided for the use of the public. This implies that all facilities and equipment installed in libraries should be made safely and conveniently for the use of disabled clients. Moreover, the law

¹⁷ Michael G. Gunde, 'What every librarian should know about the Americans with Disabilities Act', *American Libraries*, Vol. 21(9), September 1991, p.808.

clearly indicates that information should be accessed by disabled people independently. This means all libraries should be made available to disabled clients because no library exists without dealing with information. Therefore all the libraries in Korea are subject to the Act. They should remove physical and communicational barriers for disabled people to access information independently. For hearing impaired people they should provide communication modes which make communication possible between hearing impaired clients and library staff without hearing problems. For visually impaired people print and electronic materials should be made accessible by these groups as they provide assistive computer technology such as a screen reader and a screen magnifier etc. to access reading and information materials independently. The *Act on Installation of Convenience Facilities for the Disabled* in Korea came into force in 1998 except Sub-Section 3 of Section 27 which is about penalties and came into effect in June 1999. Besides, the removal of physical barriers comes into force in March 2001.

1.4.2 Educational factors

Education is considered as the most important factor for the integration of disabled people into mainstream society. Through education many disabled people are able to develop their potential and to live independently financially. Moreover, they are able to understand their rights and to prevent themselves from being discriminated against.

Since 1970 there was a strong trend of integration for children with disabilities in mainstream schools in many countries. Mainstream schools mean general schools in which non-disabled children are taught. Under the term 'mainstreaming', children with disabilities have been placed in general classes or special classes in mainstream schools. In Britain the *Education Act* in 1976 included a clause which was intended to change the legal emphasis of special education treatment in special schools to provide for all categories of disabled

children in the mainstream sector. Until that time disabled children were placed in special schools by being categorised according to their disabilities. But in 1973 this categorisation of disabled children was re-examined and replaced by the introduction of comprehensive schools, in which grammar schools in England and Wales were abolished instead, all children regardless of academic abilities were put in comprehensive schools. As a result disabled children were also able to be taught at general schools. Particularly Section 10 of the *Education Act* stated that children should be educated in special schools only if they could not receive adequate tuition in general schools, or if the cost of that instruction would be to cause unreasonable public expenditure.

Mainstream education for disabled children in Britain has been reinforced since the new Labour Government took power in 1997. A Green Paper was published about the future of provision for children with disabilities and special needs which proposed to abolish the special schools wherever possible. Nowadays in Britain even totally blind children are taught in regular classes in general schools. The proportion of children with disabilities in special schools has declined as the number in mainstream schools has risen but there were still 98,000 pupils educated in special schools in 1998.¹⁸ According to the statistics of the Royal National Institution for the Blind (RNIB), 60 % of visually impaired children attended mainstream schools while 7 % of them attended special schools for visually impaired children and the rest of them attended other special schools.¹⁹

In the United States Congress enacted the *Education of Handicapped Children Act*, as a single piece of legislation in 1975. The Act required States to place all students in the least restrictive environment. Since the implementation of the Act most children with disabilities have been put in general classes or

¹⁸ Mick Archer, 'Talking tough', *Special Children*, Issue 108, February 1998, p.12.

¹⁹ L. Clunies-Ross and S. Keil, *Factsheet on numbers of visually impaired children in the UK in 1997*, unpublished, RNIB, cited in the Council for Museums Archives and Libraries, *Library Services for Visually Impaired People: a Manual of Best Practice*, London: The Council for Museums, Archives and Libraries, 2000, p. Chapter 5 (5.7.3). This Manual is available on the Web site of the National Library for the Blind: <http://www.nlbuk.org>

'pull-out' resources rooms in mainstream schools. As a result of the new education act the numbers of disabled students entering in higher education have increased greatly. A study jointly conducted by the President's Committee on the Employment of the Handicapped in USA and the American Council for Education shows that in just seven years the numbers of disabled people in higher education increased threefold, from 2.6 per cent in 1978 to 7.4 per cent in 1985.²⁰ In his book *No pity*, Joseph Shapiro says by quoting a report of the Department of Education in 1991 that in the USA the number of students identified with disabilities had increased every year since 1976 and was expected to continue that trend through at least the end of the century.²¹

In Korea there were pioneers in education who had a strong belief that children with disabilities are not different from those without disabilities and can be taught at mainstream schools. They tried hard to legalise the integration of disabled children into mainstream sector from the late 1960s. The integration of education was seen as the first step of social integration to them. However, the integration did not become a major issue among professionals until the 1980s. Since the middle of the 1980s the number of special classes in mainstream schools for disabled children has gradually increased. With overall amendment of the *Special Education Law* in 1994, the integration of disabled children has been accelerated. Under Section 15 of the *Special Education Promotion Law*, which was promulgated in 1997, principals of general schools should accept admission of children who need special education when requested by students themselves, parents or principals of special schools. The Law requires when general schools conduct integrating education, they should provide appropriate texts, equipment and facilities.

According to the statistics of the *Special Education Booklet '97* published

²⁰ Barbara A. Bishop, 'The State-Supported University Libraries of Alabama: Serving the Needs of Patrons with Disabilities' College & Research Libraries, Vol.56 (1), January 1995, p.19.

²¹ J. Shapiro, *No Pity*, cited in Barbara A. Bishop, 'The State-Supported University Libraries of Alabama: Serving the Needs of Patrons with Disabilities' College & Research Libraries, Vol.56(1), January 1995, p.19.

by the Korean Special Education Association, in 1984 there were 946 special classes in general schools but in 1997 the number had reached 3626. The Korea Institute for Special Education (KISE) reported its plan to increase the 626 special classes in general schools to 5485 by 2001.²² Following the increase of special classes in general schools, the education budget allocated to special education has also increased. In 1996 the proportion of special education was merely 1.7 % of total education expenses but in 1997 it reached 7.3 %. By implementing a new law the Government increased education budgets for children with disabilities. According to the source of Korea Institute for Special Education, Ministry of Education, the increase of special education expense is as follows:²³

Table 1.2

Annual Financial Investment Plan on Special Education (1997-2001)

1997	1998	1999	2000	2001
₩87.1billion	₩125 billion	₩118.3 billion	₩ 182.6 billion	₩ 208.9 billion

(Unit: Korean currency (₩= Won), ₩ 1600 equivalent to £1 in British Sterling)

1.4.3 Technological factors

The development of technology particularly Information and Communication Technology is changing the way of the lives of disabled people. Technology helps greatly disabled people to feel normal and independent by enabling disabled people to work and study independently. For example a blind man mentioned that 'a friend of mine recently said to me that if she didn't know better she'd have thought that the Internet was made for blind people.'²⁴ He was

²² The Korea Institute for Special Education, Special Education: How to Change in 2000s, Ansan, Korea: The Korea Institute for Special Education, 1997, p.12.

²³ The Korea Institute for Special Education, Special Education: How to Change in 2000s, 1997, p.36.

²⁴ Damon Rose, 'The Internet: made for blind people', New Beacon, (944), July / August

referring to the fact that, thanks to computer technology, a number of publications that were previously denied to a visually impaired person are now available on the Internet. The dream of a world where visually impaired people can independently access magazines, books, documents, data and even private mails almost comes true. For hearing impaired people the impact of computer technology on their lives is not less than that of visually impaired people. Especially e-mail contributes greatly to the improvement of their communications with and without hearing impaired people.

Along with development of general computer technology, varying assistive computer technology has also been developed. Assistive computer technology means any modification made to standard computer software and hardware to enable people with disabilities to work independently. This is often called 'adaptive', 'access' or 'enabling' technology. For instance, screen reading software is used to convert the text on the computer screen to speech. By using this software even totally blind people can access computer catalogues, electronic books and journals, and literally world-wide information resources through the Internet.

In fact the development of computer technology has brought a great impact on the lives of disabled people. For the first time, disabled people can browse the up-to-date online catalogue and choose books to read independently. With assistive computer technology general libraries are now able to help, in particular, visually impaired people, to access their materials stored, either in printed format or electronic format which previously was impossible.

Moreover, it is encouraging that the cost of information and communication technology devices has gradually gone down. The assistive computer technology devices are often more expensive than the standard ones because of high research and development costs and a small market. But the cost of assistive technology is also going down as it is increasingly becoming

mainstream. In addition, it is anticipated that the more disabled people are taught in higher education the more assistive technology would be developed and mainstreamed as graduates with disabilities from higher education likely involve themselves in the area of new technology devices.

1. 4. 4 Social factors

Society's awareness of people with disabilities has been greatly increased. Disabled people have organised themselves to raise society's consciousness about their needs and to gain their rights. Their activities support the view that people with disabilities have abilities. They do not need to be totally dependent. They understand their rights, and they are not timid about protesting when those rights are compromised.

The period particularly between the 1980s and 1990s saw a growing awareness of the rights of disabled people. This was probably the result of some disabled people having been given an opportunity to receive mainstream education which provided an impetus for the development of self-awareness and leading independent lives. They became aware that the only way out was to organise themselves. Setting up their own organisations, disabled people started taking joint actions for the issues concerning their welfare and future. For example in Britain since 1982 there were 13 unsuccessful attempts to get an anti-discrimination legislation for disabled people through Parliament before the enactment of the *Disability Discrimination Act* 1995. Disabled people did not want an anti-discrimination legislation which would be rooted in medical rather than the social model of disability. In other words, they opposed a legislation which sets out to prohibit discrimination against disabled people on the grounds of their (not society's) disabilities. They argued that legislation should emphasise civil rights rather than individual needs and should focus on the society in which they live, and not upon individual disabled people. Therefore they claimed for a comprehensive legislative programme which ensured the

integration of disabled people into mainstream economic and social life of the community, and provided public confirmation that discrimination against disabled people for whatever reason was no longer acceptable.

In addition to this thirteenth attempt to get the Bill through Parliament, on 9 July 1994 over 2,000 disabled people from all over Britain attended a 'Rights Now Rally' in Trafalgar Square. As a direct result of the most potent and sustained campaign run by disabled people, at last the *Disability Discrimination Bill* in Britain became a law passed by Parliament in 1995.

A consortium of disability organisations — MENCAP, MIND, RADAR, RNIB, RNID and SCOPE in the UK marked the DDA as a milestone on the path to full recognition of the civil rights of disabled people. They said it provided an important tool to fight the discrimination against disabled people that is so rife.

Our organisations are committed to fighting discrimination against disabled people. Whilst still seeking further legislative developments, we welcome the DDA as important progress in the right direction. We are committed to making as great a success of the legislation as possible.²⁵

In the United State of America there is also a similar story behind the enactment of an anti-discrimination legislation, the *Americans with Disabilities Act*. The ADA is considered by many to be the most significant civil rights legislation passed by the federal government since the *Civil Rights Act* of 1964 in America. When President George Bush signed *the American with Disability Act* into law in July 1990, about three thousand people were gathered at the south lawn of the White House. The ceremony was started by a prayer led by Reverend Harold Wilke, who is disabled. Then U.S. Attorney-General, Dick Thornburgh, said it was very unusual that such a great number of people gathered to celebrate the new enactment of a law because most acts, passed by Congress were signed with two or three persons present.²⁶

²⁵ Royal National Institute for the Blind, 'Disability Discrimination Act', *New Beacon*, (937), December 1995, pp.20-21.

²⁶ Young Woo Kang, *Dream of Father and Son*, Seoul: Word of Life Press, 1998, p.223.

Attorney General Thornburgh realised an ambition when he played mid-wife to the ADA. At a church in Korea in 1995 he revealed that after his son Peter suffered brain damage in a car accident as a baby, he determined to dedicate himself to the improvement of the welfare of disabled people.²⁷ He became involved in politics and served twice as Governor of Pennsylvania. He then became Professor at Harvard and less than a year later was appointed as Attorney General.

Indeed it is very interesting to note the connections with disability of many of the politicians in USA closely associated with the ADA. For example, President George Bush at that time has two sons with disabilities; Edward Kennedy has a sister with learning difficulties and a son who lost a leg to cancer; Senator Wicker has a child with Down's Syndrome; Senator Bob Dole has a paralysed right arm; the chief Senator sponsor, Tim Harkin, has a deaf brother and a paralysed nephew.²⁸ A Congressman who was one of the chief sponsors of the bill said in a speech at a banquet 'Disability impacts practically every family.'²⁹

There is also an account related to the UN's proclamation of the *International Year of Disabled Persons* in 1981. Deputy Assistance Secretary of the U.S. State Department, Alan A. Reich, who was paralysed in the lower part of his body by a ski accident, and his friend, Ambassador John McDonald, succeeded in the declaration of the IYDP. It was accomplished by negotiating with Libya, which has the highest rate of population of disabled people in the world caused by land mines.³⁰ Mr. Reich was the first disabled person to give a speech at the UN General Assembly.

In Korea, one of the best known figures abroad is Dr. Young Woo Kang, who is a blind professor in the United States. He is Vice Chairman of the World

²⁷ Young Woo Kang, *Dream of Father and Son*, 1998, p.223.

²⁸ Caroline Gooding, *Disabling Laws, Enabling Acts, Disability Rights in Britain and America*, 1994, p. 90.

²⁹ Caroline Gooding, *Disabling Laws, Enabling Acts, Disability Rights in Britain and America*, 1994, p.90.

³⁰ Young Woo Kang, *Dream of Father and Son*, Seoul: Word of Life Press, 1998, p.225.

Committee on Disability Senior and an adviser of the Roosevelt Institutes. Dr. Kang played important role. With his effort, Korea was selected to win the inaugural Roosevelt International Disability Award. Then President Kim Young Sam received the award on behalf of his country in 1996. A television drama titled *A Light in my Heart* based on a true story of Kang's boyhood produced by Munhwa Broadcasting Company (MBC) was played at the Headquarters of United Nations on the International Disabled Persons Day on 3rd December 1995. In the drama there was an epilogue of the former U.S. President George Bush cited that Dr. Kang as an example of overcoming impossible odds, and finding a place in the mainstreaming society. He also mentioned that Dr. Kang is an inspiration not only in Korea, but also around the world. Eight months later after the drama, Korea became the first country to be awarded the first Roosevelt International Disability Award. The Trustees of Franklin and Ellenor Roosevelt Institute selected Korea as the first winner country unanimously after heated discussions. It said that Vice Chairman of the UN World Committee on Disability, the former U.S. Attorney General, Thornburgh, had initially nominated Korea. He is a long-time close friend of Kang. In the next year 1997 Canada was awarded among 27 candidate countries.

After receiving the award the Korean government took various measures immediately in order to improve the standard of disabled people's lives. A first remarkable measure was the enactment of the *Act on Installation of Convenience Facilities for the Disabled* in 1997 and secondly, the improvement of *Special Education Promotion Law* in 1997. In addition, the government also increased dramatically the budget for social welfare and education for disabled people. All these accounts tell the power of disabled individuals and their organisations in terms of playing a constructive role in society as well as pursuing their civil rights.

There is an account of its kind in the library sector as well. For example, in Denmark it is said that press groups of disabled people influenced the government to enact two Acts: *Danish Public Library Act 1994* and *Danish*

Copyright Act in 1995. In the *Danish Public Library Act* it is legally established that talking books are treated on equal terms with printed books in the interlibrary lending system. In the *Danish Copyright Act* the transmission of electronic texts from The Danish National Library for the Blind to blind people is legalised. These two Acts are probably the most distinguished laws for the benefit of disabled library users in the world. The enactment of these two laws also explains the ability of people with disabilities in Denmark. A librarian said:

We do not consider blind people to be a 'weak' group in society. Blind people have managed to attract political attention through their strong organisation and lobbying efforts. Thus when library budgets are cut, it is rare that the handicap area is touched.³¹

1. 5 Practices and problems of integration in other sectors in Korea

In this section the practice of the integration of disabled people in other sectors will be discussed for the benefit of library professionals in Korea. They can learn a lot from observing what others are doing to integrate disabled people in the same environment although each has different aims in pursuing integration of disabled people. There are probably two areas where integration has proceeded first in Korea. These are the education sector and the religious sector, which have started integration since the 1970s.

1.5.1 Education sector

In the views of recipients of education, integration is very positive. Many children with disabilities are likely to feel themselves normal when integrated into mainstream education. Children without disabilities are also less likely to discriminate against their disabled peers when integrated at an early stage of their school years. In his autobiography, *Gotaihumanzoku* (meaning all the

³¹Johannes Balslev, 'The Danish Model of Library Services to the Printheadicapped', Paper

limbs of body incomplete), Ototake Herotada said he had never thought himself disabled throughout all his school life at mainstream sector although he was born without four limbs.³² He was very popular and loved by many. Wherever and whenever he was, there was always a group of his peers happily surrounding him. In his book children without disabilities were fantastic in negotiating and handling with their disabled peer, Ototake, in various school activities. They knew how to play football with him who has no legs but two very short thighs by not applying the same rules which were made for people with two legs in order to be fair to him.

Through the book it was found that children without disabilities had built their good personality by understanding individuals' differences or eliminating their prejudice and discrimination towards a disabled peer as they interact.

As another example a university student casually responded to a sudden question about his peers with disabilities. He said that he felt very uneasy and uncomfortable when he had come across disabled students at campus during the first year at the university. It was even hard for him to say hello to them but now two years later, it was not a big deal for him to joke or approach them to give a hand when it is necessary. He remarked that the experience of campus life for two years with them changed his conception about disabled people greatly and made him look at disabled peers in the same way as those without disabilities.³³

In the views of education professionals in Korea some support the principle of integration of disabled children into general schools. Recognising the benefit of integration they argue that the sooner children with disabilities come to integration the better they are able to adapt to the mainstream

to the 63rd IFLA General Conference, Copenhagen, Denmark, 1997.

³² Herotada Ototake, *Gotaihumanzoku*, Tokyo: Kodansha Ltd, 1998, translated into Korean by Kyung Bin Chun, Seoul:Chang Hae Publishing Co.,1999.

³³ He is a student at Daegu University, Kyungsan-si, Korea. He was interviewed by chance near to the Braille Library in the university on 14/7/99. Daegu University has the largest number of students with disabilities (of which about 30 visually impaired students taught) among universities in Korea.

environment. On the economic front it is said that the money spent on integration is half that spent on separation.³⁴

On the contrary, there is opposition from either special schools or mainstream schools in Korea. Many teachers have negative feelings about integration. A teacher at a special school in Korea expressed a critical attitude towards integration by arguing that mainstream school teachers cannot teach disabled children without being trained and without adequate resources being provided.³⁵ Besides, many criticized the current circumstance of mainstream education in Korea. Efforts for integration have been made mainly by the increase of the number of special classes in mainstream schools, while there has been less attention to the development of integration programmes and staff training.

From the views of some parents who have children with disabilities, integration is to reduce government expenditure on public sector. They believe that the government can spend less money on integration by providing inferior levels of support in mainstream schools compared to those in special schools. In addition some parents believe that their children have had experiences of isolation or bully from their non-disabled counterparts. So they withdrew their children from the mainstream schools and put them back in special schools.³⁶ In this case these parents have a very negative view on integration. They also believe that their children have been neglected by the class teacher when integrated in mainstream schools.

According to the 21st century Special Education Forum in Korea in 1998, which conducted a survey on parents' and teachers' attitude on integration, parents with disabled children opposed integration more than parents with non-

³⁴ Hyung Sik Kim, 'Improvement of circumstance for the social integration of students with disabilities', The direction of special education, Paper to the 5th anniversary of the foundation of the Korea Institute of Special Education, 12/5/1999, Seoul Education Center.

³⁵ Interview with Young Mi Lee, a teacher at Seoul Blind School, in July 1999.

³⁶ Interview with two parents at Seoul Blind School in August 1999, during the interview they mentioned the experiences of other parents who put their children back to the special school.

disabled children.³⁷ There were 41 (19%) among the total 212 respondents who have disabled children in opposition to integration while there were 126 (15%) among 837 respondents who have children without disabilities. The major reason for opposition to integration by those who have children without disabilities was that their children are likely to get bad habits or to lose attention on study because of disabled children.

Many professionals in Korea point out several factors which currently would affect the success of integration. First, there is a lack of understanding about integration by both parents and teachers. The survey of the 21st century Special Education Forum found a very low level of understanding of integration both by parents having children with and without disabilities. The survey found that approximately 30 % of the parents surveyed (63 out of 212 parents having disabled children; 180 out of 837 parents having non-disabled children) had known nothing about integration.³⁸ There were some teachers who misunderstood the principle of integration. They thought of integration as disabled children assimilated with non-disabled children. That is, integration is just like black goats becoming white sheep.³⁹ They do not think integration as a way of living together with different people in harmony by understanding and admitting the difference of others.

Secondly, there is a lack of teaching resources. This is universal. Even in more affluent countries in terms of materials that is the case. Without maintaining a continuum of resources integration would be unrealistic. Even in the special schools the circumstance is not much better than those in general schools. It is said in the most affluent countries that teachers in reception classes use a container of half a dozen eggs to teach blind children to develop

³⁷ 21c Special Education Forum, A survey of attitude of teachers and parents toward the inclusion of children with disabilities, cited in Sham Shup Kim in 'Restructuring Education for Inclusion', The direction of special education, 1999.

³⁸ Sham Shup Kim, 'Restructuring Education for Inclusion', The direction of special education, 1999.

³⁹ Interview with Hyang Sup Choi, Director of Planning & Research Section, Korea Institute for Special Education, Ansan, in July 1999.

pre-Braille skills. Because a Braille cell is made up of six dots, arranged in two columns of three dots each. The dots are numbered 1 to 6. Each Braille letter or other symbol is formed by using one or more of the six dots. Cardboard is also used frequently to make shapes and letters in a classroom.⁴⁰ Cardboard shapes are easier to feel due to being thicker and heavier than plain paper. A parent who has a blind daughter said that she had to make everything from toys to school reference books for her daughter. She argued that it is very unfair that there are so many different kinds of toys and books for sighted children while there are not even basic teaching materials for visually impaired children.⁴¹

The third problem is untrained staff. In fact, most adults these days have lived without contacting disabled people except those who have disabled family members, relatives or friends. They have limited knowledge of the characteristics of disabilities. Misconception about disabled people is rife. For instance, some people assume all deaf people use a sign language. It is a half truth. Some deaf people do but some do not. A number of deaf people are lip readers and even speak. People who have the same disabilities have different characteristics. Each individual has different characteristics just like those who do not have disabilities

Many people who work for disabled people said that the needs of disabled people are the same as those of non-disabled people. But teachers in the mainstream schools often think their needs are very different and presume it must be very difficult to meet their needs. To a certain extent this assumption is true. For instance the mother of the blind girl mentioned above said that she taught her daughter to get a concept of shapes such as triangular, square, rectangular etc. for almost one year when she was young. This can be understood by an average sighted child within a minute. But she was very

⁴⁰ This was observed during an internship at Linden Lodge School, a school for the blind, London in October 1998.

⁴¹ Her daughter was a former pupil at Seoul Blind School and now a pupil at Linden Lodge School, London.

amazed by the ability of her daughter to read Braille music by 'Bar by Bar' system which is known as the most difficult written system of piano music. She joked 'I thought her brain is unfurnished but I found it fully furnished but totally differently.' Her daughter passed grade 8 in piano with a very good grade within 4 months after the pass of grade 7 when she was in year 11 at a special school, which usually takes one and half years for average children. The Principal of the School praised her as a great asset of the school.

An emphasis on the difficulties can present staff who work in mainstream schools with a negative view of their disabled students and prevent staff from being creative and innovative in their teaching. The ability of children with disabilities and their potentials would be greatly developed by trained staff with knowledge, skills and enthusiasm.

Although there are many problems which hamper the integration of disabled children into mainstream education in Korea, there are many education professionals with strong commitment and enthusiasm for integration. One of their achievements in this area was the establishment of the Korea Institute for Special Education (KISE), in 1994. The purpose of the foundation states:

KISE was founded to be the central institute for the study of special education and to improve the status and quality of special education. The institute carries out practical research, develops and delivers instructional materials. KISE also provides in-service training for special education professionals and information on special education through computer-aided system.⁴²

As described in the purpose, KISE plays a pivotal role on research & development, staff training and information for special education for children with disabilities. Among 37 members 17 are education researchers and teachers. So far they have conducted research and development on teaching-

⁴² The Korea Institute for Special Education, Korea Institute for Special Education, KISE, 1999, p.4.

learning programmes, teaching methods, materials for developmental disabilities and curriculum etc. They have held staff training for principals and teachers from both general and special schools. The total of trainees was 1,637 in 1998 and 2,029 in 1999. In addition they hold varying seminars, workshops and conferences at both domestic and international levels. Information about special education, welfare, rehabilitation, and employment is provided either through the Internet or domestic PC net.⁴³ By using super-high speed information-communication nets, face-to-face questions and answers between the main centre at KISE and branch stations at special schools are available.

In addition the KISE produces various publications for practitioners to give guidance, information, and consultations about the implementation of integration on spot. It is expected that KISE will play a pivotal role as overall resource centre for the advancement of education for children with disabilities.

1.5.2. Religious sector

Probably the movement of integration in Christians started with the Korean Miral, an evangelical organisation. The organisation was founded to preach the Gospel for disabled people by a blind young man in 1979, who is currently President of World Miral and Professor at Presbyterian Seminary in Korea. The Association now has grown into having its headquarters in Seoul and 12 branches and 9 local offices across the country. One of the aims of the Association is to wake sleeping churches to preach the Gospel to disabled people and to call for government and society to be aware of disabled people.⁴⁴

Though they are not sure whether they have been influenced by the work of the Association, many leading churches in Korea are active in integrating Christians with disabilities into mainstream services. During Sunday services sign language interpreters are used at many churches. Some

⁴³ KISE Website: <http://www.kise.or.kr> (E-mail: webmaster@kise.or.kr)

⁴⁴ Korean Wheat Evangelical Association, 1999 Information Booklet: Much Fruit of Love, Seoul: Korean Wheat Evangelical Association, p.5.

churches appoint full-time staff to care for members with disabilities and look after housebound disabled people in community. A young preacher who is in charge of disabled people said when asked about the qualification for the job 'I have not been trained for this job formally but I learned a sign language during my military service and had some experiences in working with hearing impaired children.'⁴⁵ He is also running a class at the church for disabled students who need help and expressed his concern about unfortunate disabled youths who lost their opportunities of education for varying reasons.

In order to raise the awareness of the general congregations towards disabled people some leading churches invite internationally well known figures who are disabled or related to disabled people. For example in 1995 Korean Christians invited the former U.S. Attorney General, Dick Thornburgh, (see p.30) and his wife, Ginney Thornburgh, to raise awareness of disabled people in church. The couple were invited to several meetings and Sunday services. They emphasised the importance of integration of disabled people starting from a home and a church by sharing their personal experience of their son's exclusion from the society. Their visit has influenced many churches to raise awareness of disabled people. One church found that the numbers of disabled people increased greatly since their visit to the church.⁴⁶ In particular, *That All May Worship*⁴⁷, a guide book for the integration of disabled people into church, written by Ginney Thornburgh, has become popular among Christians in Korea.

Given that one quarter of the population are Christians in Korea and most of them have Sunday services every week, the Christian movement of the integration of disabled people will give impetus to the promotion of integration of disabled people into all sorts of society including the library community.

⁴⁵ Interview with Jae Choong Nam at Wangsung Church, Seoul, in August 1999.

⁴⁶ Daejeun Daehung Methodist Church has increased by 180 disabled people including deaf, blind and physically impaired people since then, cited in Young Yoo Kang, *Dream of father and son*, 1998, p.221.

⁴⁷ *That All May Worship* was published in 1993 by National Organization on Disability, USA, as the first book of Religion and Disability series. The next was *Loving Justice: The ADA and the Religious Community*, 1995 and the third *From Barriers to Bridges*, 1996. All the three books were translated into Korean.

Conclusion

In this chapter the various factors affecting the integration of disabled people into mainstream society have been discussed. One obvious point is that the issue of integration has assumed a global dimension. Since the implementation of mainstreaming disabled children in general schools, school and university libraries could no longer discriminate against their disabled clients on the grounds of disabilities. Exclusion of disabled people from their services is already against the law in many countries. This is a great challenge to libraries regardless of their kind. Up to now library services for disabled people have been excluded from the services of mainstream libraries. Most libraries currently in any society are available only for able-bodied people in terms of facilities, equipment, reading and information resources, and services. Library professionals nowadays also have limited knowledge and experience with disabilities and disabled people. All these negative factors currently are great barriers for integrating disabled people into the rest of library populations.

As pointed out in Section 1.3.2, mainstream libraries also have similar problems in their implementation of integration. Therefore library professionals can get an insight into integration by observing the practice of the education sector although there is a difference between the two sectors. Going to school is compulsory but going to a library is voluntary. Nevertheless, in the views of services providers, that is, as teachers and librarians, there is no difference. Both are responsible for meeting the needs of disabled subjects. Besides, there are many libraries which have already started providing good services for disabled people abroad. Their experiences acquired through trial and error when introducing integration to their existing services could be a useful lesson for those who plan to initiate new services for disabled people in Korea.

Chapter 2

People with disabilities

Introduction

This chapter consists of two parts: 1) characteristics and problems of disabled people; 2) negative attitudes and discrimination towards disabled people. The first part discusses three types of disabilities which limit persons making use of a mainstream library. These are visual impairment, hearing impairment and mobility impairment. Currently people with these impairment have difficulties in using library facilities, equipment, materials and services in mainstream libraries. In the other half, firstly, negative attitudes and discrimination towards disabled people are discussed in an historical perspective. Secondly, practices of discrimination in mainstream libraries are enumerated. Lastly, two most challenging elements to library professionals for integration are discussed. These are a trend of privatisation of public services and library professionals' uncritical acceptance of market driven management style in libraries, and poorly prepared library professionals who have limited knowledge and experience with disabilities and disabled people.

The lack of knowledge and the misunderstanding of the characteristics of disabilities and the difficulties of disabled people are likely to lead to librarians feeling uncomfortable when talking to people with disabilities. This is usually caused by uncertainty about how to talk to people with disabilities. Many services in library settings are accomplished through personal interaction. This uncomfortable and uncertain reaction can result in negative feelings, incomplete

service, or incorrect answers.¹ Poor communication creates one of the worst hindrances for disabled people and can leave a long-lasting impression.

2.1 Characteristics and problems of disabled people

2.1.1 Visual impairment

The World Health Organisation (WHO) devised in 1973 a classification of visual impairment. According to the WHO visual impairment is measured in five stages from a visual acuity of 6/24 (the third line in the standard chart) to no light perception at all.² In Korea, visual impairment is classified in five levels measured by both visual acuity and visual field. The Royal National Institute for the Blind (RNIB) in Britain classified visual impairment into many different types apart from total blindness and lowered visual acuity. They are central vision loss, peripheral vision loss, patch sight loss, and blurred and cloudy vision.³ In the context of library services, Selvin said in his article 'The Librarian and the Blind Patron' that there are two different sets of legally blind conditions, usually known as visual acuity and visual field. People are legally blind if their acuity is insufficient for reading ordinary newspapers even with glasses, or if their central vision is less than 20/200 (a legally blind person can see only at 20ft what a sighted person can see at 200ft.); or if their visual field is less than 20 degrees.⁴ The normal visual field is slightly more than 180 degrees.

Among legally blind people central vision loss is the most common. A blank patch or dark spot is in the centre of the vision. The effect of central vision loss is primarily the loss of detail vision. For example, straight lines can become wavy or distorted; activities such as reading, writing, seeing small objects or

¹ Katy Lean, 'Library Services to Disabled Students: Outreach and Education', Reference Librarian, (53), 1996, p.17.

² Tim Cullinan, Visual Disability in Elderly, London: Croom Helm, 1986, p.6.

³ Royal National Institute for the Blind, Your words could save their sight [An information booklet], London: RNIB, 1998.

⁴ Hanan C Selvin, 'The Librarian and the Blind Patron' in Ruth A. Velleman, Serving Physically Disabled People: An Information Handbook for All Libraries, New York: R.R. Bowker Company, 1979, p.118.

recognising faces, and fine colour definition become difficult. Without the knowledge of this type of visual impairment, librarians will easily misunderstand their clients. Peripheral Vision Loss is often called 'tunnel vision'. People who have this type of visual loss can see only straight ahead. They must turn their heads to see anything that is even a little bit to the side. It is as if they were seeing through a keyhole. However, once settled in the correct environment they may be able to read the smallest of print sizes because they may retain almost normal central vision.

On the other hand total blindness is rare. Total blindness means that no shapes or colours, no light or dark can be distinguished by people with this type of visual loss. People who are totally blind say there is greyness all around them. This type of visual loss is rare. More often people are partially sighted, seeing some things even if only through a blur. They can distinguish between light and dark and colours and shapes but usually not enough to make out shapes clearly. Spectacles can help them see a little better, but won't enable them to see normally.

2.1.1.1 Problems associated with visual impairment

One of the main problems for blind people is mobility. Vision dictates how sighted people manoeuvre or find things, the absence of vision immediately creating hazards, especially in unfamiliar surroundings. Because of this many blind people feel isolated; they are less inclined to leave their homes than others as they cannot see what is around them. Peter Craddock mentioned the mobility problems of blind people as follows:

The tangible world for many visually handicapped people ends at the garden gate, the world is a veritable jungle of noise and movement without the helping hand of a friend or relative or the aid of a guide dog.⁵

⁵ Peter Craddock, 'Talking Newspapers and Library and Information Needs of the visually Handicapped', *An Leabharlann*, Vol. 7 (2), 1978, p.60.

Communication is another problem for blind people. In particular, people who are born blind or become blind at an early age have difficulties of language development, perception, cognition and speech. Out of the five senses, vision produces the most detailed and extensive information about the environment.

A child learns words, generally, by hearing them and relating them to visible, tangible objects. Without this visual frame of reference, a child may have little concept of what words actually mean and his /her understanding of the physical world may be distorted.⁶ Through touch, he/she can experience shape and texture, and can learn to recognise objects small enough to be felt all at once but large objects cannot be examined. Some things, like shadows and snowflakes, can be easily perceived only through vision. The child can learn to locate objects in relation to each other, but understanding the spatial relationships of things like towns or countries is more difficult.⁷

People who become blind when they are adult have different problems from those who have been blind since childhood. It is said that they pass through stages. The first is shock and disbelief. Then despair sets in. For them, blindness is a kind of death. Their sighted life is over. They feel terrible grief at their loss. Without sight, they fear they will lose all contact with the world because their eyes no longer tell them what is going on around them. Many blind adults may shut themselves away from other people. They are afraid people will pity them and point them out, or that they will lose their friends or their families will come to resent them.

2.1.1.2 Communication Mode

People who cannot use the visual mode generally rely on the tactile and aural ones. Most people who become blind in childhood learn to read Braille. Children who are totally blind usually begin to learn Braille when they are in first grade at

⁶ Emma Armstrong, Public Library Provision for Children with Visual and Hearing Impairments, Paper submitted in part requirement for the Degree of MA of University College London, 1995, p. 15.

⁷ Linda Lucas Walling and Marilyn H. Karrenbrock, Disabilities, Children, and Libraries: Mainstreaming Services in Public Libraries and School Library Media Centers, 1993, p. 90.

a primary school. Their fingertips are very sensitive, and with time and practice become even more so. Their fingers race across a page at an amazing speed. Even so, it takes a blind person twice as long to read something in Braille as it would take a sighted person to read in print.⁸

Many people who learn Braille can write Braille as well. They use a special tough paper, a sharp pointed stylus shaped like a small pencil, and a slate small enough to fit into a pocket. The slate has a metal ruler divided into cells, with evenly spaced holes that guide the stylus. A person who writes Braille punches the dots through the holes in the ruler across the paper from right to left. This leaves raised dots on the back of the paper. Then, when the page is finished and turned over, the cells are read from left to right, just as print is read.

Those who become blind when they are adults often have trouble learning Braille. Some can never learn it. Their fingers are no longer sensitive enough to feel the difference between the Braille cells. Besides, learning Braille is almost like learning another language. For them, and for all blind people, there are other ways to read that many find easier. The most often used are talking books. They are made to be played either as ordinary long-playing records or at slower speeds. Tape recorders have also become writing substitutes for the blind. They speak their message onto tape, and send it off. The person who receives it "reads" it by playing it back.

Braille is bulky and requires much storage space because a Braille book generally takes three pages of Braille to equal one page of type. But Braille is still very much in use. One reason is that it works well for reference works, mathematical or science books which contain many formulas and diagrams, and for any works whose parts are reviewed and reread often.⁹ Another is that many blind people who read Braille like to feel the words rather than hear them.

⁸ Rebecca B. Marcus, *Being Blind*, New York: Hastings House Publishers, 1981, p. 30.

⁹ Linda Lucas Walling, *Disabilities, Children, and Libraries: Mainstreaming Services in Public Libraries and School Library Media Centers*, 1993, p.106.



A school boy told his teacher, 'I get sleepy when I hear the voice on a record go on and on. Reading Braille keeps me alert.'¹⁰

2.1.1.3 Dos and Don'ts

Most librarians in the mainstream of the library service will feel awkward when actually faced with helping disabled people for the first time. A few simple dos and don'ts may help to put them at ease.

- Librarians do not need to avoid using words like "look" and "see" when talking with blind people. They know what that means, and it doesn't bother them to hear these words.
- Most blind people do not reflect their emotions in facial expressions as sighted people do. They rely heavily on the emotion in voices to understand how others are reacting. Their hands and bodies may be better indicators of their feelings than their faces.
- Librarians should never gesture about a blind person to someone else who may be present. This will inevitably be picked up and make the person who is blind feel that you are talking behind his/her back.
- Blind people usually prefer to take sighted people's arms rather than sighted people grabbing their arms, because they have been trained to put their hands just above the guide's elbow. The guide then walks half a step ahead so a blind person can be followed.
- When anyone enters or leaves a room, this fact should be casually mentioned so that blind people will not try to speak to or locate someone who is not present.
- Getting around at a library isn't hard as long as each piece of furniture stays in the same place for a blind person. If furniture is moved this should be mentioned to the blind person.
- Those who interact with blind people should introduce themselves verbally. If

¹⁰ Rebecca B. Marcus, *Being Blind*, 1981, p.30.

- they ask someone in a group a question, they should call the person by name.
- An unexpected touch can frighten blind people, but once they are aware of your presence, a touch lets them know where you are. A touch on the shoulder or a hug can substitute for a smile in greeting.
 - In particular, blind children may turn their backs to the speaker or seem to be stargazing. They may not have learned to send messages through facial expression and body language. Many actions which are automatic for adults and sighted children must be consciously learned by children with visual impairments. They learn to judge the direction of voices and to face the speaker during group instruction and storytelling.

2.1.2 Hearing Impairment

Hearing impairment can be categorised in several ways. Michael Martin and Brian Grover categorised it in two types.¹¹ The first, known as conductive, is associated with the mechanical part of the hearing mechanism, including the outer and middle ear which conduct sound waves to the inner ear. Conductive hearing loss leads to a loss of loudness which can be overcome by amplifying the sound and can often be helped by medical or surgical means. The effect of conductive hearing loss is like trying to listen to someone who is speaking very quietly, or at a great distance. If the person speaks up or comes closer, he/she can be heard and understood perfectly.

The second is associated with the inner ear or the neural pathways through which sound vibrations are converted into electrical impulses and transmitted to the brain. This type of impairment is known as sensori-neural, perceptive, or, sometimes, nerve deafness. Sensori-neural hearing loss leads not only to a loss of loudness, but causes distortion, which means that, even when the sound is made loud enough to hear, it may still not be understood by the listener. There may well be a loss of ability to distinguish between different sounds. The effect is a bit like listening to an unknown foreign language. This

¹¹ Michael Martin and Brian Grover, Ears and Hearing, London: Macdonald & Co.

additional factor makes the understanding of speech more difficult, especially in the presence of any background noise. In most cases of sensori-neural hearing loss the lack of clarity cannot be completely corrected by medical or surgical means of help.

Other forms of hearing impairment can be categorised in two types related to various modes of communication. The first is prelingual hearing loss. These people were deaf at birth or very early in infancy. When this degree of hearing loss occurs, the person is not only deaf but has also been deprived of the opportunity to acquire normal speech and language patterns. The problem in communication is linguistic as well as aural.

The second is postlingual hearing loss. These people sustain a hearing impairment after the acquisition of normal speech and language patterns. Included in this group are those whose hearing loss is the result of injury, illness, or old age. The problem in communication here is aural rather than linguistic.

2.1.2.1 Problems associated with hearing impairment

It is not widely appreciated that hearing loss is the second most common disability in many countries. Figures supplied by the Royal National Institute for the Deaf (RNID) in the UK declare that one in six adults in the UK are affected by some degree of hearing loss. In spite of a substantial portion of the population being deaf, because deaf people are not identifiable as deaf by casual observation and they tend to blend into the larger community, their problems are less known by the rest of population. Chalfond, the former President of RNID said:

One of the most frustrating and depressing aspects of deafness to those who suffer from it is its invisibility. Most other disabilities are easily recognisable, but the deaf often seem to other people to be just inattentive or slow in the uptake. For this reason deaf people are often treated with less kindness and consideration than those who are blind or in some other way obviously disabled. At the same time, those who suffer from hearing loss are often reluctant to admit it and frequently try to conceal their

condition rather than seek treatment or advice...Deaf people often claim that theirs is the loneliest disability of all, isolating them cruelly from the rest of the community, which often seems unaware of their condition or uncaring about it.¹²

In library services one of the greatest difficulties faced by deaf people is communication. Not only is there a barrier when hearing people attempt to communicate with the deaf but also when the deaf attempt to communicate with hearing individuals. While deaf people may understand each other 100 percent of the time, the information they receive in their communication with hearing persons is fragmentary. A deaf person may only receive 30 to 70 percent of information communicated by a hearing person who uses speech or has just learned sign language.¹³ Even the best lip-reader probably only reads 50 percent of words on the lips; the rest must be guessed from the content of what is being said. In particular, lip-reading is impossible if the speaker stands against the light, or in shadow, or speaks with a cigarette in his mouth. Besides, it can be very difficult to follow a conversation if one is not familiar with the subject, or if the speaker suddenly switches to a different topic.

Childhood deafness affects the whole of a child's initial experience and its consequences therefore will be apparent in both the natural development and the personality of the child. It is quite different from the later onset of deafness affecting older children and adults. The deaf child initially has no auditory information and the information he/she later receives is much reduced in quantity and quality, when compared with the hearing child's data.¹⁴ This means that the actual, or chronological age of a deaf child is simply not the same as the hearing age of that child. Indeed, many deaf children spend the first year of life in silence.

¹² Michael Martin and Brian Grover, Hearing Loss: Patient Handbook 24, Edinburgh: Churchill Livingstone, 1986, p. Forward.

¹³ V. Roper, E. Ansell, *et al*, The Hearing Impaired Library User within North-West England, British Library Research and Innovation Report (36), London: British Library, 1996, p.16.

¹⁴ Wilham Rae Quin, Understanding Childhood Deafness, Glasgow, UK: Caledonian International Book Manufacturing Ltd., 1996, p.99.

The difficulties faced by the hearing impaired in mainstream libraries are well summarised on the Home Page of a deaf man.¹⁵ The difficulties are categorised in four areas: 1) Unable to question; 2) Unable to find the book; 3) Unable to communicate with the librarian; 4) The book is too difficult to read. First, he said that hearing people use a voice phone to ask information from a library such as opening hours or location but deaf people cannot. They should ask someone to phone the library for them. Secondly, even if hearing impaired people come to a library they cannot find proper books because there are a lot of books. Although there are guide maps or information to find books these are written in too difficult a manner for them to find books. Thirdly, when they ask for help in a library, librarians speak to them with a voice language as if they hear well. Librarians know little about the communication modes of the hearing impaired such as sign language, writing, lip reading or gesture etc. Lastly, most books in a library are too difficult for them. To hearing impaired people learning new words is more difficult than for hearing people to learn a foreign language. This sums up well the difficulties of hearing impaired people in library settings.

2.1.2.2 Communication mode

People who have hearing loss have many ways of communication. One of them is sign language. It uses hand shape, hand location, hand movement, orientation of the palm to the hand, finger motion and position, lip movement, and facial changes to communicate entire words and concepts. True sign languages used by deaf people are complete languages with their own grammatical structures which are different from spoken languages. One major difference is that they do not exist in a written form.¹⁶ People who use sign language are mainly those who were born profoundly deaf.

¹⁵ Fugio Kobayashi, The problem when Deaf and Hearing Impaired use libraries, 1997(updated), <http://www.asahi-net.or.jp/~gw2f-kbys/defprb-e.htm>.

¹⁶ Michael Martin, Ears and Hearing, 1990, p.96.

Sign language is not universal, and there are national and regional variations. The World Federation of the Deaf (WFD) has created an International Sign Language which is used at international conferences.

One may wonder how sign language works — how it is different from spoken language. It might be assumed that sentences are signed word-by-word or concept-by-concept in the word order used in spoken and written language. But sign language is a shortcut form of communication. It is abbreviated by signing the concept. For example, 'Do you like to watch television?' in sign language it would read 'Like watch TV?'¹⁷ Even among some educated deaf persons, it may be difficult for them to remember 'proper' word order when writing for the benefit of hearing people. Spoken and written language is a foreign language to persons born deaf or for those who became deaf in early childhood, although some of them can write fluently.

Another method of communication is lip-reading. Lip-reading is an ability to understand what is being said by watching the lips. Usually it involves watching the whole face and throat movements as well. However, lip-reading is an imperfect means of receiving speech. Even with good language development, lip-reading is difficult to learn because many words such as 'bat' and 'pat' cannot be easily differentiated visually. These look very much alike on the lips but the actual sounds are different. People who cannot hear these sounds, however, cannot gain enough information from watching the lips alone. So even the best lip-readers will say that they only receive half the information which is spoken and must fill in the rest from experience and common-sense.

As lip-reading is an important but imperfect method of communication, it is vital to make maximum use of any residual hearing ability. The combination of lip-reading and limited hearing of speech greatly enhances understanding of what is being said. Nowadays this type of communication approach is preferred by some because reading and writing are based on the spoken language. Knowing the spoken language makes learning to read and write easier. Since

¹⁷ Alice Hagemeyer, 'Special needs of the Deaf Patron' in Ruth A. Velleman. Serving Physically Disabled People: An Information Handbook for All Libraries, New York: R.R. Bowker Company, 1979, p. 147.

90 percent of the children who are deaf come from hearing families¹⁸, this combination of visual and oral approach has the advantage that parents can communicate with their child without learning a new language.

2.1.2.3 Dos and Don'ts

- It is good for librarians to ask the person's advice on what one might do to make the conversation easier.
- A speaker should face hearing impaired people directly when speaking; speak slightly more slowly than usual, but do not shout. Shouting distorts the facial features and does not help at all
- A speaker should stand close to any visuals which are used so that deaf people can see them and his /her lips and hands at the same time.
- A speaker should stand or sit in good light, without shadow or glare, and keep his/her head up. Deaf people should not face the light source.
- A speaker should speak clearly without distortion, moving the lips. People with hearing loss often complain that others are mumbling — and quite often it is true.
- It is good for women to use lipstick to highlight their lips; men should avoid moustaches and beards, which mask the lips. Both men and women should avoid chewing gum and smoking cigarettes for the same reason.
- One should repeat the sentences when they are misunderstood by using exactly the same sentences otherwise they feel more difficult to understand.
- Conversation should be conducted away from a background noise.

2.1.3 Mobility impairment

There are various types of mobility impairment, in which some of the well-

¹⁸ Linda Lucas Walling and Marilyn H. Karrenbrock, Disabilities, Children, and Libraries: Mainstreaming Services in Public Libraries and School Library Media Centers, 1993, p.99.

known disabilities and their common characteristics will be mentioned here. These are Amputation, Arthritis, Cerebral Palsy and Spinal Cord Injury. People with these impairment have difficulties in accessing to buildings, using equipment and holding books. Although there are many differences in the same disabilities, for instance, all persons in wheelchairs or using crutches or braces do not have the same kinds of physical problems.

Amputation means that parts of legs or arms, or an entire limb are missing. Generally amputations are divided into two. One is *acquired* which means the person was born normally, but through accident or surgery, a limb was removed. The other is *congenital* which means the child was born without the limb, in part or in total. The cause of total or partial limb absence at birth is a failure of fetal limb bud development in the first three months of pregnancy.

It is said that amputation of an upper limb is twice as common as amputation of a lower limb and the problems a person experiences depend on which limbs are missing, the extent of the loss, and the age at which the limb is lost. People with both legs above-the-knee amputees are usually very disabled and need wheelchairs. Although the complete loss of a limb is most drastic, even partial amputation such as a finger, hand, or lower arm section missed seriously interferes with mobility and dexterity and impacts the number of things a person will be able to do. For instance, the loss of thumb affects the ability to grasp and to open a book and turn pages. In a library especially book handling and the use of IT equipment all require manual dexterity.

Arthritis means inflammation of a joint. Arthritis limits one's activities. There is an arthritis called Juvenile Rheumatoid Arthritis which happen in children. This kind of arthritis may occur in children as early as six weeks of age. Most children with rheumatoid arthritis have a type called polyarticular arthritis, with severely affected joints. These children are usually in pain and will tend to sit very still so as not to feel it. Frequently the children are small for their age, since the disease interferes with growth. Another type of arthritis is Arthrogryposis Multiplex Congenita. It involves the muscles resulting in failure of muscle

function. This causes lack of movement in the joints and consequent stiffness and deformity. Children born with this disability are stiff-jointed, usually with their arms fixed in a permanently twisted position. Surgery may sometimes allow the arms to bend so that the hands can be used. However, once in a bent position, the arms often cannot be straightened. Some of these children walk with stiff-legged gait; others are in a wheelchair.

Cerebral Palsy, in Greek, the *Cerebral* refers to the brain and *palsy* to the lack of control over the muscles. It results from damage to the brain or central nervous system, usually at birth. It is a non-progressive condition that remains throughout life. Chief among its causes is an insufficient amount of oxygen reaching the fetal or new-born brain. Other causes may be premature birth.

A person with cerebral palsy exhibits a cluster of disabilities. No single symptom describes its manifestations. In addition to the lack of motor control, there may be seizures, spasms, mental retardation, abnormal sensation and perception, or impairment of sight, hearing or speech - all in varying degrees. When the tongue muscle is involved, eating and talking are affected. Those who have these impairment speak slowly and sometimes involvement of the facial muscles can cause grimaces.

Spinal Cord Injury results in paralysis when the nerves located in the spinal cord are damaged. Traumatic Brain Injury sometimes accompanies Spinal Cord Injury. Both movement and sensation are commonly lost below the point of injury. The paralysis is specified as *paraplegia* and *quadriplegia* according to the degree. In paraplegia both legs are paralysed; in quadriplegia all four limbs are affected. A person with damage high in the spinal cord injury may be unable to walk and use her arms, hands, and fingers.

2.1.3.1 Problems associated with mobility impairment

Unlike sensory impaired people such as visually and hearing impaired people, mobility impaired people have difficulties when they access the built

environment. This is because most of these facilities have been designed for people without disabilities. Many library buildings have heavy doors, stairs, narrow corridors, high shelving and issue desks etc. which prevent these people from making use of the library, although they are able to read printed materials and communicate with librarians. Therefore the most frustrating difficulties they face are the built environment which prevents them from using their abilities and make them disabled. Physical barriers to these mobility impairment will be discussed in Chapter 4 in detail.

2.1.3.2 Dos and Don'ts

- One should not be concerned with using the words walking or running when talking to a person in a wheelchair. Disabled people use these words themselves and think nothing of it
- When talking with a person in a wheelchair for any length of time, it is better to sit down in order to be at the same eye level. It is very tiring for a person to look up for a long time.
- One should not lean on a person's wheelchair. The chair is part of the body space of the person who uses it.
- One should treat adults in a manner befitting adults. Do not use gestures more suitable for children, such as patting the person in a wheelchair on the head.
- It is dehumanising to refer to a person in forms of condition. Therefore, do not say 'wheelchair bound' or describe someone as 'confined to a wheelchair', instead say 'wheelchair user' or 'person who uses a wheelchair'.

The following are related to all sorts of disabled people.

- One should always talk directly to a disabled person rather than to the person who may be accompanying him/her. Never talk about a disabled person to his/her companion as if the person did not exist.
- Disabled people hate unasked-for help. A boy says, 'It's like a back seat

driver. It implies that you can't drive and takes the control out of your hands. People who help me when I don't ask them are doing the same thing. I love the challenge of doing things myself.'¹⁹

2.2 Negative attitudes toward people with disabilities

As mentioned in anti-discrimination Acts, discrimination has already become indisputably against the law in most countries. In Korea as a result of legalisation of barrier free access for disabled people to buildings, facilities and information, many changes have been made in ramps, lifts, automatic doors, parking lots etc. in public buildings including public and academic libraries. Tactile paving in a very bright yellow colour for blind pedestrians has been spotted frequently. All these changes are visible and seem to proclaim that we are caring for disabled people.

But human beings are motivated largely by self-interest. No outside factors are likely to change one's perception of disabled people. Some people say visual changes such as buildings, pavements, parking lots, lifts, are easy, those can be done with just a phone call.²⁰ But attitude towards disabled people is a different story. People normally do not like to change things that have worked well in their lives. Law mandates rights but a positive attitude cannot be mandated. Thus, changing or modifying of attitude would be a great challenge to librarians when they integrate people with disabilities into mainstream library services.

2.2.1 History of Discrimination

To pinpoint precisely the origins of discrimination towards disability and disabled people would be almost impossible. Among the many suggestions that have been made is the view that one's perceptions of impairment and disability are

¹⁹ Rebecca B. Marcus, *Being Blind*, 1981, p.95.

²⁰ Teri R. Switzer, 'The ADA: Creating Positive Awareness and Attitude', *Library Administration & Management*, Vol.8 (4), 1994, p.205.

coloured by a deep-rooted psychological fear of the unknown cause, the anomalous and the abnormal.²¹ Miles said in his article, 'Disability in an Eastern Religious Context', that in Eastern countries, in particular India and Pakistan, disabled people were seen as misfortunes, sent by a deity, fate, karma.²² They believed that as a consequence of the guilt of former crimes, people are born as idiots, dumb, blind, deaf and deformed men, who are all despised by the virtuous.

Helen Keller, one of the best known deaf and blind persons in the world, said in her book, *The Practice of Optimism*,

Go to India...the blind know not how to see, nor the deaf to hear, and they are left by the roadside to die. In India it is a sin to teach the blind and the deaf, because their affliction is regarded as a punishment for offences in a previous state of existence. If I had been born in the midst of these fatalistic doctrines, I should still be in darkness, my life a desert-land where no caravan of thought pass between my spirit and the world beyond.²³

In the Western countries it is also said that particularly in medieval Europe disability was associated with evil and witchcraft. Disabled children were the products of the mother's intercourse with Satan. By and large both in Eastern and Western societies disability is portrayed as something fearful, usually a punishment for wrongdoing.

Since the late 19th century, Barnes cited that discrimination against disabled people was affected adversely by the publication of Charles Darwin's *Origin of Species*.²⁴ His theory of evolution places an emphasis upon the process of natural selection and the survival of the fittest. It was adapted from the biological domain to apply to human societies, which later became known as 'Social Darwinism'. In the view of Social Darwinism the sufferings of disabled

²¹ Caroline Gooding, Disabling Laws, Enabling Acts, Disability Rights in Britain and America, 1994, p.133.

²² M. Miles, 'Disability in an Eastern Religious Context: historical perspectives', Disability & Society, Vol.10 (1), 1995, p.49.

²³ Helen Keller, The Practice of Optimism, London: Hodder and Stoughton, 1907(?), p.49 [Previously published under the title of My Key of Life].

²⁴ Colin Barnes, Disabled people in Britain and Discrimination: A Case for Anti-discrimination legislation, London: Hurst in association with the British Council of Organizations of Disabled People, 1991, p.19.

people were the inevitable price of progress, which could only be resolved through the struggle for existence. The notorious massacre of disabled people during the Second World War in the Nazi death camps epitomised Social Darwinism. During that time approximately 100,000 disabled people were killed. The Nazis regarded disabled people as not the best specimens and even thought them harmful to society. Bethel, a village of disabled people today in Germany, was formed by those who escaped from the persecution of the Nazis at that time.

Up to now, it is not uncommon, although rarely discussed openly, for some doctors with the compliance of parents to allow severely impaired babies to die if the impairment is unexpected. It is also considered socially acceptable for women in many countries to have an abortion if there is any substantial risk that the unborn child will be seriously disabled. In some countries even sterilisation of disabled people became compulsory.

2.2.2 Practices of discrimination

Discrimination is not always inadvertent but is occasionally direct and even hostile in intent. Many disabled people mentioned that they had been told 'people like you should stay at home'.²⁵ So often disabled people are refused admission to public places such as restaurants or pubs for reasons varying from a claim that a wheel chair would ruin a new carpet to risk of embarrassing other customers.

In the library community this kind of discrimination is no exception. A public librarian said that Director of the library encouraged staff to refuse admission of disabled people to the library because disabled people would damage the image of the library.²⁶ There are many stories of disabled people being discriminated against unintentionally in mainstream libraries. Much has been done by librarians who are insensitive or have limited experience and

²⁵ Caroline Gooding, Disabling Laws, Enabling Acts, Disability Rights in Britain and America, 1994, p.133.

²⁶ Personal communication. The librarian attended a training course at the National Library

knowledge of the characteristics of disability and problems of disabled people. For instance, a man overheard a conversation between two librarians about him:

'That chap's sight is getting quite poor isn't it? He's always asking for help.'
'I think he can see a lot more than he admits, — he dropped a £ coin earlier, he soon saw that and picked it up — he can see when he wants to.'²⁷

Of course, the man has never been back to the library since that day. In his article, 'Understanding the problems of being partially sighted', Collins said that if someone lost his central vision which makes it difficult for him to read and write, nevertheless he may well be able to pinpoint a coin or at least a small shiny object on the floor, even at 4-5 metres, because he may locate it through his peripheral vision as he moves his head or eyes.²⁸

As another example, a university staff reported that:

Recently one of our students with cerebral palsy, who had straight As in all of his class work, visited a number of libraries in the Washington area to secure archival material for a highly technical research paper. He felt that his requests were not being taken seriously and that visits to a number of related libraries yielded less information than they might have. Suspecting that those he had approached in person believed he could not possibly handle so complex a research problem, he sent type written requests in advance of future visits and was not surprised to find that the libraries in question indeed had a great deal of the material he sought.²⁹

Unfortunately, librarians' misconceptions about disabled patrons prevented him from gaining full access to the library's collection. They failed to see the

of Korea in 1996.

²⁷ John Collins, 'Understanding the problems of being partially sighted', Looking ahead: A practical look at new developments in library and information services for visually impaired persons, VIP, Paper presented at the second international conference on library services to visually impaired persons, University of Nottingham, Sutton Bonington Campus, 15-18 July 1994, Leicester, England: Ulverscroft Large Print Books Ltd., p.71.

²⁸ John Collins, 'Understanding the problems of being partially sighted', Looking ahead: A practical look at new developments in library and information services for visually impaired persons, VIP, 1994, p.71.

²⁹ Karen Pirog, 'Attitudinal and Physical Barriers Facing the Disabled Library Patron', Current Studies in Librarianship, Vol.9 (112), Spring/Fall 1985, p.42.

individual behind the disability. Disabled persons are treated frequently as children or less intellectual people than non-disabled people. In addition it is not uncommon to observe that people raise their voices when they talk to a blind person. This happens when a person with a disability is met and it is assumed that the person not only has a disability, but that the person is disabled in all areas. This implies the dehumanisation of disabled people.

With the development of computer and telecommunication technology, many libraries provide computerised catalogues such as On-line Public Access Catalogues (OPAC) through either Internet or domestic computer networks. In particular, graphical user interface (GUI) has greatly contributed to those who have computer phobia to come to terms with the computer. GUI makes it easy for people to use computers by using graphics such as symbols or buttons rather than text. But to visually impaired people GUI is a formidable barrier. Most visually impaired computer users in Korea are still using DOS because Windows is at the experimental stage. A blind man expressed his frustration after finding out the discrimination by computer technicians against visually impaired users at mainstream libraries.³⁰ He had tried to access OPACs at the local universities through a computer network but failed because the computer catalogues were made in a Windows driven mode not in a menu driven mode. So he contacted a computer technician at one of the university libraries to find out whether it was technically feasible to convert the catalogue to the text based mode for visually impaired people while keeping the Windows mode for sighted people. The technician said that it was technically possible to convert it but for only a few people they could not implement it.

Administrators' views on disabled people have a great impact on services for disabled people and staff's attitude towards them. It may be fair to say that overall library services for disabled clients are completely dependent on the attitude of the top administrator in most public libraries. Unfortunately, the first reaction of most administrators when asked about services for disabled

³⁰ Interview with Jang Min Kim, Director of Dept. of Rehabilitation at Pusan Welfare Centre for the Visually Handicapped, Korea, in July 1999. The library catalogues of two universities: Pusan National University and Kyungsung University were contacted by him.

people is that it costs too much money. That means the needs of disabled people cannot be met or have to wait until the library's budget is in surplus. Few libraries at the present time have a budget in surplus.

Attitudes may be based on philosophies rather than the mere specifics of attitude to disabled people. Lippman said in his comparative study on attitudes towards disabled people in Europe and the United States that in Europe there was a genuine conviction at least on the part of professionals that disabled people have potential and can be helped. In addition, there was willing acceptance of social responsibility by tax payers.³¹

2. 3 Challenge to library professional for integration

There are two major factors which encourage the discrimination by librarians against people with disabilities being admitted into mainstream library services. First, is the current library professionals' uncritical acceptance of market driven management style and commercialisation of information in libraries. The other is poorly prepared library professionals who have limited knowledge and experience of disabilities and disabled people.

2.3.1 Privatisation of library services

During the first half of the 1990s in Korea there was a strong voice for adoption of a market driven management style in public services within the government. Therefore many government officers participated in varying management training programmes offered by business sectors. It is not known whether they learned how to listen to and care for customers or how to respond to complaints from the private sector. But one obvious thing is that phrases such as contracting out, privatisation or commodities of information have prevailed widely in the library sector since then. As a result recently there was a sharp conflict between government and the library sector centring on privatisation of

³¹ L. Lippman, Attitudes Toward the Handicapped: A Comparison between Europe and the United States, Springfield MA: Charles C Thomas Publisher, 1972, p.67.

the National Library of Korea.³² The government drives for privatisation hit even the National Library. Earlier, uncritical acceptance and introducing of a management style drawn from the private sector in library services among some library professionals could not escape blame. They imported this theory which was popular in the 1980s in Western countries. It might have encouraged the government to accelerate the drive of privatisation of library services.

Although the eccentric idea of privatisation of the National Library would not alarm those who know how the National Library is managed, this idea could significantly affect the future of library services particularly in public libraries. Parston said that 'the emphasis of many market-style reforms is to take the public out of public services.'³³ In his book, *Rediscovering Public Library Management*, 1996, Bob Usherwood said that:

Commercial enterprises and public services are underpinned by different assumptions and values. ... Whereas commercial firms seek to identify areas that will provide profitable markets for their products, public sector organisations are more concerned with identifying areas of need and deprivation, with a view to targeting specific services toward them.³⁴

A library is not like a commercial firm. The goal of a commercial firm is to make a profit for its own sake but a library is for its clients' interest. The principle of library services is based on equality and fairness of redistribution of information to their clients regardless of their ability to pay. In the view of enterprises it is logically impossible to invest resources in a smaller market instead of a larger market. If majority rule were applied to library services, disabled clients would be the first target to be marginalised in the services. In any society disabled people are the minority of the population and are the poorest among the poor. Many librarians in Korea said that serving disabled people is beyond their ability because they do not even care properly for non-disabled clients with their

³² The National Library of Korea, *Newsletter of Libraries*, Vol.9 (2), 1999, p.3.

³³ G. Parston, *Danger of Dogma*, *The Guardian*, 10 August 1994, cited in Bob Usherwood, *Rediscovering Public Library Management*, London: Library Association Publishing, 1996, p.8.

³⁴ Bob Usherwood, *Rediscovering Public Library Management*, 1996, p.14.

limited resources. Currently in Korea 2 per cent of residents are making use of their local libraries.³⁵

Practices in privatisation in public services in Western countries come from a different political environment. Governments in countries have invested a large sum of money in public libraries and raised over 60 per cent of the population to use libraries. Nevertheless library professionals particularly in the UK criticise the government policy. Usherwood remarked that since the publication of *Ex Libris* the government published a series of discussion papers on the private sector's management style in public libraries.³⁶ *Ex Libris* advocated a minimalist state and argued that the free market should operate within the public sector. Since then government concern has moved away from services to the disadvantaged to a methodology for costing public libraries, a manual on performance indicators and a guide to objectives setting.

Alex Wilson, the former President of the Library Association in Britain said that 'the professional ethic of librarians and information workers supports the ideal of free and equal access to knowledge, as one pillar of society. If free and equal access were to be sustained the first priority for libraries should be to the culturally and economically disadvantaged.'³⁷

2.3.2 Less prepared librarians

A survey in 1996 in Korea revealed that the first qualification of librarians for services for visually impaired people was the understanding of visually impaired people, the second the knowledge of Braille, the third education in librarianship and the last special educational background.³⁸ A research questionnaire was sent to 31 libraries including 6 public libraries which offered services for visually

³⁵ Ju Bong Kim, 'A tour of Public Libraries in Japan', *Newsletter of Libraries*, Vol.9 (9), 1999, p.23.

³⁶ Bob Usherwood, *Rediscovering Public Library Management*, 1996, pp.7-8.

³⁷ Cited in Peter Craddock, 'Sharing The Vision', *Interlend '96 Information Rich, Information Poor: Filing the Gaps*, Paper presented to a conference, University of Kent on 11th and 13th July 1996, Forum for Interlending (FIL), edited by Stephen Prowse, London: The British Library, 1996, p.29.

³⁸ Hyun Kyung Kim, *A Study of Multimedia information Services for Visually Handicapped* ,

impaired people. Twenty nine libraries responded. Every respondent except one library (indicating the first as education in librarianship) answered that the understanding of disabled people was the first requirement of librarians.

As the survey indicates, there is nothing more important than knowing the characteristics, problems and needs of disabled people in library services. In fact, most librarians these days have not been taught or had experience in dealing with disabilities and disabled people, therefore they do not know much about that. As a consequence this leads librarians to uncertainty and apprehension when dealing with them. Some will also feel uncomfortable or fear when being around with them. Or some will have curiosity about their disabilities. All these human factors cause great barriers for disabled people in using mainstream library services. These factors will be discussed in detail in Chapter 6.

Conclusion

This chapter discussed issues focusing on disabled people, that is, the characteristics of disabilities and the difficulties disabled people face in daily life. Besides, the discrimination and librarians' negative attitudes towards disabled people in mainstream libraries were discussed. These are regarded as the most difficulty barrier for mainstream libraries when integrating disabled people into the rest of users. Not legal requirements but the acceptance of disabled people as members of the library is a great challenge to librarians in mainstream sets nowadays.

Chapter 3

Development of library services for people with disabilities

Introduction

The development of library services for disabled people has been parallel with the development of new technology which has played a significant role in the increase of library users with disabilities. The development of information and communication technology and social changes are also accelerating integration of disabled people into mainstream library services. In this chapter three periods may be identified which made a big leap in the development of library services for disabled people. These are Braille, Talking book (Analogue) and Digital period. Focusing mainly on the development of alternative materials such as Braille and talking books for the visually impaired people library services in each period are briefly described.

3.1 Braille period

The history of efforts to improve blind people's access to reading materials, goes back more than 200 years. The first real step was initiated by Valentin Haüy in the 1780s in France.¹ He devised books with raised letters for teaching blind people. In those days in France like many other countries most blind people were untaught and lived by alms. They were frequently treated as less than human by society due to their physical impairment. The plight of blind

¹ Rebecca B Marcus, *Being Blind*, 1981, pp. 30-58.

people stimulated Haüy to think seriously for the welfare of the blind. He thought that education was the only answer to improve the level of their lives. So he started teaching blind people by trying various teaching methods. With lots of effort he finally devised a new method, raised letters. Before devising this method Haüy noticed a blind young man recognised letters by touch, which just came out from a press plate and so they were still slightly raised. He had also admired the ability of a blind beggar who recognised a silver coin Haüy gave him and the beggar came back soon to return the silver coin to him in case he had given it by mistake. Through these incidents Haüy realised that blind people recognise things by touch and developed a teaching method, raised letters, to teach them. Haüy's method was used in schools for the blind in France until Louis Braille devised a system of six-dot cells in 1829, now called Braille.

In 1820, Louis Braille was an eleven-year-old pupil at a boarding school for blind boys in Paris. At that time the books made by the Haüy method were big and heavy because each letter was quite high, and only three or four words could fit on a page. Therefore reading was very slow. It took months to finish even a short book. Besides, since they were made by hand, the books were expensive, and schools could afford to own only a few. Louis was impatient with the slow way of reading books. Louis's quick mind wanted to learn much more about the world than he could from these books. If there existed no better way to read, he decided to invent one. So he started to work on a tactile alphabet when he heard about a code an army captain had invented to send night messages. The captain used a sharp pointed tool — a stylus — to punch patterns of little holes into a thick paper. Each pattern meant a different sound. When the paper was turned over the dots stood out from the paper. A man could feel the dots with his fingers and read the message in the dark without striking a light.

Dots, Louis thought that could be the answer. But his code would have to be different from the army's. Groups of dots should stand for letters, not

sounds, because the twenty-five letters of the alphabet in French could spell out many more sounds, and thousands of words. At last in 1829, after 9 years work, Louis Braille devised a system of six-dot cells. His system is made up of different arrangements of one to six tiny raised dots within a small space. With the development of Braille, formal education for blind children started in many countries in the mid nineteenth century. Consequently library services with Braille for the blind were gradually followed.

3.1.1 Emergence of library services for the blind

After Louis Braille's system gained ground the majority of countries adopted his system to their own languages and started producing Braille books. With the production of Braille, library services for the blind have gradually spread throughout the world. At the earliest age Braille materials were mainly produced by local societies for the blind or by individuals as philanthropic efforts. In most countries in Scandinavia, for instance, upper-class ladies transcribed a number of books into Braille for the blind in society. The efforts of these ladies formed the basis of libraries for the blind.

In Finland, Cely Mechelin, the daughter of a Helsinki senator, initiated an association called 'Books for the Blind' in 1890 by recruiting among upper-class ladies in Helsinki.² In the same year, she had travelled to Paris to get acquainted with the library for the blind (founded by Maurice de la Sizeranne) and to learn how to produce Braille books. After that each member of the association undertook to transcribe into Braille a certain number of pages every year. Eventually the Library for the Blind in Finland was born having sixteen books in Braille made by the association.

² Lissa Perheentupa, 'The Finnish Library for the Blind', Scandinavian Public Library Quarterly, Vol.2(3), 1969, p.159.

In Norway the first attempt was also made in 1890 by a group of ladies.³ They transcribed a number of books into Braille pricking out each letter by hand with plate and stylus. These efforts formed the basis of a library for the blind.

In Sweden, a teacher called Amy Segerstedt after visiting the library for the blind in Paris in 1885, brought together a group of educated sighted women and got them interested in the Braille system.⁴ When the ladies began a transcription of books into Braille consequently, a library for the blind was formed.

In Britain before Braille was introduced there had already been other embossed types such as Lucas, Frere, Alston and Moon. These embossed types gradually ceased to be used once Braille became popular except for Moon, which is still used. Moon was devised by Dr. William Moon in 1847 in England, and is rather similar to the Latin alphabet based on straight lines and curves. Moon has clear and bold outlines that are easy to feel and require less sensitivity in the fingertips than Braille.⁵ So Moon is particularly suitable for the elderly and blind people who lost their sight late in life after learning to read.⁶

In his book, *A History of Public Libraries in Great Britain, 1845 - 1975*⁷, Thomas Kelly said that library provision of books for the blind seems to have begun in Liverpool in 1857, on the initiative of R.W. Roulston, Superintendent of the Lending Libraries and Manchester followed suit in 1863. He said that books at this period were in the Moon type. The widespread use of Braille came later,

³ Synnove Opdahl, 'Library Service for the Blind in Norway', *Scandinavian Public Library Quarterly*, Vol.2(3), 1969, pp.149-51.

⁴ Ulla Cahling, 'The Study of Books to the Blind and Partially Sighted in Sweden', *Scandinavian Public Library Quarterly*, Vol.3(2), 1970, p.85.

⁵ Jean Tucker, *The Role of the Public Library in the Provision of Library and Information Services for Visually Impaired People*, Paper submitted in partial fulfillment for the Degree of Master of Arts in the School of Library, Archive and Information Studies at University College London, 1992, p.16.

⁶ A librarian at the National Library for the Blind in Britain said that many elderly people request Moon after their eyesight deteriorated, when unable to read printed materials in their local libraries. They usually transfer their membership from the public library to the National Library for the Blind when they can no longer read even large print books in the public library. She was interviewed in July 1998.

⁷ Thomas Kelly, *A History of Public Libraries in Great Britain, 1845 - 1975*, London: The

as a result of the advocacy of the British and Foreign Blind Association, founded in 1868.

The first library which used Braille for the blind in Britain was established by a retired blind teacher of Braille, Miss Martha Arnold, in 1882 co-operating with her sighted friend, Miss Carlota Howden, later Mrs Dow. The two ladies ran the library in a small room of Miss Arnold house with some Braille books.⁸

In the United States local societies for the blind first provided reading materials in Braille. As for public libraries it is said that the Boston Public Library started services for the blind for the first time after receiving a gift of eight Braille books in 1868. The San Francisco Public Library followed in 1902. As a national library, the Library of Congress provided a special reading room when the new library building was opened in 1897.⁹ Braille books and music were circulated to blind users of the Library. In addition varying programmes were run, for instance, one hour of oral readings each day, a weekly recital, art gallery visits, garden parties, dramatic entertainment, river excursions, and teas.

In Korea the first Braille system was introduced by Rossetta Sherwood Hall, an American missionary. She learned the New York Point, a form of Braille, which was devised in 1868 by William Bell Wait, the former Principal of the New York Blind School. After learning the New York Point she modified it to suit to Korean characters in 1898 to teach Korean blind children. It is known that Hall was the first person to teach blind children in Pyongyang, North Korea in 1894.¹⁰ The Ten Commandments and some other parts of the Bible were published in Braille by her efforts. Later, a '3 point 2' Braille was devised by Du Sung Park in 1921 which became standard in 1926 in Korea and was named

Library Association, 1977, p.80.

⁸ The National Library for the Blind, A short history of The National Library for the Blind: 1882-1982, Cheshire, England: The National Library for the Blind, 1990, p.3.

⁹ Hylida Kamisar, 'Users' That all may read: Library Service for Blind and Physically Handicapped People, Washington, DC: The Library of Congress, 1983.p.226.

¹⁰ H.H. Underwood, Modern Education in Korea, New York: International Press, 1926, pp.153-154, cited in Chong Jae Lee, A study on the Library Service for the Visually Handicapped Persons, A master's thesis in the Dept. of Library Science at Sung Kyun Kwan University, 1986, p.40.

Hoon Maeng Chung Um (meaning a script for the blind). As a library service the Seoul Blind School started circulating Braille materials to its pupils and the former students in 1945 for the first time in the country.

3.1.2 The establishment of national library services

The library services for blind people in most countries started as local individual efforts from the mid nineteenth century. Most of these libraries were unstructured and run by relatively philanthropic efforts of volunteer staff with a very low budget. At the turn of the twentieth century library services for the blind began to grow into more structured organisations. In some countries, governments spearheaded the development of library services for these clients by the provision of funding, legislation and the creation of a national institute.

The first state institute of its kind in the world was the Denmark's Blindebibliotek (DBB), the Danish National Library for the Blind. In 1924 the DBB was founded as a state institution as part of the Royal Institute for the Blind (founded in 1857) under the auspices of the Ministry of Social Affairs.¹¹ Later in 1954 the DBB became an independent institution with a director of its own and premises.

Known as the most well structured national institute there is the National Library Service (NLS) for the Blind and Physically Handicapped of the Library of Congress in the United States. The NLS acts as a headquarters having a number of regional libraries which provide services directly to blind people and physically disabled people within the region. The regional libraries are the basic organisational units in a network. This network is the oldest network of American libraries established in 1931. However before this network service was established, there had been an activity of the American Library Association for library services for the blind.

¹¹ Winnie Vitzansky, 'The Development of National Strategies for Library Service for Blind and Print Handicapped People in Denmark', Paper to the 62nd IFLA General Conference, Beijing, China, 1996.

In 1928, the American Library Association (ALA) asked the American Foundation for the Blind (AFB) to make a study of the library needs of blind people and how they were being met. With support of the ALA the American Foundation for the Blind conducted research and recommended that the federal government should support free books for the blind to a designated group of geographically well-distributed libraries, on condition that these libraries circulated the books to readers in the assigned zones. This recommendation resulted in the passage of the Pratt-Smoot Bill, which was signed into law in 1931. This law is commonly known as the Pratt-Smoot Act because Ruth Pratt (a congresswoman) from New York and Reed Smoot (a senator) from Utah introduced identical bills into the House and Senate authorising an annual appropriation of US \$ 75,000 (£ 50,000) to the Library of Congress for books for blind adults, to be distributed by regional libraries. The Pratt-Smoot Act mandated that the Librarian of Congress:

provide books... for the use of the adult blind residents of the United States, including the several States, Territories, insular possessions, and the District of Columbia. The Librarian of Congress may arrange with such libraries as he may judge appropriate to serve as local or regional centres for the circulation of such books, under such conditions and regulations as he may prescribe.¹²

Initially eighteen libraries were designated as regional libraries for the blind. The regional libraries acted as service points in distributing materials to blind adults while the Library of Congress played a central part in the production of books in Braille. In 1932, the first year, there were 3,225 users served nationally and 50,190 items were circulated.¹³

In some countries where government's interest has been limited, individual local institutes have grown into national libraries by offering services

¹² Stephen Prine and Kieth C. Wright, 'Standards for the Visually and Hearing Impaired', *Library Trends*, Vol.31(1), 1982, p.94.

¹³ Hylida Kamisar, 'Users' That all may read: Library Service for Blind and Physically Handicapped People, Washington, DC: The Library of Congress, 1983, p. 226.

for blind people countrywide. Although these institutes were national agencies most of them were charities receiving only a very small share of their cost from the government. Nevertheless, in Britain, the library, which was founded by Martha Arnold in 1882, developed into a strong organisation and became the National Library for the Blind in 1916. Although there were serious administrative difficulties toward the end of Arnold's personal management the library rapidly grew under the leadership of Ethel Winifred Austin, Librarian, after she took up the post in 1906. She governed the library for 12 years with enthusiasm and tirelessness until she died in 1918, which period proved to be most eventful of the library's history.¹⁴ Although apparently without professional training, Austin built up the library's collection, services and resources. She gained financial support by gaining attention from those with power and influence. She spoke for the needs of blind people for books and services wherever there was a need. One of her distinguished achievements was the establishment of free services of the library to blind readers. Previously they paid to subscribe to books. She also secured a reduction in the rates of postage for embossed books for the blind which was granted by the Postmaster General in 1908.¹⁵ In those days materials sent to visually impaired people were not exempted from the payment of postage (now it is free) in Britain as in many other countries. Therefore the cost of postage for the embossed (e.g. Braille and Moon) materials for blind readers caused a great financial burden to this kind of library. Another achievement by Austin was the amalgamation of small libraries for the blind into one centralised system. For efficient and effective library services she strongly believed that the amalgamation of the small libraries was a prerequisite. This resulted in the establishment of the Incorporated National Lending Library for the Blind and it became the National

¹⁴ The National Library for the Blind, *A short history of The National Library for the Blind: 1882-1982*, 1990, p.5.

¹⁵ The National Library for the Blind, *A short history of The National Library for the Blind: 1882-1982*, 1990, pp.4-6.

Library for the Blind in 1916. The NLB is now the largest library with embossed materials in Britain, serving 5,000 readers in the country.

Besides, there is the Students' Library in Britain, operated by the Royal National Institute for the Blind. Although the size of this library is much smaller than NLB, this offers a very valuable service to blind students. NLB concentrates on leisure reading for the general public with visual impairment, while the Students' Library is more concerned with the needs of school and college libraries.

In Korea, slightly later than in Western countries the Korea Braille Library started the first national library services for blind people in 1970 although before this there had been a few special agencies who provided Braille for blind people on a local basis. The library was founded in 1969 by a blind man, Byung Il Yuck in Seoul and started circulating Braille in 1970 to blind people across the country by receiving from Du Sung Park who devised Korean Braille, a number of Braille books and Braille production equipment. As the founder and Director of the Library, Yuck was well known among the blind and even sighted people. So there were many people who called the library *Yuck Dosohkwan* (Dosohkwan means a library) or '*Yuck Byung Il Dosohkwan*' after his name. In 1979 the Korea Braille Library became the first accredited Braille library by registering with the Ministry of Education in the country.

3. 2 Talking book Period

In the 1930s the advent of talking books served as a milestone in the progress of library services for the blind. The talking book is a voice recording of printed materials. This is accomplished by having someone read the print text onto a tape using microphone and a tape recorder. Talking books are usually recorded at normal pace without dramatic effects in reading the text and background music, just as sighted people read books. When Edison in the mid 1870s invented the phonograph it was already intended to be a means of

compensation for people with reading difficulties more so than its purpose of recording music.¹⁶

For those who found difficulty in reading by touch, that is, reading Braille or Moon, talking books were an invaluable alternative format. Consequently a number of new readers were created. Nonetheless visually impaired people, people with other disabilities such as physical limitation who cannot hold books or turn pages or people with mental problems have benefited from talking books.

With the production of talking books public libraries in some countries have been involved in the distribution of these alternative materials to disabled people who have been previously excluded from using their local libraries.

3.2.1 Involvement of public libraries

The involvement of public libraries in distribution of talking books to disabled people in community can be seen as a distinguishable feature in the development of library services for disabled people. In particular public libraries in Scandinavia have been more actively involved than the rest of the world in this area. The Scandinavian countries are perhaps the forerunners to mainstream library services for disabled people.

Denmark: since the late 1930s talking books have been produced by the Danish National Library for the Blind which is the major Danish producer of talking books. At the early stage talking books were recorded on discs and later reels. But since in the mid 1970s the medium of talking books changed to cassettes in this country. Thanks to the production of talking books on cassette public libraries in Denmark experienced a great boom by providing talking books to the visually impaired people and consequently new target groups were reached. In Denmark there were actually many similarities in developing the

¹⁶ Ole Jall, 'The Talking Book in Denmark', Scandinavian Public Library

access to borrow books from public libraries and to borrow talking books from the Danish National Library for the Blind. At the early stage of the public libraries in Denmark an individual citizen was allowed to borrow books by post from the public libraries just as visually impaired people had this option from the Danish National Library for the Blind (DBB).

In comparison with the public libraries the DBB's resources were very limited. This meant that there was often a long wait for new and popular titles, whether they were talking books or Braille. In any case books borrowed by DBB had to be returned to the library before the borrower was allowed to a new supply. The system was frustrating in several ways. The contrast between services to visually impaired people and those to sighted library users grew dramatically. In this circumstance the public libraries met the need of visually impaired readers from DBB and a demand for improvement rose in the library world.

In this circumstance a committee was appointed by the Danish Library Directorate to examine how best to organise library service for blind and partially sighted people. In 1973 addressing this urgent problem the committee's report recommended that public libraries must be able to serve these readers as the library for the blind cannot, and talking books must be available for purchase by the public libraries. In 1982 a new committee was appointed by The Danish Library Directorate to look into the organisation of the library services for blind and print handicapped and especially the role of the library for the blind. The committee made several recommendations:

- The decentralisation of the Library services should be carried on and strengthened.
- The Library for the blind should assume national library functions and form the superstructure for the lending of talking books to the public libraries in Denmark.

- The Library for the blind should be moved from the Ministry of Social Affairs to the Ministry of Culture in order to emphasise its connection with the Library system, and also to stress the fact that library services for disabled people are cultural services as well as those to able bodied people.

As a result of the recommendation, public libraries in Denmark started distributing talking books to end-users. In addition in 1994 a new *Danish Public Library Act* legalised that talking books should be treated on equal terms with printed books in the interlibrary lending system and the superstructure function of The Danish National Library for the Blind became law. Currently the talking books are registered in the National Bibliography.

In Denmark the decentralisation of the talking book service has been accelerated by the copyright laws, which have been changed many times. One noticeable point is that the copyright owners signed an agreement that talking books could be used by people other than blind people. This agreement allowed talking books to be lent to everyone who had difficulties in reading printed materials. In addition to blind people, this meant people with visual impairment, and people with dyslexia and other reading disabilities. This provided a considerably larger target group and greater demand for individual titles, thus ensuring a reasonable return on the money spent to purchase talking books. Since talking books are expensive to produce in the first place, the cost of each talking book is very high indeed.

The situation was improved even further when an agreement was made with copyright owners so that everyone, with or without reading difficulties, could use the talking books. This meant that talking books could now be used by commuters and ordinary travellers, or listened to at home by people carrying out mundane household chores at the same time. Naturally, in the beginning, there was a certain reluctance on the part of some people with difficulties in printed materials to share their talking books with others. However, it soon became obvious that ordinary readers selected talking books to only a very

limited extent, while having this larger target group made it possible to offer a wide selection of titles locally. All together these many steps have resulted in one of the highest annual lending of talking books in the world. Over 2 million talking books a year are borrowed from the public libraries in Denmark which has 5 million inhabitants.¹⁷

Norway: Norsk Lys-og Blindeskriftbibliotek (NLBB), the National Library for the Blind, became a national institute in 1990. The NLBB produces both Braille and talking books for children and adults with visual impairments. Besides, the Norwegian Talking and Braille Book Library produces talking books, which is Norway's largest producer of talking books. Finding that more than 500,000 Norwegians, which is one out of every eight, have such difficulty in reading printed materials, the Norwegian government launched the Talking Book Project as part of the 1990-93 national programme. One of the aims of the project was to make it just as easy to obtain a talking book as a printed book. In implementing the national programme for 1990-93 the government made available a grant of NOK 12 million (Norwegian currency).¹⁸

During the period 1991-93 county libraries in Norway were granted about NOK 100,000 each for the purpose of building up a collection of talking books. The aim was for every public library and a variety of other institutions to have talking books available. Figures for the public libraries showed that their collections rose by almost 30 % from 1992 to 1993, while during the same period borrowing increased by 50 % from 202,000 to 303,000.

The librarians in public libraries played a vital function in presenting this new product to the public. Some public libraries, for example, Asker Public Library in Norway directed its activities particularly towards schools within the community, visiting not only children in class but also the teaching staff. As a

¹⁷Johannes Balslev, 'The Danish Model of Library Services to the printhandicapped', Paper to the 63rd IFLA General Conference 1997.

¹⁸Ka-Jo Carlsen, 'The Norwegian Talking Book Project - why a project?', Scandinavian Public Library Quarterly, Vol.28(2), 1995, p.25.

result, the library, which had 20,000 borrowings in 1994, had 4,000 to 5,000 titles available specifically for children and young people. Melhus Public Library had concerned itself particularly with integrating the mentally-handicapped into the library and creating the right conditions for them. As a result 40 mentally impaired people became regular users of the library.¹⁹ After the project was completed people with disabilities continued to borrow talking books from their local libraries.

Sweden: In 1955 the library of the Association of the Blind in Stockholm first introduced talking books. Since the introduction of these new materials public libraries in Sweden participated actively in the distribution of talking books along with the library of the Association of the Blind. In her paper, 'The Supply of Books to the Blind and Partially Sighted in Sweden'²⁰, Ulla Cahling said that this double anchorage, in the Association of the Blind and the public libraries, has characterised such activities in Sweden since the beginning of talking books and has greatly assisted progress in supplying talking books for the visually impaired. She added that visually impaired people can obtain personal advice at their local library on the choice of books if public libraries have their own talking books.

The cooperation of the two parties was further developed during the 1960s. In 1969 approximately 100 public libraries had their own collections of talking books. In the same year loans from the library of the Association of the Blind amounted to 91,700, of which 11,400 were effected via public libraries, hospital libraries etc.

Since the Talboks-och Punktskriftsbiblioteket (TPB), the Swedish Library of Talking books and Braille became a national library in 1980, it has played the role as the national source of talking books. TPB limits services to libraries, and

¹⁹ Ka-Jo Carlsen, 'The Norwegian Talking Book Project - why a project?', Scandinavian Public Library Quarterly, 1995, p.26.

²⁰ Ulla Cahling, 'The Study of Books to the Blind and Partially Sighted in Sweden', Scandinavian Public Library Quarterly, Vol.3(2),1970, pp.87-88.

not to individuals except for Swedes living abroad. The primary circulation of talking books took place in the public libraries. TPB became a sort of umbrella for talking book collection and co-ordination and information regarding audio materials and library services. This means library services for people with visual impairment in Sweden have been completely decentralised. Sweden is probably the leading country in the world in providing mainstream library services for people with disabilities. People with disabilities who want to borrow talking books simply turn to the nearest library. If the library does not have a copy of the book in question, it can normally provide it from another library or from the TPB through a network system.

Public libraries in Sweden buy their own talking books on an annual basis at reasonable cost from TPB. Talking books cannot be bought by the general public. They can only be borrowed from a public library and only by people who suffer from physical or mental reading disabilities. Entitled to borrow talking books are:

- the visually impaired,
- the mobile impaired,
- aphasics,
- the mentally retarded,
- dyslectics,
- the hard of hearing (for auditory training),
- the chronically ill,
- convalescents (recovering patient).²¹

Besides, people who are temporarily unable to read can also borrow talking books during their disabilities.

²¹ Lena Bergman, 'Projects of Talking Books', Scandinavian Public Library Quarterly, Vol.28(2), 1995, p.28.

In Sweden there are many different types of talking books. For people with learning problems, for example, there are talking books recorded at different speeds and the same books have been read several times, at normal, slow and extra slow speed. For people with mental problems talking books are recorded with several voices taking part, with some music or other sounds which animate the reading and make listening more stimulating. There are talking books which read non-fiction books with many pictures for children and for adults. These books are made for people who can see the pictures but not read the text, as dyslectics and the partially sighted. The readings of these non-fiction books give no descriptions of the pictures, as would be the case in talking books for the blind. Besides, in Sweden there have been many projects related to the promotion of using talking books in education for children with reading difficulties.

A very important factor in library services for visually impaired people in the Scandinavia is the government decision that library services to the blind, like services to the sighted people, should be funded by government expenditure. This decision lays the groundwork for co-operation between national libraries for the visually impaired people and public libraries in these countries and leads to the integration of people with disabilities into mainstream library services.

The United States of America: as soon as technological developments made the talking book feasible, legislation was passed by Congress to include talking books in the NLS service of Library of Congress. Following this new material, many additional thousands of blind adults could become active library users. In addition, postal laws were amended in 1934 to allow the free mailing of talking books to the blind. In 1935 Congress increased its annual appropriation to the Library of Congress national programme for blind adults from \$100,000 (£67,000) to \$175,000 (£117,000), with \$75,000 (£50,000) to be used for talking books. The appropriation in the financial year of 1959 was \$1,350,000

(£900,000), six years later it was \$2,446,000 (£1,630,000), an increase of 80 percent.²²

In 1952, the Pratt-Smoot Act had been amended by deleting the word 'adult', which allowed blind children to be eligible for service from the Library of Congress. In 1966 the Act was again amended so that physically and visually impaired people who were unable to hold, handle, or read conventional printed materials because of physical limitations were eligible to borrow recorded books and playback equipment under the Library of Congress programme for blind readers. Thus, the law extended eligibility to people who have no arms or fingers or who are in iron lungs, and those who have muscular dystrophy, multiple sclerosis, cerebral palsy, Parkinson's disease, or any other crippling diseases. People with such disabilities had not previously had access to library services.

The fastest growth of talking book services began in 1966 when the Library Services and Construction Act (LSCA) funds became available for states to plan and support library service to blind and physically handicapped individuals. The Division of the Library of Congress which provided services for the blind and physically handicapped itself underwent change as a result of the extended service. In 1966, it became the Division for the Blind and Physically Handicapped (DBPH). The number of its authorised permanent staff positions rose from thirty five in 1966 to fifty four in 1967. From 1960 to 1970 the total readership grew tremendously from 63,300 to 223,900 in the regional libraries of NLS. In 1981, 56 regional libraries and 101 sub-regional libraries had been established. Currently there are 57 regional libraries and 86 sub-regional libraries.²³ One reason for the decrease of the number of sub-regional libraries

²² The National Library Service for the Blind and Physically Handicapped (NLSBPH), Library of Congress, 'A History of the National Library Service for Blind and Handicapped Individuals, the Library of Congress', That all may read: Library Service for Blind and Physically Handicapped People, 1983, pp. 83-141.

²³ Library of Congress, The Network of the National Library Service for the Blind and Physically Handicapped, Library of Congress, 1986, text is available at <http://www.loc.gov/nls/referebce/facts-network.htm> (viewed on 18/1/2000).

can be attributed to the involvement of public libraries in offering services for people with disabilities. In 1987 Basu conducted a national survey for public library services for visually impaired children in America.²⁴ The finding of the survey showed that public libraries provided general services such as storytelling, film, arts and crafts to disabled children, while sub-regional libraries provided more specialised services such as training in the use of equipment, delivering Braille, talking books and talking magazines, scratch and sniff books etc. by mail. In addition in the mid 1990 another survey (see pp.90-91) showed that almost every public library in America holds talking books for visually impaired people. Besides it is assumed that since information and communication technology became popular in public libraries the information needs of disabled people should have been met at their local libraries.

The United Kingdom: since the introduction of the first talking books offered by the Royal National Institute for the Blind in 1935, the readership of talking books has been gradually increased. The RNIB set up the Nuffield Talking Book Library together with St. Dunstan's. The first talking books were recorded on 24 rpm discs on a special gramophone. Later the medium of talking books gradually changed to tape. The readership of the British Talking Book Service for the Blind (renamed from 1966) grew from 6,600 in 1950s, to 22,000 in the late 1960s, 40,000 in 1970s, and over 66,000 in the late 1980s.²⁵

There are other organisations in Britain which provide talking book services to people who are unable to read printed materials. One of them is Calibre (Cassette library), which has provided books on standard half-track Philips cassette to anyone unable to read printed materials since 1976. There are other smaller facilities but most of them are run by local societies.

²⁴ S.G. Basu, Public Library Services to Visually Disabled Children, Doctoral thesis submitted to the School of Library and Information Studies, Florida State University, USA, 1987.

²⁵ Allan Leach, 'Library services in the United Kingdom', Paper to the Expert Meeting of Libraries for the Blind, prior to the IFLA General Conference, Brighton, the United Kingdom, 1987.

In addition to talking books there are a lot of talking newspapers in Britain. The talking newspapers have developed from local initiatives in partnership between blind and sighted people. The first talking newspapers were started by Ronald Sturt in 1969 at the College of Librarianship Wales, Aberystwyth.²⁶ There are now around 530 talking newspapers in Britain. It is estimated that 250,000 people with visual impairment keep in touch with local affairs through talking newspapers. It is said that almost every medium-sized town in Britain has its own talking newspapers. As an umbrella organisation of local talking newspapers in 1974 the Talking Newspapers Association of UK (TNAUK) was founded to unite local talking newspapers groups and runs a national service with national newspapers to an individual membership of over 17,000 and distributes 6,000 audio cassettes a day. These three (RNIB, Clibre and TNAUK) are the major national providers of talking books and talking newspapers in Britain. As of 1975 the readership of the three national institutes was as follow²⁷ :

Publications	RNIB	Calibre	TNAUK
Talking books	60,000	13,000	
Other audio texts	4,000		
Talking newspapers and magazines			17,000

In 2000 RNIB's Talking Book Service has about 50,000 members and Calibre has around 15,000 members.

Along with these three national talking book providers public libraries in Britain also offer talking books services to visually impaired people. The involvement of public libraries in talking book services has been strengthened by a number of commercial publishers. They produce taped versions of popular

²⁶ Neil H. McLachlan, Access to Newspapers and Journals for Visually Impaired People: The Talking Newspaper Association of the UK, text is available at <http://www.ariadne.ac.uk/issue10/tnau> (viewed on 28/10/97).

²⁷ Peter Craddock, 'Share The Vision', Paper to the 63rd IFLA General Conference,

books, narrated by well-known television and stage performers, and well enough packaged to attract a wide range of readership. Actually this development was an extension of the popular recorded music section and the object of this service was not the people who are unable to read printed materials but they have benefited.²⁸ In public libraries talking books are usually called 'spoken-word cassettes' equivalent to written-word books in Britain.

The scale of public libraries' use of talking books can be seen from the findings of the following two surveys. A survey conducted by Share The Vision (STV) in 1990 showed that 92 % of public library authorities in Britain offered talking books services.²⁹ More recent statistic presented by the RNIB's survey in 1997, revealed that all public library authorities in Britain are well established in the provision of talking books.³⁰ The RNIB distributed a questionnaire to 184 local authorities in the UK and received replies from 165 authorities. In most cases talking books were part of their core collection and were available to all library users not just visually impaired people.

Korea: Canes Club in Korea first started talking book services in 1978 and was followed immediately by the Korea Braille Library within the same year. Talking books in Korea are recorded onto the standard two track cassette tapes. In comparison with Braille, talking books were much easier to produce and also available in mass production with low cost. This feature caused a number of new libraries to spring up in order to meet the reading needs of visually impaired people during the 1980s and the 1990s in Korea.

Copenhagen, Denmark, 1997.

²⁸ Allan Leach, 'Library services in the United Kingdom', Paper to the Expert Meeting of Libraries for the Blind, prior to the IFLA General Conference, 1987.

²⁹ The survey was based on 130 library authorities in Britain and the total of 119 libraries have the provision of talking books, cited by Peter Craddock, Share The Vision, Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, 1997.

³⁰ Stephen Chartres, Leisure and Information services for Visually Impaired People: Local Authority Library Services Survey Summary of Findings, July - September 1997, unpublished, RNIB, 1998.

Until the introduction of talking books in the late 1970s there were only a few libraries for the blind in Korea. But during the following two decades the number of institutes which offered talking book services for the visually impaired people grew to over 30.³¹ During the 1980s there were around 7 institutes, of which 2 were opened in 1982. The two were 'Catholic Talking book Library' and the library of 'Korea Welfare Foundation for the Visually Handicapped' which launched talking books services to visually impaired people. In the same year the Braille Library of Daegu University also extended their services by producing talking books along with the Braille. At the beginning of the 1990s several public libraries also started talking book services for visually impaired people living in their communities.

Consequently the membership of visually impaired readers in these libraries was also considerably increased. The library of the Korea Welfare Foundation for the Visually Handicapped, one of the largest libraries of its kind, for example, increased the total of borrowers a year more than ten times within 10 years starting from 1,200 in 1983 to 12,800 in 1993.³²

Unlike Western countries, in Korea talking books services in public libraries were rare. There were only a few libraries which provided talking books to visually impaired people with a limited number of titles. The main reason is that there are no national producers of talking books. The majority of agencies who offer library services for visually impaired people in Korea are charities. They produce their own materials in small editions to lend to their readers, though there are a few institutes who produce extra copies of some titles for sale. This activity is very limited in scope. The absence of a central producer prevents public libraries from launching new services for the visually impaired people in the community. Moreover, commercially produced talking books in Korea mainly concentrate on children's books.

³¹ The Korea Braille Library Association, The National Catalogue of Braille Libraries: 1996, Seoul: The Korea Braille Library Association, 1996, pp.3-33.

³² The Korea Braille Library Association, The National Catalogue of Braille Libraries, 1996, p.37.

In this circumstance, most public libraries have been unable to provide talking book services to visually impaired people. Therefore there are even some libraries which produce talking books and Braille by installing special facilities to meet the needs of visually impaired people. Apart from the running cost the initial expense of a production unit for alternative materials was not a small investment for these public libraries. In 1997 a public library in Seoul, for example, installed a production unit for Braille and talking books. The library purchased Braille production equipment including 4 multimedia PCs, 2 Braille Printers and 1 standard laser printer, and 2 recording studios for talking books.³³ It cost approximately ₩ 100.4 million (£61,000). This cost is higher than the average of the annual acquisition of the majority of public libraries in Korea. Given this circumstance, producing alternative materials in public libraries seems not to be practical.

During my research in Korea I visited 8 libraries which provide library services for the visually impaired: 5 in charities, 1 in each of a school, a university and a public library. Among them except for one in a charity, 7 libraries have facilities for the production of both Braille and talking books. Most of the equipment especially for the production of Braille in these libraries was from foreign makers. The cost of this equipment is very expensive. For example, a set of a printer and Braille maker which produces Zincography Braille plates cost more than ₩120 million (£75,000) a few years ago. This equipment was found in many libraries and some libraries had more than 1 set apart from the computer generated Braille equipment. Besides, some purchased a double sided Braille printer (Braillo made in Norway) which costs ₩100 million (£63,000), even a school library had this printer. But in Britain, there was 3 Braillo embossers connected to computers when I visited the site of the NLB.³⁴ There was no more sign of equipment except for binding in the production unit at the library. The NLB is a national service provider in Braille for the visually

³³ Mapo Library, Seoul, Korea, A Plan of a Special unit for the Visually Impaired [An internal document], 1997.

³⁴ A visit was made in August 1998.

impaired having stocks of 50,000 titles. On the contrary, in Korea the average stocks of these libraries are less than 3,000 titles covering mostly local areas except the Braille Library of Daegu University which is a major supplier of school textbooks. In addition, all libraries have more than 2 recording studios of talking books and one has even 7 studios. Most of them are in good condition with high-tech equipment. Even some visitors from Japan were surprised at the high quality of studios installed at a school. In addition to these 7 libraries, there is a number of agencies producing alternative materials in Korea. In the absence of co-operation among service providers there has been duplication of efforts. For example, there may be copies of one particular book in perhaps several different agencies. This means the efforts of the production of certain books in alternative formats are repeated by different agencies. Apart from the installation of the production utilities, the cost of production of alternative materials is expensive. Despite all these efforts, there are not many materials for the end-users to read. A blind reader said that after 3 years reading there was no more to read even though he had multi memberships from these libraries.³⁵

The absence of a co-ordinating body and limited interest by government in this area result in library services for the disabled still left in the hands of charity, wasting resources and it is unable to remove the label of charity library services for disabled people. A high investment but poor output!

3.3 Digital Period

The advent of talking books has contributed greatly to the increase of library membership of not only the visually impaired and but also people with other disabilities who cannot access printed materials. Despite the great contribution of talking books disabled people are still left poor in reading and information

³⁵ Su Jin Paik, *The Improvement of the Braille Library Services through New Media*, A master's thesis submitted to the Department of Library, Archives and Information Studies at Pusan National University, 1998, p.63.

resources, compared to sighted people. For instance the holdings of the Union Catalogue of Alternative Materials (e.g. Braille and talking books) in five English speaking countries including Australia, Canada and the USA lists approximately 250,000 titles, that was mentioned at the 63rd IFLA General Conference in 1997.³⁶ Then the National Union Catalogue of Alternative Formats (NUCAF) in Britain contains 60,000 records (80,000 records in 2000). So the total of alternative materials in six major English speaking countries accounts for 310,000 at best.

Alternative materials in Korea are far less than these countries. The total stocks of the two largest libraries in Braille and talking book collections in Korea account for 6,000. This number will be much decreased if duplication subtracted from it and also the same titles are normally produced both in Braille and talking book format. The other libraries of this kind seem to have almost the same titles as those in these two libraries although some have other titles in limited scope. The two major factors, which cause the dearth of alternative materials in any country are perhaps cost and time. The production of Braille, Moon and talking books requires human intervention, that is, original printed text should be converted into accessible formats for visually impaired people.

On the contrary in the digital era the most distinguishable feature compared to those in the previous two periods is to remove human intervention and to connect visually impaired people directly to original text by using assistive computer technology. This means that visually impaired people are able to access reading and information materials in the same way as their sighted counterparts.

The starting point of the digital era varies from country to country but it is safe to say that since the mid 1990s information and communication technology has got into its stride and the usage of the Internet by general public has become increasingly popular.

³⁶ Rosemary Kavanagh and Barbara Freeze, 'VISUNET: A Vision of Virtual Library Services for the Blind', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, 1997.

In the digital era, for example, even totally blind people are able to access Internet and electronic publications independently by using special hardware and software. There is a possibility that almost the entire print materials in library stocks can be accessed by visually impaired people by using OCR (Optical Character Recognition) technology. The most sophisticated device in the OCR technology is the Kurzweil reading machine which converts text to speech.

Another feature in the digital era is that the production of alternative materials can be made much easier. For example once original text is converted into digitised form which can be done by a scanner or by keyboarding the same document could be formatted by computer into Braille, or large print. This is of great benefit to those who offer alternative materials to the visually impaired. In addition, multiple copies of the same format can be done within a short time otherwise it would take several days or months if done by manually intensive methods. In the production of talking books currently this relies on human voice. With the continuing improvements in synthetic speech technology which has already come near to the human voice, there is the possibility of more automatic production of audio materials from electronic texts.³⁷

Last, but not least, since storage of bulk Braille materials has always been a headache in Braille libraries, there is some relief in this area by storing or distributing materials on digitised forms. This not only solves storage problems but also CD-ROM books overcome the problems in finding particular sections which are impossible with books either on tapes or in Braille. The ability of indexing of CD-ROM is very significant particularly in reference books for visually impaired students.

³⁷ Tom Wesley, 'Information technology: A Key to access', Looking ahead: A practical look at new developments in library and information services for visually impaired persons, VIP, Paper present at the 2nd International Conference on Library Services to Visually Impaired Persons held at University of Nottingham, Sutton Bonington Campus, 15-18 July 1994, p.20.

All these features in the digital era show the possibilities of mainstream libraries to be able to play a significant role in minimising the shortage of reading and information resources for the print disabled. Besides, more libraries in turn are moving increasingly into producing and providing electronic document and retrieval facilities. Some further issues related to the digital era will be discussed in detail in Chapter 5.

3.4 Mainstream library service for disabled people

As mentioned in Chapter 1, various factors in political, social, educational and technological environments nowadays have accelerated the integration of people with disabilities in all sorts of society. In this circumstance mainstream libraries have taken varying measures in their programmes, services and facilities to comply with laws for people with disabilities. Since the passage of the *Americans with Disabilities Act* (ADA) in 1990 a survey found that virtually every public library (98 per cent) in cities with a population of over 100,000 provided programmes and/or services for children with disabilities. A questionnaire was sent to 224 children's co-ordinators in U.S. public libraries serving populations over 100,000, which is half of the national total of such public libraries in size. Respondent rate was 57 per cent (127 returned). Forty per cent of respondents indicated that library usage by disabled children had increased within the past five years. In the provision of the information technology the survey found that over one third provided Kurzweil reading machines. Around 20 per cent provided On-line computer catalogue with speech and screen enlargement, and On-line searching CD-ROM database. Less than 10 per cent provided Internet bulletin board access.³⁸

Given the findings of the survey which was probably conducted between 1995 and 1996 it is assumed that the current provision of IT for adults with

³⁸ Cynthia A. Robinson and Frances Smardo Dowed, 'Public Library Services to Disabled Children: A National Survey of Large Systems', *Journal of Youth Services in Libraries*, Vol.10(3), Spring 1997, p.284.

disabilities in American public libraries is much higher in rate and more varied in access devices.

Moreover, there are significant interests from mainstream libraries in connecting to the Internet and providing new services to their clients. As of 1999 forty three per cent of public libraries in the UK offered public access to the Internet, that means approximately 1,800 of the total of 4,200 public libraries in the UK are connected.³⁹ By the end of 2002 all the public libraries in the UK are supposed to be connected to the Internet under a project of People's Network. The People's Network is an UK public library network project which was launched in July 1997 and aims for public libraries to play a leading role in making the use of IT accessible to all.⁴⁰

The current practice of mainstream libraries to link library users to electronic materials has a great potential for visually impaired library clients to overcome the shortage of reading and information resources. Besides, connecting to the network mainstream libraries will help disabled people to seek electronic information independently and to have a freedom to choose what they want and when they want to read without the intervention of third parties. In the economic perspective, there is a benefit. If the existing resources can be utilised as much as possible, the value of existing investment would be increased because at present most mainstream libraries are not accessed by disabled people.

Nevertheless, despite all these possibilities and benefits there are still many in mainstream libraries who are unaware or not willing to accommodate disabled people in their services. As just mentioned about the People's Network in the UK, it may be too early to worry about the possibility of exclusion of disabled people from the Network. Nevertheless, one thing obvious is that none of the public libraries had made it possible for visually impaired people to

³⁹ Sylvia Simmons, 'People's Network', *The Library Association Record*, Vol. 102 (1), 2000, p. 26.

⁴⁰ In connection to the project a report was published by the Library and Information Commission under the name of the 'New Library: The People's Network',.text is available at

access the Internet until the Islington Central Library proclaimed its service as the country's first public library Internet service for visually impaired people on 11 May 1999.⁴¹

In Korea the National Library of Korea had not recognised the needs of IT for disabled people until the Library was given a set of CCTV donated from the Korea Association for the Partially Sighted in 1998. The Closed Circuit Television system utilises the computer's monitor to display the magnified image. CCTV is often the optimum solution for people with low vision by magnifying words, pictures or image up to 50 times of their real size. In addition the Library has 2 rooms which are packed with IT devices. One is the Information Service Room (1st fl.) and the other Multimedia Resources Room (5th fl.). In these rooms users are able to access On-line library catalogue, CD-ROM Net, VOD (Video On Demand) and Internet including domestic PC-Net (HITEL, Chollian). Unfortunately, none of these devices are equipped with assistive technology for the visually impaired clients. It is a noticeable phenomenon these days in Korea for libraries, including academic and public libraries, to follow the National Library by setting up a multimedia information centre in the library. The Head of the Multimedia Resources Room at the National Library has found himself giving advice almost daily either on phone or in person to those who plan to install such a kind of room. He seemed never to have heard of assistive technology for the visually impaired.

Further there are even libraries who purchased sophisticated IT devices for disabled people and allow them to gather dust. Generally these devices are expensive. However, whatever the reasons, it was often observed that this equipment is less used than expected. During my field work at public libraries in London, I found that a Kurzweil Reading Machine in a library was put away in storage. A librarian, when asked, explained with rather perplexed look that it was not used much and so they had put it there. As another example, a

<http://www.ukoln.ac.uk/services/lic/newlibrary/>

⁴¹ London Borough of Islington Council, 1999, 'News Release', on the 5th of May 1999.

librarian in the reference library at a public library did not know whether there was an Optical Character Recognition (OCR) machine in the room. Actually there was a set of OCR system located just a few steps from the reference desk. For hearing impaired people public libraries in the UK and the USA have installed TDD (Telecommunication Devices for the Deaf) or Minicom since 1980s. A librarian passed me an instruction booklet for the Minicom when asked how to use it, saying that she was not familiar with it, as she had not used it for ages.

These unfavourable practices may be attributed to the lack of staff training and publicity in mainstream libraries. This can be also regarded as an early phenomenon which happened in the process of integration of disabled people into mainstream library services. Nevertheless, the more important fact in the digital era is that visually impaired people are able to access initial text without human intervention almost as much as their sighted peers. To make this happens a great role of mainstream libraries is expected. Some libraries have already been in action and some are planning.

Conclusion

The development of library services for people with disabilities seems to be the history of library services for the blind. People with other disabilities such as hearing, mobility, or mental impairment have been less regarded than the blind in the library services for the disabled. The main reason for this treatment is because they are able to read printed materials. Given that library services have been mainly based on printed materials, librarians are more concerned about people who are unable to read printed materials. There are some librarians who prefer using the term 'the print disabled' to visually impaired people. The concept of the print disabled is much broader than that of the visually impaired in that it includes those who cannot readily read printed

materials because of other disabilities such as dyslexia or physical limitation which prevents the holding of a book.⁴²

In reality, for people with other disabilities, the level of their difficulties in access to library services is not much different from those of the blind. With varying reasons, either their own physical limitation or other outside factors, these groups of people have been excluded from the benefits of library services. Nevertheless, early efforts to improve library services for people with disabilities have mainly focused on the blind.

⁴² Section of Libraries for the Blind, IFLA, Section of Libraries for the Blind Newsletter, Fall 1998, text is available at: <http://www.ifla.org/VII/s31/nwsl/fall98.htm>

Chapter 4

Overcoming physical barriers

Introduction

Various barriers prevent people with disabilities using mainstream library services. The first is a physical barrier. For too long people with mobility impairments such as people in a wheelchair have been excluded from mainstream library services simply on the basis of 'not being able to get in the door.'¹

In this chapter the varying aspects of physical environment in libraries will be discussed focusing not only on specific factors which are directly related to accessible libraries but also general issues in the planning and design of library buildings. In Korea the past decades have witnessed the construction of a number of public library buildings. This trend is likely to continue in the coming years. In spite of the increase of library building constructions there are still few architects who show interest in library buildings with knowledge and skills. Given this circumstance it is desirable to discuss first the general issues related to the design of library buildings in order to get more understanding of physical buildings before going to the specific accessible issues.

In both the general and specific issues of library buildings, good practices in Britain will be introduced to help Korean library professionals to overcome the physical barriers of libraries.

¹ Ruth A Velleman, Serving Physically Disabled People: An Information Handbook for All Libraries, New York: R.R. Bowker Company, 1979, p.107.

4.1 The case of physical libraries

Cheah and Koh argue that 'when all the essential resources normally provided by a traditional library can be digitised and put onto the Internet, the need for a library building disappears altogether.'²

In 1995 at the Korea Document and Information Society conference, two papers proclaimed the end of physical buildings of libraries. One paper commented that 'In the 21st century university libraries would be changed into a system which provides learned information for academic work without having buildings and spaces like current big academic libraries'. Calling for a change of the concept of a traditional library the other paper stated that 'the transformation of libraries progressed in Western countries can be summarised in three features: 1) Books in libraries are disappearing; 2) Users are not necessarily going to libraries; 3) Access is being made to any libraries in the global village.'³

Contrary to the prediction of these and others in the library and information profession, any sign of the predicted disappearance of physical buildings is nowhere to be found. On the contrary, traditional libraries are flourishing more than ever before by encompassing IT-based new services.

In reality, the development of information and communication technology has brought libraries to extend the horizon of their services by creating new demands and users. Instead of bringing the death of physical libraries, IT is actually making them more active and lively than were in the past. Thanks to IT particularly, public libraries, which have been said to be inactive, are regaining strength and playing a key role as the source of information in a community. The wealth of information and knowledge they offer breathes colour and life into the communities of many countries the world over.

² H. M. Cheah and T.S. Koh, 'Internet libraries in science education', Libraries in national development: Paper at the 10th Congress of Southeast Asian Librarians, Kuala Lumpur, 21-25 May 1996, p.303.

³ Cited without having its bibliography on purpose by Jung Gun Kim and Jong Sung Kim ,

Those who predicted the death of physical buildings of libraries might be simple to understand the full impact of IT. David Jones, a library building consultant and manager in Australia, once expressed his view of public libraries at the Country Public Libraries Association of New South Wales Conference at Wollongong in 1997.

Far from becoming time capsules, libraries are able to be time machines, spanning centuries, adapting to changing roles and new demands and with resources old and new...They will need a physical place for all this to happen.⁴

Quoting J. Cram's saying 'In cyberspace layer upon layer of potential and limitless perspective replaces the feeling of being grounded that provides us with a sense of security,'⁵ Jones stressed that a physical building is an important anchor in information era. In this context what H. Mackay said is understood in the double-faced feature of IT, 'We live in a society, which depends upon interpersonal communication, and this is increasingly important in an electronic environment which has the capacity to isolate as well as to link.'⁶ Mackay got an insight into the impact of IT on the human life. It is also a trait of human nature that the more isolated we become the more we hope to be connected to each other.

Apart from all these views, currently the growing number of library building projects from all parts of the world has proved plainly enough that physical libraries will never die. For instance, in the UK there were 16 projects

Digital Library: Dreams, Madness, and Reality, Seoul: Min Eum Sha, 1997, pp.33-4.

⁴ David J. Jones, 'Time capsules or time machines? Challenges for public library buildings', The Australian Library Journal, Vol.46 (4), 1997, p.395.

⁵ J. Cram, 'Engaged in triumphant retreat: public libraries and the social impact of the Internet', LASIE, Vol.21(1), 1996, p.6, cited in David J. Jones, 'Time capsules or time machines? Challenges for public library buildings', The Australian Library Journal, Vol.46 (4), 1997, p.397.

⁶ H. Mackay, 'Can we know too much? Information and morality', LASIE, Vol.26 (1,2,3), 1995, pp.6-17, cited in David J. Jones, 'Time capsules or time machines? Challenges for public library buildings', The Australian Library Journal, Vol.46 (4), 1997, p.397.

of new, refurbished, extended and converted public library buildings in 1996⁷ and during 1997-98 there were 23 public library constructions.⁸ In the USA there were 1407 public library constructions for new, additional and renovation projects spanning a six year period, from 1988 to 1993, 590 of these library buildings were new. The total project cost for the new, addition and renovation of buildings was approximately \$ 428,777,578 (£ 286millions).⁹

Opened in March 2000 and called a Millennium library, the Peckham Library in the London borough of Southwark provides further evidence of physical library buildings. The new library has an IT and multimedia centre designed to bring new learning and career development opportunities to residents of the borough, attracting particularly people who have not traditionally used libraries such as teenagers and disadvantaged people. The library, designed by Alsop and Stormer, a leading UK architectural practice, is the culmination of over two years' work and around £6.5m investment.¹⁰ Through my observation in Britain and findings from the literature it is anticipated that this trend will never cease in the next decades.

4.2 Library buildings in Korea

Beforehand, some general problems of the construction of physical buildings of libraries in Korea will be discussed, which might affect negatively the provision of an accessible library.

⁷ Robert Williams (com), 'New Public Library Buildings 1997', *Public Library Journal*, Vol.12 (5), September/October 1997, p.105.

⁸ Public Library Group of the Library Association, '1999 Public Library Buildings Awards', *Public Library Journal*, Vol.14 (4), Winter 1999, p.105.

⁹ Public Library Buildings 1993, *Library Journal*, Vol.118 (21), December 1993, p.64.

¹⁰ The Library Association and the Library Information Technology Centre, 'Talis to supply landmark library', *Library Technology*, Vol.5(3), June 2000, p.37.

4.2.1 Few architects in library projects

Not very long ago architects in Korea started showing their interest in library buildings, particularly public library buildings. Statistics show that the number of public libraries in Korea has increased by more than six fold in less than two decades: 61 in 1985 as against 380 in 1999. This figure may be considered insignificant if compared with 4260 public libraries in Britain. It is encouraging to report that the present government of Korea (in recognition of the importance of public libraries in the cultural infrastructure of Korea) is determined to increase the number of public libraries to about 750 over the next decade.¹¹ Besides, a number of existing library buildings both in academic and public sectors have had additions, renovations or extensions mainly due to the increasing need to accommodate IT facilities.

Although anticipating an increase in the number of library building projects, there are few architects who can create and develop tailored solutions for a variety of public and academic libraries in Korea. Until 1995 there were no skilled architects specifically learned and trained in library projects in Korea. This was discovered when an academic from the Hong Yic University, the top university in Architecture in Korea, brought a Japanese architect to have a casual look at the National Library of Korea in 1995.¹² During the library tour the Korean academic said he was probably the only person in Korea with an interest in library buildings. However, his interest was purely personal without any experience or knowledge of libraries. In Japan, however, there were already several architects in this area. In Western countries especially in Britain with a long library history — 150 years of public libraries in 2000 — there is a number of architecture practices which have knowledge and skills in library building projects.

¹¹ The National Library of Korea, *Newsletter of Libraries*, Vol. 8(7), 1998, p.10.

¹² At that time I was working for the National Library of Korea and I had the opportunity of

4.2.2 Lack of interest of library professionals

Library professionals in Korea seem to pay little attention to library design and planning. It is a pervasive thought among library professionals in Korea that the subject, library building, is for men. Like many other countries librarianship in Korea is a woman-domain job. It is estimated that approximately seventy per cent of librarians are women. This figure would reach eighty per cent if the number of front line librarians is considered. However, librarians in public services are seldomly involved in the planning of any library building projects in Korea.

When I first participated in an international seminar, 'Library Planning and Design' in 1995 in England, my impression throughout the whole 7 days seminar was that this subject is not for men but for women.¹³ In fact, approximately two thirds of the 15 participants were women. So many things related to design require women's delicacy and elaborateness aesthetically and practically. In addition, I found that there were some blind parts in the design which will never be known to design teams unless persons who have experience in public services give a voice.

After returning home I gave a 60-minute presentation to the staff at the National Library of Korea on a library closing day by summarizing what transpired at the seminar. I noticed no one was distracted during my presentation, every eye fixed on me with enthusiasm. This is my first experience throughout my life in which I have spellbound an entire audience of about 200 for 60 minutes. I reaffirmed that this is never a boring subject to women. From my observation, librarians' involvement in library design should be a precondition if the library can be fully functioned.

A guest speaker from the British Library at the seminar gave valuable and useful information to the participants. She said that one of the biggest

conducting them around.

¹³ Library Planning and Design seminar organized by the British Council, Robinson Library, Newcastle University, England, October 1995.

difficulties facing the design team at the new British Library building project was how to make it well-balanced and harmonious with the next building, St. Pancras train station. The Station is one of the landmark buildings in London built in the nineteenth century using red brick and with a light-green roof. It looked like a castle to me at first sight such as I have seen in fairy tale children's books. The new building had to show not only a harmony aesthetically with the older station but also needed to reveal its identity and unique feature representing the time in which it was built. This seemed a major architectural challenge. The new British Library was also completed in red brick with a light-green roof and shaped like a vessel.

4.2.3 Poor perception by the public

More seriously, the average Korean over 40 years of age has had very little experience of libraries throughout his/her life. Quite a few people might have used their local libraries when they were young but it has always been a place for studying. Therefore when the term 'public library' is mentioned, the first thing that comes to their minds might be a long queue of students with heavy school bags at the entrance of libraries to enter, and a dull looking study hall packed with desks and chairs surrounded by empty walls in silence. Currently most library managers, architects and government administrators belong to this generation.

During my student days in the 1980s in the United States, my personal experience in libraries was a kind of cultural shock. I was utterly numbed at the scene which unfolded out in front of me when I first visited the central library in Syracuse, New York in 1984, where I used to live. The first thing I noticed were people particularly babies and the elderly. Even babies less than 1 year of age were sitting on their parent's lap and flipping pages with drool running down from their mouths. The elderly were frequently coming and going carrying big plastic bags full of books. Telephones were ringing and librarians moving busily.

Walls were packed with books and information. It was full of life and hustle and bustle. It completely shook the preconception of a library that I had up to that time. I could not stop thinking 'what is a library?'

My experience in Britain in the late 1990s has made me see a library from a different perspective. If the former was about people the latter is about library buildings. As aforementioned, throughout my first tour of libraries in 1997 in Britain, I experienced almost the same degree of shock as I did in America. I admired many buildings I visited for their beauty and elegance of the buildings and their functions. I felt a high level of artistic sense and knowledge in libraries through the creative design, layout, tone of colour, lighting and signage of libraries. Moreover, the most striking feature of library projects in Britain is probably the skill and technique used to convert century-old buildings to hi-tech libraries by blending the classic artistic details with modern functions. It is thought that the Public Library Buildings Awards which takes place every other year in Britain probably has played an important role as one of the instruments for the advancement of specialisation of public library buildings.

4.3 Key issues in library construction

This section discusses key issues relating to the construction and siting of library buildings.

4.3.1 Site

The site for a library has always been significant but nowadays more so than ever before because there are so many other entertaining places that attract people. Home-based entertainment has also increased. More and more people simply cannot be bothered to go to a library. If a library is located in a remote area in order to avoid the crowds and noise it is hard to anticipate the library being used much. But in the 60s to 70s in Korea remote areas were regarded

as good sites for a library because the major role of a public library was to provide facilities for students to study. Unfortunately some library managers and government officers still think a public library should be used primarily as a study hall for students and so they prefer a remote quieter location.

This presents a striking contrast to the situation in Britain, where public libraries are located in busy and crowded places. In the case of a central library it was commonly built in the town centre, an area easy to reach on foot. For public libraries, the nearest possible location is the best. A research commissioned by the Department of National Heritage in Britain in 1995 evaluated the role of London's public libraries in the social and economic infrastructure of the capital city. The research reported that public libraries have been important symbolic components of town centres for nearly a century. The research also found that on the days public libraries closed, the sales of retailers surrounding the library decreased greatly. So retailers regard the area surrounding the libraries as the prime place.¹⁴ Before this research was conducted there was a study about town centre decline and renewal in Britain done by Comedia, an independent consultancy and research organization in 1991. The study looked at twelve town centres in depth at the range of activities they contained, at the people who used them at different times of day and night, and at the strengths and weaknesses of current urban policy. Of the many findings, the role of the public library was strongly pronounced as a central key role in sustaining a lively civic culture. The study described the public library as a 'honey pot' in supporting the mix of retail and community functions, keeping the towns active. Comedia proposed to carry out a national research to take account of the creative opportunities for the library network. So many library authorities in the UK agreed to join a national study on 'The Future of Public Library Service'. As one of the participant libraries Birmingham Central Library conducted a street survey. The result of the survey indicated that 67 out of 100

¹⁴ C. Burton, L. Greenhalgh *et al*, London: Library City, The Public Library Services in London: A Strategic Review, supported by Department for National Heritage, Gloucester: Comedia, 1996, p.38.

people interviewed had visited the central library in the previous 12 months and average daily attendance was 7,000. This figure was higher than for any other venue in the city centre.¹⁵

It is also notable that a few years ago when the British government designated some town centres as Metropolitan town centres the government chose the location of some of London's most 'successful' public libraries for example, Bromley, Croydon, Ealing, Hownslow and Sutton.

This scenario is not limited to the UK. There are many similar accounts in the USA. For example, after the New Hanover County Library in Wilmington, North Carolina opened, the library was found to have contributed greatly to the revitalisation and re-emergence of the old Wilmington. The library was converted from an old department store that had been forced out of the town centre by urban sprawl and the proliferation of strip mall blight into a beautiful, well-designed modern facilities. After many business sectors moved out of the town centre consequently the town centre became inactive and lost its vibrancy with life and energy. But when the new library opened close to half million visitors made use of it.¹⁶ The presence of the library in the town centre contributed greatly to the revitalisation and re-emergence of the old town as centre of culture and commerce.

As well as being easy to reach, library sites should be clearly visible. They should not be obstructed by other buildings or be an anonymous component of a larger complex.¹⁷ The site has to allow the library to be associated with other community facilities, such as museums, exhibition spaces, theatres, cinemas, recreational facilities, cafés etc. Or they should be on the high street, next to retail and commercial sites or shopping centres. On these sites there are both economic and social advantages in sharing infrastructure,

¹⁵ Birmingham Central Library, Comedia Case Study, the Central Library, A Study of Birmingham Central Library in the City Centre, Gloucester: Comedia, 1993.

¹⁶ Dan Horne, 'If You Build It, They Will Come!', North Carolina Libraries, Summer 1997, p. 85.

¹⁷ David J. Jones, 'Time capsules or time machines? Challenges for public library buildings', Australian Library Journal, 1997, Vol. 46(3), pp.397-8.

such as parking space, and it is the valuable combination of learning and leisure, of business and pleasure, which provides a central meeting place for all citizens.

4.3.2 Identity

The physical appearance of library buildings should be somewhat different from schools, police stations and factories. Libraries should never become just another roadside building. Library buildings should give some clues about the functions and facilities they offer to affirm their identity. There is much more to exposure than just putting up a sign. The important issue that must be addressed is 'what are libraries for?'; what kind of message should be revealed by the building? Particularly public libraries should convey the image and identity of the community. Nowadays some architects provide a strong visual orientation by using glass to expose what is inside. Identity can be signalled in some cases by making parts of the building transparent to show the library activities and to give a view into the building.

4.3.3 Form follows function

Architecture is the business of compromise which should be accomplished through the dialogue between architects and librarians throughout the entire process of design. It is important to keep in mind that function should never be sacrificed to any other things.¹⁸ The compromises may occur more frequently during a renovation project than a new project in order to gain as much building functioning and flexibility as possible. But architects prefer function to follow form because they want to give some impression of the building aesthetically. Chris Batt, former Director of Croydon Library in London, expressed his feelings

¹⁸ William R. Burgin, 'Fashion Your New Library from Old', North Carolina Libraries, Vol.55 (2), Summer 1997, p.64.

during the library building project, which is one of the most prominent public library buildings in Britain converted from the town hall during the last decade.

The various feelings and impressions which I have acquired over the period we worked with our design team clicked into sharp focus when I started watching a BBC2 series entitled *How Buildings Learn*. The premise of the series is that successful buildings adapt and are remodelled by the occupants over time and that too frequently the architect tries to produce a work of art which fulfils needs having nothing to do with the occupants or building's uses. 'Form follows function' is the phrase which the designer Buckminster Fuller coined to stress the need to understand that design is about delivering useful products. There are many architects which would prefer function to follow form. As the BBC2 programme reported, architects have deliberately designed dysfunctional buildings to stop the occupants from finding ways to mould them better to the desired use. Two interesting statistics - in a survey of new buildings - only one in ten architects had "revisited the scene of the crime"; and 70% of building users were unhappy with the design and utility of the buildings and their systems (signage, air conditioning and the like)!¹⁹

Batt concluded that the relationship created between library staff and the architect as they set out on the journey together is going to have a major impact on the building which emerges at the end of that process.

4.3.4 Design for all

There are many aspects of the expression 'design for all' such as Universal design, Inclusive design etc. The principle of all these terms is that buildings, facilities, equipment and services of libraries should be able to be used by anyone. There should be no barriers to use for disabled people, older people, pregnant women, children in buggies, tall people, short people. Therefore good design is to enable all people to function equally. But in reality it is very rare to have buildings, facilities, equipment, goods and services which are made to suit disabled people equally with able-bodied people. There was an interesting

¹⁹ Chris Batt, 'The Cutting Edge 32', Public Library Journal, Vol.12(4), July/August 1997, pp.88-9.

finding presented by the United Kingdom Institute for Inclusive Design (UKIID). The UKIID found that the typical manufacturing executive and designer in Britain is male, 35 years old, six foot tall with size 10 feet and has all his strength, dexterity, mobility, hearing and eyesight intact.²⁰ This is never a local matter limiting to the UK but it is universal. In any society the standard of all sorts of things is made for people without disabilities. But this norm is now being greatly challenged by the movement of inclusive design and more and more people believe that good design for disabled people is good design for everybody. Acknowledging the importance of inclusive design nowadays many initiatives for inclusive design are being made around the world. For example, in Britain design textbooks of the GCSE (General Certificate of Secondary Education) are being revamped to ensure they contain principles of inclusive design.

Good design should facilitate disabled people being as independent as possible. When mainstream libraries make their buildings, facilities, equipment and services accessible to disabled users independent access is essential. There is often an unstated assumption that people in wheelchairs or blind people will have a non-disabled 'escort' with them at all times to help them negotiate inaccessible or difficult buildings.²¹ But in well-designed buildings or facilities disabled people do not need assistance at all and they could even feel as normal as any other people by using them independently. In many cases the disabilities of disabled people are caused not by their impairments but by an inaccessible environment. Therefore design for all is the most crucial issue in any kind of library. There will be a great frustration for disabled people when they cannot use their abilities due to the inaccessible environment.

To design buildings which allow disabled people to get around easily by themselves in the library and to use facilities independently is not easy but it is not impossible. Sometimes there are differing and even conflicting needs

²⁰ Sally Brown, 'Design for all', *Disability Now*, November 1999, p.23.

²¹ Christine Pickersgill and Gateshead Access Panel, *Design to Enable*, Gateshead, England: Gateshead Access Panel, 1997, p.7.

among people with disabilities in mainstream libraries. Different disabilities bring different needs; even persons with the same type of disability experience different specific effects. In a facility which serves only one disability group, design problems are solved relatively easily but in mainstreamed environments some needs of certain persons directly conflict with the needs of others. Therefore careful consideration should be given on the design of buildings or facilities in mainstream libraries in order to accommodate various people with or without disabilities.

4.4 Barriers to the accessible library

In Korea the *Act on Installation of Convenience Facilities for the Disabled* passed in 1997, requires public buildings to be safe and convenient for disabled people to gain access into and within the building. Since then, many changes have been made here and there in the country. Tactile paving has been installed more than ever before on the roadside for blind pedestrians. At many underground train stations newly installed lifts are catching passers-by' eyes. Besides, it is noticeable that many buildings have posted the international symbol of wheelchair accessibility by installing ramps or removing the kerb at the entrance of the buildings.

Nevertheless, the views of disabled people indicated that all these visual changes have not made any difference to them. During my research in Korea I found that some facilities and equipment which have been installed for the use of disabled people do not function properly. Some ramps which rose more than standard, for example, installed at the entrance looked so steep that a wheelchair might fall over. As another example, a university library installed a ramp at the entrance and a symbol of wheelchair accessibility was placed on the wall. But unfortunately as I passed the entrance door I immediately faced the stairs standing formidably, with no lifts anywhere. Besides, a librarian working for a special library for the blind told me that in many public places

nowadays some brief instructional information written in Braille for blind users is seen, such as on the lift control panel, but most of them are not accurate and some were even placed upside down. A blind man criticised the poor installation of tactile paving which is placed parallel with the road to help blind people to walk safely. He said that if you followed tactile paving you without fail hit a tree or get stuck. Sure enough some tactile paving installed at crossroads was placed to lead blind people directly to the middle of the road.

In the case of existing buildings or facilities, physical barriers are worse. Recently, a university student with visual impairment said that 'I go to the university and I risk my life... I have to climb up 100 stairs which have no handrails to get to music class.'²²

Overcoming physical barriers to access for disabled people can not be done easily even if the law is enforced. From the foregoing, disabled people still feel that there is a long way to go. The Minister for Disabled people in Britain, Margaret Hodge, expressed her concern 'My fear is that the disability movement will be set back by demands for instant change.'²³ She said that she was impressed by a Scottish hairdresser who decided to learn British Sign Language, not because of the law but out of respect for her deaf clients. Understanding the difficulties of disabled people is the most important factor when mainstream librarians try to make their physical environment accessible to disabled clients. This is another subject in this context that will be discussed in Chapter 6 in detail. Besides of the lack of understanding, there are varying factors which cause physical buildings to be inaccessible. Some common problems which exist currently in Korea will be discussed.

²² The Hankook Ilbo (a major daily newspaper in Korea), 8 June 2000, p.30.

²³ Margaret Hodge, 'A step at a time', Disability Now, November 1999, p.17.

4.5 Problems of physical barriers in Korean libraries

4.5.1 Enforcement of legal requirements

Although the *Act on Installation of Convenience Facilities for the Disabled* has taken effect there are few library practitioners who know the requirements of the law. Even newly constructed library buildings are not accessed by people with mobility problems.

The penalty which is imposed on those who do not comply with the legal requirement is five per cent of the total cost of the personnel and material resources which will be spent on it. As the amount of fine is not too much, people prefer paying fines to meeting legal requirement.

From an economic aspect if from the planning stage of library constructions inclusive design is sought by the design team the total cost for an accessible library is not much different from that for buildings which are inaccessible. For example, in the USA after the implementation of Americans with Disability Act (ADA), it was found that approximately three per cent more was spent on new buildings which were accessible. In addition, the mental level of satisfaction of the building was quite high both for the employers and employees.²⁴

Apart from the cost, renovating old library buildings to make them accessible is a greater challenge than in constructing a new one. For instance, there were thirty seven separate sections of work, in fifteen phases when renovating the Hartly Library at the University of Southampton in England during the 1980s. Each section had a required start and completion date within the overall contract period of 25 months and within the contract sum. The usable floor area of its building was 6,000 square metres with approximately 1,000,000 volumes; every volume in the library was moved at least once, and

²⁴ Kwang Yun Seo, 'General Study for Access', Planning for an Effective Accessible Facility for People with Disabilities, Seoul: Korea Research Meeting for A/P Decade, 1997, pp. 3-4.

some three times and every staff member had a change of office accommodation as a result of the project.²⁵ Due to the renovation of the old building this library probably required the maximum financial cost and human effort but for even a new building if it is inaccessible the effort and cost of refitting will never be small.

To avoid human effort and financial resources the law should be enforced by employing varying tools to stop the current practices.

4.5.2 Consultancy with disabled people

As shown above some provisions made for disabled people have failed to be suitable for use by the very people it was intended to serve. This is because these provisions were made without consultation with disabled people. There are many examples where buildings have been designed and constructed without consultation with disabled people. Consequently, the work has simply wasted money and effort.

On the contrary, there are many good practices by consulting with disabled people in the provision of an enabling environment for them. For example, when Harrow library service - Harrow is an outer London borough²⁶ with a population of approximately 200,000 having 11 library service points - planned to include disabled people into their services, they first contacted the Chairman of the Harrow Association for Disability (HAD).²⁷ There was no guidance as to what to do after a working party was set up. They soon realised that they did not have expertise to carry this out alone. So they knocked on the door of the HAD and by the chairman's suggestion they contacted the

²⁵ Bernard Naylor and Robert Chambers, 'University of Southampton: the Hartley Library', *European Research Libraries Cooperation*, Vol.7 (1), 1997, p.197.

²⁶ Borough is a district within a large city, which has its own council. There are 33 boroughs in London.

²⁷ Hilary Wigmore and Deirdre Morries, 'Opening doors to disabled people: improving services for the disabled library user', *The Library Association Record*, Vol. 90 (3), 1988, pp.153-6.

borough's Access Officer, from whom they received technical advice. The two men visited each of 11 libraries in Harrow in order to assess their accessibility for people with varying degrees of disability. The working party devised a questionnaire which covered external access, beginning with the car park and extending to the internal access to library materials, catalogues and toilets etc. The two experts visited the libraries over a period of several weeks. Every library required some work, but this varied from some which with minimal work could be made fully accessible for people in wheelchairs to others which could be made accessible to ambulant disabled people only. The libraries were divided into three groups according to their accessibility: easy (4 libraries), moderate (5 libraries) and difficult (2 libraries). Then the libraries were prioritised according to four criteria. First, libraries in the easy access group requiring only minor improvement would be promoted. Second, libraries were chosen on the basis of achieving a geographical spread throughout the borough. Third, the busiest libraries were accorded a degree of priority, as they could benefit the greatest number of users. Fourth, libraries which housed special collections for example the Central Reference Library and the local history collection, were placed high on the list. Subsequently, the improvement work was costed and a report prepared for the Leisure Committee in the local authority. It was finally agreed that a certain amount of finance should be made available in consecutive years.

A good starting point when planning is to gather information about the special features and particular needs of different disability groups. As librarians lack a clear picture of the needs of disabled people, the best people to talk to about disability are the persons with the disability.²⁸ Consultancy with disabled people is invaluable in either new constructions or any renovations. But being disabled in itself does not qualify one person to give advice on behalf of all disabled people. What is required by a wheelchair user, for example, may not

²⁸ Cathy Evans, 'A chance to welcome more users', The Library Association Records, Vol.99 (6), June, 1997, p.22.

be the same design as that required by a blind person. Adapting or building a structure to be fully accessible and 'usable' can be expensive. Therefore to ensure an accessible environment, the only way is by involving groups of people with varying impairments at all stages of the planning and design process.

4.5.3 Practical guidance

There is a lack of practical guidance to help libraries in the provision of a physical environment to allow disabled people access to their buildings, facilities and services. Particularly when physical changes in the existing environment are needed, it is very difficult to decide what is the best solution within the limited space and finance. I found many existing buildings in Korea which had recently installed ramps at the entrance and the work seemed to be stopped at the entrance. Inside the buildings there was no sign of continuing work for a way finding of a wheelchair from the entrance. Again each building has different layout. At first glance with untrained eyes, every building seems to require a different solution.

There are different ways to overcome physical barriers: by removing the physical feature, altering it, providing a means of avoiding it or providing the services by an alternative method. To accomplish these changes effectively and efficiently in compliance with legal requirement, there should be adequate information and guidance.

There are few librarians who understand the implication and requirement of the current law. In fact the majority of librarians in mainstream libraries in Korea do not seem to realise the very existence of the law. Given this circumstance it is very desirable to have basic design guidance on possible technical solutions in the library sector by highlighting common issues which are likely to affect many libraries.

In this context action by Disability Rights Commission (DRC) in the United Kingdom will be more than sensible. The DRC is an independent body set up in April 2000 by the Government to help secure civil rights for disabled people. The DRC has the double task of protecting disabled people against discrimination (as required by law) and giving information, advice and assistance in varying areas related to disabled people. Over a half of the commissioners of the DRC are disabled. Recently the DRC produced a publication entitled *Overcoming physical barriers to access for disabled customers: a practical guide for smaller service providers*.²⁹ Although the publication is aimed at the commercial sector it is also useful for the library sector. It covers varying areas such as parking, lighting, doors, lifts, stairs, signage etc. Besides, in the UK many local authorities hire Access Officers to give advice and consultancy from several national consulting agencies dealing with accessibility.

4.6 Standards of an accessible library

According to the *Code of Practice of the Act on Installation of Convenience Facilities for the Disabled* public library buildings should meet its requirement in 13 areas for disabled people to access their services. Nine of these are compulsory and four are recommended while libraries in the education sector have twelve areas, ten compulsory and two recommended. They are as follows:

- Pathways towards entrance (both comp.)
- Parking bay (both comp.)
- Ramps or removing kerb at doors (both comp.)
- Entrance doors (both comp.)

²⁹ Disability Right Commission, Overcoming physical barriers to access for disabled customers: a practical guide for smaller service providers, 2000, text is available at <http://www.drc-gb.org/drc/InformationAndLegislation/Page323.asp> (written in Microsoft word 2.0)

- Corridors (both comp.)
- Steps or lifts (both comp.)
- WC
 - Toilets (both comp.)
 - Men's toilets (public. rec. / edu. comp.)
 - Washing basins (pub. rec. / edu. comp.)
- Tactile paving (pub. comp.)
- Guiding facilities for visually impaired people (both rec.)
- Reading desks (both comp.)
- Issue desks (both rec.)

In 1985 in Korea a survey conducted by Jung Pyo Sohn showed that there were 4 public libraries among 44 public libraries, including one national library and its branch, which provided services for people with mobility impairments. A questionnaire of the survey was sent to 93 libraries including special schools and agencies for mobility impaired people, and got 62 respondents. The survey asked about 7 areas in the facilities and equipment for the mobility impaired: parking, ramps, doors, toilets, low issue desks, wider area between shelving, the provision of wheelchairs for use in the premises. The investigation concluded that the overall level of library services for the mobility impaired was very low and pointed out some problems such as the low interest of library services in the mobility impaired, the lack of government support and no regulation for library facilities and services for these client. He recommended reforms in the area of library facilities, equipment and services. These were entrance, doors, aisles, ramps, toilets, lifts, public phones, reading desks, shelving, cataloguing box, special equipment such as page turners etc.

This was probably the first effort dealing with library services for mobility impaired people in librarianship in Korea.

As a good model, some guidelines aiming for a barrier-free physical environment especially for the library environment will be presented. This is the

culmination of long experience of the Gateshead Access Panel³⁰ in the UK, some from RNIB in the UK and some from the USA. These guidelines covers varying areas in and out of the buildings, such as parking areas, ramps, doors, toilets, lifts, and signages etc. But it is important that all this information is the result of trial and error and cumulative experience in different circumstances. No rules exist which can be applied to any circumstance in library planning and design, especially for a readily accessible library. Each circumstance has unique features and requires different solutions. One good example in a given country cannot be expected to work well in another. Even in the same country and region, all situations are different.

4.6.1 Car parking

Larger parking bays are required to allow people with limited mobility, in particular, wheelchair users to get into and out of their cars with the minimum of difficulty.

- The location of accessible bays should be clearly signposted from the car park entrance.
- The width of 3.6m is required because wheelchair transfer may be needed from the drivers or the passengers side.
- The length of 5m is required because some people store their wheelchair in the boot of the car.
- Bays should be close to the facilities the car park serves - within 50m if uncovered, 100m if covered.

³⁰ The Panel is a registered charity and works with a local authority, Gateshead Council in Britain. The information above is taken from the publication, Designing to Enable, written by

4.6.2 Ramps

Ramps make life easier for people who are not in wheelchairs as well as for those who are. Ramps should be provided wherever there is a need to overcome level changes, but ideally they should be accompanied by steps for ambulant disabled people.

- Wheelchair users and people pushing prams obviously require a ramped approach.
- Some ambulant disabled people find walking down a ramp easier and safer but use steps when going up. Other people will reverse these actions depending on their personal circumstances.
- A ramp should rise no more than 1 inch for every 12 inches of its length. A gradient of 1: 20 is considered level. 1: 15 is adequate and 1: 12 is the absolute maximum. The steeper the gradient, the shorter the length of ramp between landings.
- Handrails should be provided and should be easily distinguishable from their background for the benefit of people with visual impairments.
- Surface materials should be slip-resistant and firmly-fixed.

4.6.3 Entrances door

The main entrance to a building is, by its nature, the most used area of the building and the doors need to be easily accessible, with comfort and without embarrassment to anyone. It is highly desirable that all users enter by the same door. Where in an existing building an accessible alternative entrance is necessary, it should not be sited away from the main entrance.

- Simple to use.

- Automatic doors are preferred but if not, then they should be light enough to be opened by people with restricted strength and movement.
- Automatic doors generally offer very good access for disabled people, but those that swing towards the user can be dangerous.
- Automatic doors should remain open long enough for a slow-moving person to pass through.
- Automatic entrance doors should have a clear opening width of 1.2m which enables a blind person plus a sighted escort or guide dog clear passage.
- All doors must have an unobstructed approach and be clearly visible through the use of good lighting with a lighting transition zone immediately inside the entrance doors. Good design will allow people to adjust from bright outside light to darker interior or vice versa.
- All glass doors and glazed areas must have a coloured or tonal contrasted vision band, 0.15m high, starting at a height of 1.4m above the finished floor level. This ensures that visually impaired people and others know that there is a door in place and not a clear opening.

4.6.4 Steps

Steps are preferred to ramps by some ambulant disabled people.

- Many ambulant disabled people, including blind and visually impaired people, find ramps difficult to negotiate, especially coming down and therefore prefer a stepped approach.
- Steps should be a minimum of 1.2m wide allowing an adult plus their assistant or a guide dog user clear passage.
- There should be a uniform rise for every step of no more than 0.15m in height for external steps or 0.17m for internal steps. Straight flights are easier to negotiate than curved flights.
- Lighting should be located at the side of the flight and should not cause

anyone to negotiate the stairs in their own shadow. A minimum luminance of 150 lux should be maintained.

- A textured surface of raised ribs set parallel to the step nosings should be provided at the top of each flight as a warning to people with visual impairments of the presence of a tripping hazard. These should begin a maximum distance of 0.4m from the nosing at top steps and 0.4m front the bottom step.

4.6.5 Turnstiles and Entrance Barriers

Turnstiles and Entrance barriers, which are used to regulate the flow of users, are inconsiderate, potentially dangerous and impossible to access for the following people:

- Independent wheelchair users;
- Many ambulant disabled people;
- Visually impaired people, especially if they are not colour / tonally contrasted against their background.

If the flow of users must be regulated, any barriers must have:

- Automatic entry. The disabled should not be expected to ask for the barriers to be removed to gain access.
- At least 0.85m clear opening. A wider opening than this is preferred for anyone accompanied by a guide or a guide dog.

4.6.6 Passenger Lifts

Lifts are the only means some people have of accessing the various floors and levels of a building. Such people include those with arthritis, elderly people, anyone who finds difficulty in breathing, people with children in pushchairs as well as people in wheelchairs. The appropriate size for a passenger lift is determined by the needs of wheelchair users. Lifts of various designs can be

used to enable the users of a building to achieve full and independent access to all parts of the building. The 'lifts' used in this context are different from those attached to the steps in the subway stations in Korea. In American English a lift is called an elevator.

- The minimum sizes of a lift are of 1.1m x 1.4m and clear opening doors of 0.8m. This size of lift in English has now become commonly known as the Part M Lift. As the length of a standard wheelchair is 1.14m this means that the wheelchair user has to enter facing and reverse out - there being no space inside to circle or perform a three-point turn. The preferred size of a lift with dimensions allowing a turning circle should be at least 1.6m and with a clear width opening of at least 0.85m.
- It has to be accepted that in some buildings only a small lift can be accommodated and in such circumstances it is obviously better to have the Part M minimum standard version than none at all.
- Inside the lift, to avoid visual confusion, internal walls, including pictures and advertisement must be of non-reflective material which contrasts with the floor covering.
- Internal lighting should be of a maintained illuminance of 150(lux).
- Lift control panels must be set between 0.9m and 1.2m above the finished floor level and 0.4m away from front wall. This allows wheelchair users a choice of approach.
- The button must be at least 0.03m in width; be colour / tonal contrasted to the panel it is set on which, in turn, must contrast with the wall; be indicated with embossed tactile text / numbering / bell symbol above the button or to the side, so that blind and visually impaired people, do not press the button whilst attempting to discover the floor numbers; where possible, be indicated in Braille beside the embossed tactile numbering / bell symbol.
- Audible / Visual Information must include: audible / voice feedback of the floor reached, door closure warning and direction of travel (to relieve the stress of

blind and visually impaired users); visible feedback set above head height, showing the floor reached and the direction of travel (to relieve the stress of deaf people, hard of hearing people, elderly and everyone else); a flashing light to show that the alarm bell has been activated once the alarm button has been pressed. This is for the benefit of deaf people who will not be able to hear the sound of the alarm bell.

- Emergency Telephone must be accessible to ensure the peace of mind of all users of the lift. The top of the handset and keypad should be no higher than 1.2m above finished floor level, allowing full use by wheelchair users and others; the telephone number and extension should be in the largest type size possible and no less than 0.01m high; have an emergency alert which activates once the handset is lifted. A much better facility is, of course, to include a textphone so that deaf people and others can communicate and receive comfort from the person answering the emergency condition. Textphones are being installed in American lifts.

4.6.7 Toilets

Accessible toilets are essential for the freedom of people with disabilities. Independent use should always be provided for. Some people will need assistance but this should arise from their needs rather than being imposed by the design of the toilet or its facilities.

- Ambulant disabled people and elderly people may need more support rails for balance.
- The grabrails must be colour / tonally contrasted to their background colour and fitted to either side of the WC. For aesthetic reasons both vertical and horizontal rails can be combined to form an 'L' shape.
- Visually impaired people need good colour / tonal contrasting and lighting.
- Blind people need the extra room in the compartment to accommodate their

guide dog.

- Accessible toilets should be as aesthetically pleasing as other toilet facilities and not made to look clinical.
- Visually impaired people will be assisted to locate fittings and equipment by, for example, the use of non-gloss tiles with contrasting coloured bands of tiles or single tiles, to highlight fittings. Two bands of coloured tiles around the compartment will highlight the difference between floor and walls, and allow handrails, light switches etc to be more easily highlighted against their background. One band should be placed at floor level and one at 0.75m.
- The minimum dimensions for either left or right-handed type of accessible toilet are 2m x 1.5m. The door should be outward opening so as not to interfere with the usable space.
- Toilet seats should be a dark colour in contrast to the light colour of the WC for the benefit of visually impaired people.
- There should be at least one compartment fitted with a higher than average toilet, that is, to be a height of 0.55m. This is of great assistance to anyone with hip / knee replacements, some elderly people, people with artificial or paralysed limb(s) or someone with arthritis and pregnant women who can all find sitting on / rising up from a standard toilet difficult if not impossible.

4.6.8 Floors and Walls

The selection of surfaces is of considerable importance to people with visual impairments, hearing impairments and mobility impairments. They can make the difference between a building that is easy and comfortable to use and one that is confusing or a struggle.

- Sound-absorbing carpeting lessens background noise to help people with hearing impairment and carpet also keeps the floor warmer and prevents children from being hurt if they fall.
- Glossy floors and walls cause reflections which can mislead people with poor

sight.

- For easy wheelchair movement deep pile carpets should be avoided. As a general guide, the harder a carpet feels the better it will be for wheelchair users. Compressed-fibre or low-pile looped type of carpets are preferred. Heavily ribbed carpeting should be avoided.
- Junctions between different flooring materials should be carefully detailed so as not to provide an obstacle to wheelchair users or a tripping hazard for ambulant disabled people or people with poor sight. Even a 1cm lip can cause acute pain to some wheelchair users, and be a hazard to some ambulant disabled people.
- Textured surfaces are important in providing information to people with little or no sight. Textured floors can warn of hazards or impart directional information.
- Wall covering should not be busy or distracting for people with hearing impairments who have to concentrate when lip-reading a speaker standing against them.
- Floor surfaces should be slip-resistant. This is of particular importance to people who use walking aids such as sticks or crutches, and to older people.
- Bright boldly-patterned floors should be avoided as they can create a confusing impression for people with visual impairment.

4.6.9 Furnishings

Disabled people use furniture heavily. Many of them use it as leverage to raise or lower their bodies and to support themselves when standing. All furniture must be sturdy and stable.

- The top of the enquiry desk must be of non-reflective material to avoid glare and have a slightly raised front edge. This assists people with limited use of their hands and visually impaired people when they are picking up small

items.

- Some parts of the desk should be at a low level for use by wheelchair users, people of restricted growth and children with 0.8m height to counter top from floor level and 0.76m height underneath of counter top. These dimensions allow wheelchair armrests to go underneath the top so that wheelchair users can approach the desk.
- Slanted tables help people with visual impairments by bringing the work closer and minimising distortion and reflection. Some people need a handle on the table to stabilise themselves with one hand while they work with the other. Some tables must be high enough for wheelchair arms to slide under. Tables with adjustable heights may be preferred. Alternatively, the library can provide tables of different heights, or plywood desk/table tops to fit temporarily to a wheelchair.
- Wheelchair users should be able to pull a chair out of the way easily and quietly. A reading chair or stool should be neither so heavy that it cannot be moved with relative ease, nor so light that it falls over when it is pulled.
- Chairs must be at least 0.5m high to the top of seat pads. Some higher chairs at 0.55m should be provided. These are needed by many elderly people, pregnant women and people with arthritis who have difficulty bending without pain and cannot rise out of their chair without rocking forward.
- Some of the seating should have armrests which extend to the front of the seat to ensure the chairs do not tip over under pressure. This will greatly aid disabled people and elderly people sitting and rising.
- Chairs must not be of the lightweight plastic patio type which easily tip when being used as a lever for standing.
- A space of 1m wide x 1.4m deep should be left beside seating for wheelchair users to sit alongside other visitors. A minimum clear passageway of 1.2m will be required leading to this space.

4.6.10 Signs

Library users derive a great deal of information about the library through signage. Signing should be integrated into the design and not be an ad hoc response to needs as they arise. A sign is something that indicates a fact or a condition and is intended to convey simple information or a short command. Signage can be both a help and a hindrance. Good signage allows patrons to work independently; poor signage frustrates users and wastes time. Providing inadequate or poor signage can force some individuals, who may prefer to work on their own, to reveal their disability and ask for help.

- Throughout the library, signs should be easy to read.
- The language used for signs should be user friendly and lower-case lettering should be used except for the initial letter.
- The number of signs must be kept to a minimum to avoid confusion but sufficient to create a consistent chain of information easily understood. This will ensure that time is not wasted in reading unnecessary words which may be time consuming and dangerous in an emergency situation.
- Embossed letters, raised pictograms and direction arrows help people with visual impairments.
- The position of signs is important as a visually impaired or blind person may need to get as close as possible to the sign to see or read it by touch. The height of tactile / close-viewing signs is 1.6 m to the top of the sign above floor level falling no lower than 1.3m with a clear space in front of 0.5m.
- The height of lettering on tactile / close viewing signs is recommended at a minimum height of 0.05m for all lettering on signs. Seventy per cent of people with a visual impairment can read lettering which is 0.05m high from a distance of 1.5m if good design practice is followed. The RNIB recommend the minimum size of character heights on tactile signs must be 0.025m because below this the embossed text will lose definition. Where the viewing

distance is 3m the minimum height of text should be 0.1m to a maximum of 0.17m. Where the distance is different, the height of the lettering should be worked out on a pro rata basis (0.033m per metre viewing distance)

- A visually impaired person will appreciate the high visibility design of the sign. This means large, easily recognised lettering which is well colour-contrasted, tactile and in a position where the light level is good. The best contrast between 2 colours will be achieved when there is a wide difference in the reflection of the colours.
- For visually impaired persons a sign must have the best possible contrast between the sign, the sign board and its background.

4.6.11 Emergency signs

Much of the research carried out with regard to the use of upper and lower case lettering was because of the need to establish the speed at which people interpret emergency escape signs. Research has shown that:

- Signs which use upper - and lower-case lettering, i.e. Fire Exit is easier and quicker to read than one which reads FIRE EXIT.
- Fire exit signs should use white lettering on a green background.
- Increasing the frequency of fire escape signs assists people with visual impairments.
- Signs should indicate (by use of the wheelchair and running person symbols) accessible escape routes or routes to refuge areas.
- People with a hearing impairment can use visual alarms which should be installed in a building wherever there are audible ones. This is especially important in toilet areas where the person may be isolated and away from the visual signs of trouble / panic.

4.6.12 Colour

White or yellow on black (and vice versa) will give the best contrast but white or yellow on other dark colours also be satisfactory. The background colour has to be chosen with care for example, a dark red colour such as maroon would be acceptable but a lighter shade of red may not. The reflecting properties of any light colour can be used to contrast to a background in the same colour but of a darker tone. For example, light blue on a dark blue background or light beige on a dark brown background would give satisfactory results. The RNIB give examples of the following contrasts to ensure good visibility:

Background	Sign Board	Text / Symbol
Red brick/dark stones	White	Black or dark colour
Light brick /beige	Black or dark colour	Whiter or yellow
White of pale walls	Black or dark colour	White or yellow
Green foliage	White	Black or dark colour

It is said that more people remember red lettering on white signs than green lettering on white. In a 1990 study on 24 subjects there was no difference in reaction to red and /or blue conditions. Research during the experiment disclosed that it is not hue but chromatic strength that affects reactions to colours. More vibrant colours elicit stronger reactions. The colours and patterns chosen should co-ordinate with the library's design and colours, but it should be remembered that those with vision problems need a strong contrast between lettering and background.

4.6.13 Print guidelines

14 point type size for all documents is recommended. The minimum that should be used is 12pt. Most visually impaired readers prefer a typeface like this one (Arial) to one with serifs, such as Times New Roman. Besides, the type size, contrast and spacing are all just as important.

- Type is preferred. Handwriting can be difficult for people to recognise.
- Unusual or indistinct typefaces should not be used.
- Numbers should be clear. Blind and visually impaired people can misread 3, 5 and 8 in some typefaces and 0 and 6 can also be confused.
- White type on black or another dark colour is a good way of emphasising headings or sections of text, providing the text is large enough.
- Black type on white or yellow paper gives the best contrast.
- If other coloured papers or print over tints are used, very pale colours should be used for the background.
- If dark coloured inks are used for type - strong greens, blues, reds and browns can all work well on pale backgrounds.
- Red and green colours should not be used together. About one in twelve men and one in two hundred women are red / green colour blind.
- Words should not be printed over a photograph or illustration.
- A plain, relatively thick, paper should be used for printing on. Glossy or art papers can reflect light back and make it difficult to read.
- Paper should be thick enough (normally 80 grammes or thicker) to ensure that text cannot be seen from the other side.
- Leave a reasonable space between lines so that people can clearly see the difference between 2 lines of text. Leave a clear space between paragraphs so that chunks of text can be easily identified. Be consistent. Only change a type size or spacing where you want to headline, emphasise or draw

attention to something.

- If information is aimed specifically at people who are visually impaired minimum type size should be **16 point bold**. Some readers prefer up to 32 point.³¹

4.6.14 Provision of hearing impaired people

Very often the needs of people with hearing impaired people have been neglected in the design of accessible libraries. The experience of the deaf has often taught them that libraries are embarrassing and uncomfortable places. For instance, a deaf library user who having been directed to the first floor of the library, found herself unable to get the lift door to open at this floor. After unsuccessfully attempting to force the doors open, she returned to the information desk to discover eventually that at the first floor the lift doors behind her had been opening but she had been unable to hear them. Meanwhile, bemused library staff and users had witnessed her trying to force the doors at the back of the lift open.³² For hearing-impaired people the visual signs and visual alarms are necessary, not only for their practical applications but because their presence increases a deaf person's sense of control in unfamiliar surroundings.

According to the New York Library Association's guidelines, 'Guidelines for Libraries Serving Persons with a Hearing Impairment',³³ which comply with the New York State Uniform Fire Prevention and Building Code, the following provisions for people with hearing impairments must be included in new construction and major alterations, additions and conversions:

³¹ Interview with Mrs. Kath Gaster, A librarian at the Linden Lodge School, London, April 1998.

³² Karen McQuigg and Jennifer Khan, 'The Helping Hands Project: Exploring Public Library Services for the Deaf and Hearing Impaired', *Link-up*, June 1996, p.8.

³³ New York Library Association, 'Guidelines for Libraries Serving Persons with a Hearing Impairment', *Library Trend*, Vol.41 (1), Summer 1992, p.165.

- In all buildings in which fire alarms are required, such alarms must be audible and visual.
- All public phones in buildings must be equipped with receivers that are T-switch compatible. In banks of phones, at least one must be equipped with a volume control.
- Areas of public assembly with audio-amplification systems must also have listening systems to assist persons with a hearing loss e.g. audio loop or FM system.³⁴

Deaf people should benefit from technology, such as Minicoms (also known as text phones or TTD). This enables a deaf person to send messages through a telephone line by means of typing messages on a keyboard to another minicom user. The person is able to see both their own and incoming messages displayed on a liquid crystal display screen. Text phones (Minicoms in Britain / TTDs or TDDs in America) are installed in most public libraries in both countries.

Fax machines can be invaluable to some deaf people and speech impaired people. These machines are heavily used by hearing impaired people in libraries in Japan because textphones have not been developed yet in this country. In Japan deaf people prefer fax machines because they use a lot of Chinese characters in the communication.³⁵ It must be remembered that to some people a fax transmission is not correspondence but is a telephone call and should be responded to it immediately.

4.6.15 Provision for visually impaired people

Careful consideration should be given in particular to the layout of a building and its facilities. It must be set in a logical and consistent manner as follows:

³⁴ New York Library Association, 'Guidelines for Libraries Serving Persons with a Hearing Impairment', *Library Trends*, Vol.41 (1), Summer 1992, p.165.

- Any approach, whether in the street or inside a building must be unobstructed;
- The surrounding furniture must be colour / tonally contrasted against the background. Below the knee pieces of furniture including coffee tables must be avoided as they are a particular hazard to blind and visually impaired people;
- Never place any object higher than 0.65m above finished floor level. This is because a person using a stick to detect objects in front of themselves will only detect those below this level and will walk into the obstruction placed higher, for example, a dispensing machine hung on a wall;
- Corridors - it will greatly assist blind and visually impaired people and people with learning difficulties to travel easily and without confusion along a corridor if:
 - All doors in a building have handles that turn in the same direction.
 - Where all the doors are of different widths, the wider / narrower door is always on the same side throughout the length of a corridor and building;
 - Changes of direction are at 90 degrees. Avoid curves and oblique angles.
- All stairs must be set at right angles to corridors and landings so there is no chance of blind and visually impaired people walking onto them in error.
- The ground surface can be a source of information for blind and visually impaired people and tactile paving has been developed for this very purpose. The different profiles on the paving have different and very specific meanings.

Conclusion

Library buildings are used by people. The users of the buildings should feel

³⁵ E-mail from a deaf librarian in Japan in April 1999.

comfortable and safe when using them. It is good design if as many people as possible can use the building without being obstructed. Apart from the functional, aesthetic aspects of the buildings also should not be overlooked. In the near future it is anticipated that library buildings, facilities and equipment will be a topic attracting Korean library professionals, architects and vendors as long as new library buildings are constructed and existing buildings are altered to become barrier-free. There are many positive factors which encourage this view. For the past two decades people with disabilities have shown their abilities remarkably in society. One of the most noticeable achievements in Korea was to enact the *Act on Installation Convenience Facilities for the Disabled* in 1997. It was the result of the effort of disabled people to push parliamentarians to enact the law which secures their rights of accessing physical buildings, facilities and services which have been granted to others for a long time. The same power of the disabled people will be shown to those who do not comply with the law. Not the requirement of the law but understanding the needs of reading and information of disabled people library professionals should make every effort to make barrier free libraries. Within limited resources the best solutions should be sought by sharing ideas and experience with others and also consulting with disabled people. If so, money will never be the biggest barrier to making libraries accessible.

Chapter 5

Information Technology factors

Introduction

This chapter looks at the many aspects of information technology, which may provide mainstream libraries with opportunities to open their doors to disabled people, particularly visually impaired people.

As mentioned in Chapter 4 most of the renovations and extensions of public and university libraries in Korea were due to the need to accommodate IT facilities and devices. It is a strong trend in the library community of Korea, particularly in university libraries to set up multimedia rooms equipped with hi-tech devices. For example, recently a university library opened a new multimedia room, located in Kyungsang province in Korea on 19th November 1999. The room consists of a satellite TV corner with 13 channels including BBC, CNN and NHK, an audio corner, a multimedia PC corner with a VOD (Video On Demand) system and a multimedia production corner with 6 sets of PCs with scanners, CD-RW (Rewrite) and varying multimedia production tools. The library also plans to increase the contents of VOD by producing videos for in-house courses of both introduction and special courses.¹ Some libraries even have two separately named rooms: 'Multimedia Room' and 'Information Centre'.

Electronic publications and access to electronic information have become the norm in our society. But few people know that even totally blind people are able to use computers and access the Internet by using special

¹ The National Library of Korea, 'News', Newsletter of Libraries, Vol.9 (10), 1999, p.12.

assistive technology. Unfortunately, no university library except one² in Korea, which has installed IT facilities, recognised the existence of assistive technology for visually impaired computer users. A blind university student in Britain said 'It was a great thrill the first time I was able to write an essay for university, check it myself for errors, correct them and print it out on an ink printer.'³ A blind woman in America expressed her pleasure when she used a Kurzweil reading machine, 'It's the most wonderful thing in the world - I can't describe the joy of putting a piece of paper on the machine and hearing what is there!'⁴. Information technology has made unimaginable impacts on the lives of disabled people. As portrayed by the above examples, the most distinguishable feature brought by information technology is that it has given blind people independence. For the first time they could read texts independently without asking someone else to read it to them. Technology, thus, is the most effective way of overcoming one's sensory disabilities.

This chapter will thus examine the impact of information technology on the lives of people with disabilities. More importantly, given that accessibility of electronic information is particularly dependent upon the design of Web sites, some factors on accessibility of Web site will be discussed. In addition, a variety of programmes and activities related to visually impaired people in IT areas in Europe will be introduced.

5.1 The Impact of IT on people with disabilities

Paul Porter, mentioned above as a blind university student and now Information Superhighway Project Officer at the RNIB in London who is using IT devices

² Daegu University Library installed 2 PCs with speech synthesiser, screen readers and Braille translator software for visually impaired students in the Multimedia Room. A librarian said 'this library is the only one among all of the academic libraries in Korea', when interviewed in July 1999.

Further information, <http://biho.taegu.ac.kr>

³ Paul Porter, 'The Reading Washing Machine', *Vine*, (106), 1998, p.35.

⁴ Ruth Carol Cushman, 'The Kurzweil Reading Machine', *Wilson Library Bulletin*, Vol. 54(5), January 1980, p. 311.

extensively said, 'electronic information gives visually impaired people two of the fundamental freedoms - Independence and Choice.'⁵

Before the time of electronic information becoming available, all reading materials for visually impaired people had to be converted into Braille, talking books or large print. In addition visually impaired people asked someone to read certain materials to them. All of these processes required human intervention and time. Sometimes it might have taken hours, weeks or even years. Moreover, in Braille and tape versions, there has necessarily been a lot of editing. Therefore visually impaired people have been dependent upon what others think they want to read. On the contrary, the electronic materials do not require human intervention; they can be accessed directly by visually impaired people within a matter of minutes when computers are equipped with assistive technology such as, screen reader, speech synthesiser, screen enlarger etc. If a whole newspaper is available electronically visually impaired people can choose however much and what parts they want to read and not what others think they want to read, or to read everything in the newspaper. If visually impaired people can browse an online library catalogue they can choose what they want to read.

Few visually impaired people actually visit libraries to borrow reading materials. The main point of contact to their libraries is the telephone. So often the selection of materials for borrowers is made by librarians not by the borrowers themselves. If on-line catalogues can be browsed electronically by visually impaired people it would give them greater freedom of choice. Elizabeth Hastings, the Disability Discrimination Commissioner, in Australia said when she launched the Print Disabilities Library Access Network (PLANET) in 1996:

It will give our borrowers their independence. For the first time they will be able to browse up-to-date on-line information about our collection themselves, a right which sighted public library borrowers have long taken

⁵ Paul Porter, 'The Reading Washing Machine', *Vine*, (106), 1998, p.36.

for granted. It allows our borrowers to make real choices, choices which are not subject to another's scrutiny or comment or unsolicited advice.⁶

Another great advantage for visually impaired people to access electronic information is the choice of output. Given that the same documents could be converted into varying formats, visually impaired people are eventually able to choose their preferred method of output, whether that be speech, Braille, large print or ink-print (for their sighted peers). Therefore electronic materials may be the ideal solution for visually impaired people wanting greater independent access without spending a great deal of time and money. Electronic materials could also be the only means of an access that visually impaired people have unless print material will remain available in any hard copy alternative formats.

While electronic information offers many advantages to visually impaired people, hearing impaired people may also benefit greatly from this technology. Using a variety of search tools, one can find lots of documents related to deafness and deaf culture on the Web. Information on deafness and deaf culture has grown at an astounding rate since the development of the World Wide Web (WWW) because of the suitability of the WWW as a communication medium among deaf people.⁷ Although sound is now beginning to emerge as a feature on the Web, the Web began as a wholly graphic interface. This feature allows people who are deaf to have access to everything the Web offered on a level equal to that held by hearing people.

As a communication mode, e-mail has provided tremendous opportunities to hearing impaired people to improve their communication level with people with and without hearing problems. A librarian commented on his relationship with a deaf colleague who would lip-read, and would sometimes be left out of the flow of meetings - giving her opinion after colleagues had moved on to another subject. Since e-mail has been introduced, however, the situation

⁶ Edwina Kenrick, 'Printed Disability Library Access Network', *Link-up*, June, 1996, pp.18-9.

⁷ J.M. Day, 'The World Wide Web as an Information Resource for the Deaf Community', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, August 1997.

has totally changed: 'e-mail gives her dignity; she is fluid, fast and intelligent', e-mail is 'a real breakthrough.'⁸

Technology also helps the general public to realise the ability of people with disabilities. In fact, information technology may be more revolutionary for disabled people than for the rest of the population. For the first time, disabled people will have the same opportunities to communicate and to access materials as the rest of population.

5. 2 The impact of IT on mainstream library services

5.2.1 New approach

From a library's perspective one of the difficulties when mainstream libraries offer services to people with visual impairment is the dearth of reading materials in alternative formats. The shortage of alternative materials is a universally recognised phenomenon regardless of which country is concerned. In Britain, for example, of the 100,000 new British titles published each year, only 5 % will be converted into one or more of the alternatives to standard print.⁹ Dick Tucker, IFLA Section for Libraries for the Blind, said that the average amounts of publication in alternative formats in the most developed countries account for 2 % ¹⁰ except for Sweden (25 %)¹¹. As aforementioned, the total of alternative materials in English speaking countries including America, Britain, Canada is

⁸ Yvette Jeal, Vincent de Paul Roper, *et al*, 'Deaf people and libraries - should there be special considerations? Part2: material and technological developments', New Library World, Vol.97 (1126), 1996, p.16.

⁹ The Council for Museums, Archives and Libraries, Library Services for Visually Impaired People: a Manual of Best Practice, London: The Council for Museums, Archives and Libraries, 2000,p.Chapter 10 (10.1.1).

¹⁰ Richard N Tucker, 'How VIPs Read', Paper at SEDODEL Seminar, The Right to Read: Visually Impaired Readers and the Rights Holders, Cristofori Salon, Amsterdam, 1st March 2000.

¹¹ During the SEDODEL Seminar Beatrice Christensen SKÖLD from Swedish Library of Talking Books and Braille said that 25 % of all the printed materials published in the year in Sweden are produced in talking books.

about 310,000 at best. In Korea the production of alternative materials is far less than 2 per cent.

Given the shortage of alternative materials for visually impaired people, some public libraries in Korea have taken action by setting up special units to produce Braille and talking books. As pointed out in Chapter 3 the traditional approach of in-house production of alternative materials could not be an ultimate solution to solve the shortage of reading materials for visually impaired people in light of the information era.

Considering the financial situation of most of the public libraries in Korea, setting up a production unit for an individual library is not practical. Apart from the installation of its facilities the production of alternative materials may be very expensive and very time-consuming. In Korea the actual cost of alternative materials has never been calculated because most of these materials are produced by volunteer workers. Generally the production cost of alternative materials is 10 times higher than for printed sources. But in the case of non-fiction, the cost is much higher. For example, in America the creation of the initial master in good quality for a non-fiction Braille book with charts and graphs can cost as much as \$10,000 (£6,700). A popular audio book may cost as much as \$4,000 (£2,700) to narrate.¹² In addition, an alternative title for a collection can take as long as two years from the point of ordering the book to placing it on the shelf ready for circulation, while printed material may take less than 6 months of its publication at no more than \$50 (£35) per copy.

Even if mainstream libraries can afford these expensive alternative materials they cannot bridge the gap of information between visually impaired people and their sighted peers. New measures should be sought. The provision for visually impaired clients in mainstream libraries must be sought in practical and logical solutions. Instead of producing in-house alternative materials

¹² Rosemary Kavanagh and Michael Moodie, 'Preparing for the millennium: Linking libraries for the print-disabled', Paper to the 64th IFLA General Conference, Amsterdam, The Netherlands, August 1998.

spending too much money and time, mainstream libraries must find an effective way in which they can give visually impaired people.

5.2.2 Opportunities

Along with the development of general computer technology, varying assistive computer technology has also been developed. Assistive or adaptive computer technology means any modification made to standard computer software and hardware to enable visually impaired people to work independently.¹³ A screen reader software, for example, is used to convert the text on the computer screen to speech. By using this software visually impaired people can access computer catalogues, on-line books and journals and literally world wide information through the Internet. Another example is Optical Character Recognition (OCR) which converts printed words into an electronic format that can be accessed auditorily by visually impaired people. Using these assistive technology libraries can allow visually impaired people to have access to both print and electronic resources. What seemed impossible a generation ago is now a reality. Assistive technology will be a real breakthrough for mainstream libraries to open their doors to visually impaired people.

5.2.2.1 Current assistive technology

Most of the assistive technology has been developed for visually impaired people to enable them to use computers and the Internet. In the early 1980s the assistive technology, screen reading software, which reads texts on a computer screen, was developed as various personal computers were developed. With this speech accessible computer software, for the first time visually impaired people could listen to the text they were typing on the

¹³ Daniel Hilton Chalfen and Sharon E Farb, 'Universal Access and the ADA: A Disability Access Design Specification for the New UCLA Library Online Information System', Library Hi Tech, Vol. 53(14:1), 1996, p.52.

keyboard or read back information stored on disk. Now assistive technology has become more varied in types and its quality has also been greatly improved. The first synthetic speech, for example, was very monotonous with robot-like qualities compared with the current technology which is very close to the human voice. In addition the current equipment has varying features which allow a user to control its speed, pitch, emotion, and language with simple controls. Among the access technology the following is the most popular.

Screen magnifiers

Screen magnifiers are software programs that allow partially sighted people to view the contents on a computer screen at various levels of magnification. They are able to magnify as much of the screen as they like by expanding a line, a word, an icon, or the entire screen. It is also able to change the background colour and textual colour to help those with trouble distinguishing a certain colour combination. Some programmes let a user select and magnify a horizontal or vertical band of the screen, or allow a user to zoom in and out of any area on the full screen.

Optical Character Recognition (OCR)

The process of converting printed words into texts on a computer is called OCR. There are OCRs available in DOS or Windows versions. The Kurzweil reading machine is a typical example of equipment using this technology. With these systems totally blind people are able to read print materials housed in libraries.

Screen readers

The screen readers or speech access software are the most common forms of assistive technology which are used with speech synthesis hardware to convert the texts on the computer screen into speech. This technology allows even totally blind people to use word processors, database management, Excel, Web sites and more. Some screen readers work two-way, reading and dictating.

People who cannot use a keyboard or mouse because of limited mobility may use this two-way software.

Speech synthesisers

The speech synthesisers are the hardware devices that actually make the sounds that make up speech. These speech synthesisers should not be confused with sound effects devices which produce music or signals although certain sound cards can be used as speech synthesisers.

Braille displays

Screen readers currently have the most universal appeal among assistive technology. However, for many blind computer users, a Braille display or softBraille is the preferred interface, which is output in Braille. A series of dots can be raised to form Braille characters. Braille displays usually augment a standard keyboard. Blind people use the keyboard as an input device and the Braille display to read what is on the screen. Braille displays use a special eight-dot readout instead of usual six-dot Braille cell to show highlighted items.

Braille translators

Braille translators translate text to Braille. Non-text information such as charts, graphs, outlines or mathematical formulas can not be accessed. There are several packages which are based on DOS, Windows and MAC.

Braille embossers

Braille embossers are printers connected to the computer just like an ink printer, but they punch out Braille. In most cases these printers only print the Braille on one side of the paper. But there are double sided Braille embossers which line up the Braille dots so that the dots punched on the one side of the paper do not interfere with the dots punched on the other, allowing these printers to print on both sides of the paper.

(There are several Korean made assistive technology devices developed by individuals, private companies and associations for disabled people etc. see Appendix 1)

Assistive computer technology devices are often more expensive than the standard ones because of high research and development costs and a small market. But more and more, the assistive technology is becoming mainstreamed. For example, when the first Kurzweil reading machine developed by Raymond Kurzweil in the USA came out in the mid 1970s, it cost £30,000. It was the size of a large washing machine. This early reading machine could only read certain types of good quality print and print on good quality paper. Now the scanning equipment can be purchased for as little as £150. The cheapest scanner technology is now able to read more styles of print than the first reading machine.¹⁴ The price drop of both assistive technology and general technology will be a great opportunity for mainstream libraries to meet the needs of visually impaired people without spending a large amount of money. Appendix 2 shows the current assistive technology devices and their prices presented at two exhibitions of 'RNIB Vision' in July 1998 and in June 2000 held at Kensington Town Hall in London and 'Sight Village' in July 1998 and 2000 held at Queen Alexandra College in Birmingham in the UK.

Given that new devices and systems appear almost daily, these prices will have changed and some of these devices have already become obsolete and redundant technology. Nevertheless this information will be still useful for librarians in mainstream libraries to gain an insight into the scope of assistive technology on the international market and the range of their prices. Besides, RNIB frequently produces factsheets on the major assistive technology currently available in the UK. These factsheets are available on the RNIB Web site (<http://www.rnib.org.uk/technology/factsheets.htm>)

¹⁴ Paul Porter, 'The Reading Washing Machine', *Vine*, (106), 1998, p.35.

5.2.2.2 The existence of IT facilities

Most disabled people in any society are living off a lower than average income compared with the rest of the population. They are the poorest among the poor. Although assistive technology is becoming mainstreamed there is still expensive specialist assistive technology for visually impaired people. This has always been higher in price than general computing equipment. As a result a very small minority of the disabled population currently have their own computers equipped with assistive technology. Therefore there should be locations and facilities of all these technologies available for disabled people to make use of them.

More and more disabled people, particularly young people, are recognising the value of information technology which can free them from their disabilities and dependencies. Nowadays acquiring information technology is becoming a prerequisite either in work or study. Many disabled people in Korea have shown their enthusiasm in learning information technology and finding facilities to use them. When an Internet course was held for visually impaired people in Korea in 1998, offered following the strong request of visually impaired people, there were over 40 participants from across the county. The number of people attending was twice the actual expected number. The two-day Internet course was run free of charge by Nam Jung Paik, Director of the Department of Rehabilitation at Korea Welfare Foundation for the Visually Handicapped on 16-17th July 1998.¹⁵ The course consisted of the following programme:

- Internet and HTML
- From UNIX to Lynx
- Search Engines

¹⁵Nam Jung Paik, 'Internet course', Korea Welfare Foundation for the Visually Handicapped in 16-17th July 1998.

- Related Web sites
- Evaluation

A survey in 1998 in Korea also found that the demand for facilities and training in assistive technology from disabled computer users placed a lot of strain on staff at special libraries.¹⁶ Many disabled people requested special libraries for the blind to give training and to open their facilities and equipment to the public, because these disabled people could not afford their own expensive devices and had nowhere to learn IT free of charge and did not know how to search information they want to find.

Public libraries are the most appropriate public institutions which are able to help to bring this technology to the general population of disabled people, because there is a significant interest from public libraries around the world in connecting to the Internet and providing new services for their communities. For example, as mentioned in Chapter 3, in the UK 43 per cent of public libraries as of 1999 were connected to the People's Network, the UK public library computer network. All of the public libraries (over 4260) in the UK will be connected to the network by 2002. Recently a fund of £100 million named the New Opportunity Fund (Nof) was given to facilitate the People's Network infrastructure in public libraries. The Chief Network Advisor Chris Batt said 'Such generous support from Nof is an unprecedented opportunity and a clear indication that government sees public libraries as crucial to the prosperity and well-being of their communities.'¹⁷

In Korea some public libraries have also shown a keen interest in connection to the Internet. There are already a few libraries which have started new services by providing information about the library, programmes, library

<http://www.kntl.co.kr/KntlWord/Pcline/199608/608ndo07.html> (viewed on 3rd Nov.1998)

¹⁶ Su Jin Paik, The Improvement of the Braille Library Services through New Media, A Master's thesis at Pusan National University 1998, pp.61-70.

¹⁷ The Library Association, 'Funds on the Way', The Library Association Record, Vol.102(3), 2000, p.127. Further detail on the People's Network Online Web Site at <http://www.lic.gov.uk/pno>

catalogues etc through a computer network. There are even public libraries in rural areas of Korea which have few reading resources but have computers.

The existence of IT facilities can be a good starting point for public libraries to open their doors to disabled people. For some disabled people who are not able to buy their own computers public libraries are the best places to meet these needs. It is thought that even in the UK and the USA many library users who access the Internet in public libraries have no other means to access the Internet.

Although more public libraries in many countries are becoming information centres in communities and the places to meet the IT needs of the general public, for people with disabilities the threshold of a public library is still too high to reach. In spite of having IT facilities and providing information public libraries in Korea are not seen as public libraries for people with disabilities by government, the general public and librarians themselves. This was revealed when the Department of Information and Communication in Korea announced a special fund of ₩ 20 billion (£12 million) for IT training of disabled individuals in 1999. The aim of this special fund is to decrease the information gap between people with and without disabilities. Therefore any institutions which are able to offer training for disabled people were eligible to apply for the fund. In the first year (1999/2000), for purchasing IT equipment, ₩200 million (£120,000) will be given to each successful institution and for the next 4 years another ₩ 120 million (£70,000) will be added. Unsurprisingly in its application form a public library is not mentioned in the category of possible institutions, while a welfare centre, an association or agency for people with disabilities, a corporation and a university were mentioned. Nevertheless, public libraries were still eligible to apply for it because there was a term, 'others' in the category. But no public libraries have applied. As a consequence, a considerable amount of money seemed to be given to private computer training agencies.¹⁸

¹⁸ Interview with Head of a special library for the blind in Pusan in Korea in July 1999.

This presents a striking contrast to Britain, where public libraries are seeking outside funds eagerly when they initiate new projects for disabled people. With the application of new technology to reading for visually impaired people, for example, Manchester Libraries planned to purchase a Kurzweil Reading Machine (KLM) to provide services for visually impaired people for the first time in 1982. Given the circumstance that very few blind people are likely to be able to purchase a KRM for their own use they were convinced that public institutions should provide this equipment. So they commenced their services in the belief that the most appropriate public institution to have a reading machine was that which held the materials to read. David Owen who was Director of Libraries in Manchester at that time told the Library Association in Britain how the Kurzweil reading machine was acquired in Manchester :

Our decision a year ago to provide a library service for the 16,500 registered blind and partially sighted people in the Greater Manchester area for the first time was taken in half an hour - all that was needed for the Kurzweil reading machine to prove that it can convert ordinary printed material, books, periodicals, reports and typewritten materials into synthetic speech. It has the ability to read several hundred printed styles and most size of type and we were impressed by the 35 command functions that enable a blind person to control the reading process. In that prophetic half-hour we heard and understood it reading material ranging from specialist local history books published in the 19th century to a history of Manchester United Football Club¹⁹.

The first major problem was to find the money to purchase at least one. The prevailing financial situation was grim and there was no possibility of obtaining the required £23,000 through normal channels. Our answer was to launch a public appeal, and to apply to the Department of the Environment for assistance through the Urban Aid Programme. With the aid of the public and local companies through the appeal and the DoE we were able to raise enough funds to order two machines and took delivery of them in March 1983.²⁰

¹⁹ Currently the most popular football team in the UK

²⁰ David Owen and Michael Henry, 'Technology opens a new world for the blind...' The Library Association Record, Vol.85(12), 1983, p.458.

Consequently, media attention to the Manchester library was inevitable. It is said that staff were pleased when their friends and relatives applauded the merits of this service having seen it on BBC TV's news. The news must have also boosted the morale of the library's staff at all levels.

5.2.2.3 Visualisation

Through my reading and observation it was found that there is a special area in mainstream library services which can attract media attention and increase the visibility of the library in society. As proved by the Manchester Library, initiating new services in a mainstream library for disabled people will never fail to help the library to be noticed by attracting media attention and achieving a 'fame' in the world of libraries. It was easily imaginable how much Manchester libraries were loved and applauded by many people throughout the country who were watching the BBC TV's news, John Craven's Newsround, 'This is Your Right'. This event was not things which could happen only in the 1980s. Still it works! Recently launching the accessible Internet services for visually impaired people for the first time in Britain the Islington Central Library in London has received great recognition. The following are extracts from the 'News Release' produced by Islington Council on 5 May and 11 May 1999 :

The Internet facility, installed at Islington Council's central library, magnifies text and can also scan it and convert it to sound, thereby giving visually impaired people access to information from across the world. The launch is the third stage of a comprehensive, three-year 'See it...Hear it' project designed to enable visually impaired people gain access to a wide range of library and information services through the use of new technology.²¹

On the launching day of a new system, Education Secretary David Blunkett came to offer his support. He said:

²¹ London Borough of Islington Council, News Release on 5th May 1999.

This exciting initiative will create new opportunities for people with a visual impairment. They will be able to use the Internet to continue their studies and personal development, to improve their independence, to shop, surf, or simply to talk to others.

Improving and promoting access to services like the Internet is part of the Government's strategy for achieving comprehensive civil rights for people with a disability. But this will not be achieved by legislation alone. Co-operation is the key to success in this area. People with a disability will only benefit if we all act within the spirit of the law.²²

The cost of the accessible Internet service project was only £2,700 of which £1,500 was provided as a grant by the Ulverscroft Large Print Book Company. In correspondence on 18th May 1999²³ Alan Issler, Principal Librarian, Central Area in Islington stated that they see access to services for disabled people in the community as an integral part of customer care not separate from the rest of residents. But a minimum of three per cent of library budgets has been spent on buying materials for loan and reference. In the enclosed document of the correspondence the Principal of the public library has written 'The fundamental principle of the public library service and indeed Islington Library and Information Service's statement of purpose is to provide equal access to services and information, thereby empowering the local community.'²⁴

The overall philosophy driving the project of the Islington library is that the principle of access must be the starting point. Easy to use and accessible information and communication technology (ICT) empowers the whole community and promotes social inclusion.

In the information era public libraries are in a better position in terms of visibility than any other public institutions in society. Libraries are information oriented service institutions. Moreover having well developed IT infrastructure

²² London Borough of Islington Council, News Release on 11th May 1999.

²³ The correspondence was sent by my request on overall library services for people with disabilities including written policies, library budget, staff training etc. on 23rd April 1999. Prior to this request I had already contacted him on the evening of 'Consultation Meeting for People with Visually Impairment' at Central Library on 22nd September 1998.

²⁴ Leisure Services Committee, London Borough of Islington, Report of the Director of Leisure and Library Services [An agenda item, subject: Improving Library and Information Services to Visually Impaired People Project, on 3rd October 1996].

public libraries look to advantage in their activities. Besides, these days social inclusion is considered as one of the top political issues in many countries. In this context Islington Library has made very timely and sensible actions. It deserves more than visibility.

5.3 Good practices in mainstream libraries

Some mainstream libraries in Western countries have already initiated services for disabled people by setting up a special unit or public area providing accessible IT devices since 1980s. Appendix 3 shows good practices both in university and public libraries.

5.3.1 National level (British model)

At national level in the USA and Scandinavia, library services for visually impaired or print handicapped people have been spearheaded by the central governments through their respective national libraries (see Chapter 3). Unlike these countries the governments of Britain and Korea have some limited interest in the development of library services for people with disabilities. In both countries, all special libraries and agencies providing services for visually impaired people are charities and receive only a small portion of government funds. Neither the British nor Korean National Library has taken a lead in library services for people with disabilities. For these clients library services in many countries are facing similar situations to those that pervade the scenes of the UK and Korea.

Given this circumstance, Share the Vision (STV)²⁵ has been set up as a UK partnership agency promoting library services for visually impaired people and others who experience difficulties in reading print into mainstream library

²⁵ David Owen, Executive Director, Share the Vision, Central Library, Springfield, Maidstone, Kent ME14 2LH. E-mail: sharethevision@hotmail.com

settings since 1989. Although funded by RNIB, NLB and Calibre STV is an independent agency with representatives from the British Library, Calibre, Library Association, National Library for the Blind, Royal National Institute for the Blind, Standing Conference of National and University Libraries, Scottish Library and Information Council, Society of Chief Librarians and Talking Newspaper Association UK. The main purpose of Share the Vision is to enable blind and partially sighted individuals to use their own local library to access reading and information that is available to them regardless of how and where it is produced in much the same way as a sighted person.²⁶

STV began with a national survey to assess current provision and professional attitudes, together with a series of consultative seminars throughout the UK with representatives from individual library authorities. These seminars identified the core programmes and agenda for Share the Vision. Of many programmes and activities of the STV two are more related to Information Technology which will give an insight into the development of accessible library services for mainstream libraries. They are the development of the National Union Catalogue of Alternative Formats (NUCAF) and Pilot Interlending Project (PIP).

5.3.1.1 National Union Catalogue of Alternative Formats (NUCAF)

The establishment of a national catalogue is central to the objectives of Share the Vision in providing equitable access for visually impaired people. The database of the National Union Catalogue of Alternative Formats developed by the RNIB has accumulated 80,000 records from around 230 organisations in 2000. Of these, more than 60,000 records relate to RNIB titles, around 9,000 records relate to NLB titles and around 5,000 to Calibre titles. The remaining organisations all have less than 1,000 records.²⁷ Titles listed in the database

²⁶ Peter Craddock, 'Share the Vision', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, August 1997.

²⁷ The Council for Museums Archives and Libraries, Library Services for Visually Impaired

consist of the alternative formats in Braille, Moon and non-commercial talking books (spoken word cassettes). The NUCAF now renamed as REVEAL database is being developed to include the holdings of other producers including special schools for visually impaired children and commercial publications.

Share the Vision is providing agency services for REVEAL by promoting its availability and use in the mainstream library settings. As a first step, Share the Vision had engineered the inclusion of REVEAL in UNITY, a regional database but playing as a national database in the UK and having approximately 10 million records of library holdings and 30 million locations.²⁸ UNITY consists of holdings of public, academic and special libraries and is currently used by libraries on the national interlending network for the identification and location of publications. The inclusion of REVEAL in UNITY brings together records of publications in alternative formats with the records of the rest of the publications making one single bibliographic source in the UK. The ultimate goal of this activity is to make REVEAL accessible by visually impaired people through their own local library.

5.3.1.2 Pilot Interlending Project (PIP)

This is an action research project initiated by STV in partnership with public libraries in the North West Regional Library Service (NWRLS) in England. The purpose of the project is to identify the requirements for an inter-library lending scheme. It is using the REVEAL to identify and locate publications available to library users. The primary objective of the project is to establish an interlending network which parallels that already existing for libraries for the general public.

Access to REVEAL is via PC workstations which have been provided at trial sites, including Bury, Manchester and Tameside public libraries. The

People: a Manual of Best Practice, p. Chapter 10 (10.2.1).

²⁸ Peter Craddock, 'Share the Vision', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, August 1997.

workstations incorporate assistive technology (speech, Braille and screen magnification). At all trial sites, the participation of volunteers was an essential element of the project. Volunteers received advice and training to enable them to use the workstations and to gain independence in accessing the catalogue. PIP ran in 5 stages:

- Establishment of NUCAF
- Development of the OPAC using accessible software and hardware
- Training of staff and users
- Evaluation
- Provision of the inter-library lending service

The experience of participants was being monitored and evaluated with the aim of developing an effective model for equipment and system design. PIP is also contributing to the European Union research project, TESTLAB (TEsting Systems using Telematic for Library Access for the Blind and visually handicapped readers). The outcome of PIP was revealed in the final report of TESTLAB, which will be explained in detail later.

5.3.2 International level (European Projects)

There is a very wide range of organisations and research teams involved in the development of library services for people with disabilities supported by the European Commission. In this chapter only IT-based projects will be described.

5.3.2.1 EXLIB (Expansion of European Library Systems for the Visually Disadvantaged) ²⁹

Being much concerned with the information gap between visually impaired people and their sighted peers the EXLIB project started under the European Commission Library Programme.³⁰ The EXLIB project ran from January 1993 to June 1994, funded partly by the Telematic for Libraries Programme of the Commission of the European Communities. This set out to investigate the level of library access available to visually impaired people and to develop models for library services which could meet the needs of this client group. It aimed to provide guidelines on standards to enable visually impaired people to obtain the same level of access to catalogues, library services and inter-library loans as sighted users.

EXLIB looked at the development of technology and telecommunications and conducted surveys in the areas of user needs, service provision, materials, formats, and storage. It also investigated issues such as legislation, education and training, and made recommendations for future development. The final report indicated the need for practical experiments in providing direct access to public libraries. The conclusions were based on the increasing availability of catalogue access through computers and the growing number of electronic resources through the Internet.³¹ Some of the project's recommendations were developed into practical trials including those undertaken by the TESTLAB project.

²⁹ URL: <http://www.svb.nl/project/exlib/exlib.htm>

³⁰ Richard Tucker, 'TESTLAB –Testing Electronic Systems using Telematics for Library Access for the Blind: a project under the TAP Libraries Programme', *Vine* 106, 1998, p.29.

³¹ Peter Brophy and Jenny Craven, *The Integrated Accessible Library: A model of Service Development for the 21st Century*, the final report of the REVIEL (Resources for Visually Impaired Users of the Electronic Library) Project, Manchester: Centre for Research in Library & Information Management, The Manchester Metropolitan University, 1999, p.59.

5.3.2.2 TESTLAB ³²

TESTLAB was a direct consequence of the EXLIB project. It was a two year project running from 1997 to 1998. TESTLAB aimed to give visually impaired readers access to electronic catalogues and documents by installing workstations equipped with assistive technology in public and academic libraries. The TESTLAB project comprised a series of trials in four European countries: Austria, Ireland, Italy and the UK. It also undertook a feasibility study in Greece, where at present there are no developed services for visually impaired people. The use of the workstations was monitored via a user-survey carried out by CGL, one of the Dutch partners of the project.

The main aim of TESTLAB was to use information and telecommunication technology to give visually impaired people as near as possible the same level of access to catalogues and documents as sighted people. The major test sites in public and academic libraries in four countries were 13:

- 6 university libraries in Austria; Linz, Salzburg, Graz, Klagenfurt, Vienna and the technical university of Vienna
- 2 university libraries in Ireland; Trinity College and Dublin Central University
- 3 libraries in Italy; 1 in a branch library in a suburb of Genoa, Benzi, 1 in the main library of Genoa, Berio, and 1 in the special library of Istituto David Chiossone,
- 2 public libraries in the UK; Tameside and Central Library of Manchester

A survey was conducted with three measurements, each taken during a different phase of the project: a zero-measurement, a mid-term measurement and a final measurement. The aim of the survey was to find out what the most important variables were in giving visually impaired readers access to electronic

³² TESTLAB' URL: <http://www.svb.nl/project/testlab/testlab.htm>

catalogues and documents in mainstream libraries using computers with assistive technology. This was done by evaluating the experiences of the visually impaired people with this new service; the experience of the library personnel, who will train and assist visually impaired people in using the workstation; the generic interface developed to improve the access to OPAC systems by visually impaired readers.

The evaluation of the survey formed part of the TESTLAB final report which was published in October 1998. The following is an extract of findings of the report of the final measurement of user survey, version 2.0.³³ In all of the test sites each site had different computer environments. The level of users' competence of computers varied also. Some problems which arose in certain sites were not the same ones as those in different sites. But in this paragraph, regardless of the test sites and the phases of measurements (although some problems in a zero-measurement had been solved in the mid-term measurement), major findings of the report will be discussed broadly in order to gain an insight into how visually impaired readers can be served in a mainstream library setting. The findings will be rearranged under five sub-headings: Experience, Problems, Suggestions, Location and Comments.

Experience

- Installation of the workstation motivated the respondents to make use of other facilities of the library; some respondents felt strongly motivated.
- As a result of searching the catalogue respondents' knowledge about books was increased. Some found titles in alternative formats that they did not know about and they had also the opportunity to access catalogues of other libraries. Some respondents mentioned that they now read books on subjects other than those they are studying because they know more about which books are available in alternative formats.

³³ M. Theunisz, 'Report on the Final Measurement of the TESTLAB User Survey' [TESTLAB: Testing System using Telematics for Library Access for blind and visually

- Some enjoyed using this catalogue to see what kind of information was available or finding some on-line document to read directly by the use of the catalogues.
- Browsing the catalogue gave blind people independence. They could do it whenever they wanted and read what they wanted and not what others suggested.
- Browsing the catalogue increased the possibility for some users to read more or made some choose better what to read although in practice they did not read more.

Problems

- The interface in some test sites that was installed was not giving the users full access to the catalogues, because it did not display all the information that was on the screen. Therefore users always needed assistance when operating the workstations.
- The voice of the synthetic speech was not good.
- The 8 dots Braille which shows the highlighted items confused those who had got used to 6 dots Braille.
- Navigating the screen and finding information were difficult when using screen magnification.
- The position of the Braille cursor did not follow the cursor on the screen when using the Braille display.
- The system gave little or no indication if one had made any errors and the computer often had to shut down.
- One needed to know a lot about computers to understand the sequence of the commands.

Suggestions for improving the interface

- For making the catalogues better accessible to users, respondents suggested that the interface should be changed so that all the information on the screen was accessible.
- The possibility of using both mouse and arrow keys to navigate around the screen was asked for.
- The improvement of the voice of the speech synthesis was suggested because a majority of the respondents used speech synthesis.
- 6 dots Braille would be preferred to 8 dots Braille.
- 80 character Braille display would be preferred to 40 characters.
- DOS catalogue would be preferred if it had the same features as the Windows –version
- The same search option with the system running under Windows should be possible under DOS.
- Improved colour contrast was suggested.
- Extension of the search possibilities of the catalogue such as subject, keywords, year, edition etc., was suggested.

Location of the workstations

- The location of the workstation was difficult to find without assistance.
- Some complained about the noise of the unit which housed the workstation.
- Some felt not comfortable because of the lack of privacy.
- Some felt they were being watched.

(At a certain test site, the workstation installed as a separate unit which was also used by sighted visitors of the libraries worked well. On the one hand it was integrated into the library setting and on the other hand it created some privacy.)

Comments of the respondents

(Austria)

- The workstation is good. However, I prefer accessing the catalogue and documents from my home PC which I can customise according to my needs even to a larger extent than this one is.
- The workstation is excellent. The catalogue system offers a very important opportunity for getting literature.
- The location is too public, the start up is difficult – once started the workstation works in a great way, the Braille bar is great.
- The workstation is fine but the library cannot offer books for me. The catalogue is great although I would like to get additional stock into the catalogue.
- Most of the tasks I can also do from my office via network connection. I would greatly appreciate to extend this service from only getting the search result to getting the literature in electronic format.
- I would prefer if the workstation was not located SO public.

(Ireland)

- I have no opinion until I see the finished (fully operational) product – the potential is good.
- ...looking forward to it being fixed and expect it to be very useful. Then I will begin to recommend it to colleagues etc.
- Once the system is working to its full capacity including scanner, catalogue or magnification I would find this a useful addition in my library visits particularly as my sight continues to deteriorate.

(Italy)

- The technical problems are resolved so I am very satisfied.
- An interesting start of something bigger like connecting libraries with each

other.

- It is rather far from where I live and I am sorry for that otherwise I would use it more often.
- As a start of something bigger it is not bad, let's see how it will continue and develop.
- I consult the Internet and use the library of the university but TESTLAB is important especially for the young blind.
- The manuals written in Braille are not complete and are very complicated.
- Before TESTLAB I worked with a speech synthesiser and felt more handicapped than now that I work with Zoomtext – I am happy with it.
- I am very happy with it; it is useful and interesting and it opened new frontiers for us blind.
- I would like to see it connected to the university library.
- I am very happy with it because it makes my world bigger and richer.

(UK)

- It is a good service, but I see it more in terms of providing specific information when needed rather than browsing.
- It is useful but time consuming.
- ...it puts me on equal terms with sighted users.
- ...I doubt whether elderly people would make so much use of it but younger people would not be so intimidated.

5.3.2.3 MIRACLE ³⁴

(Music Information Resources Assisted Computer Library Exchange)

The MIRACLE project appears to be a follow up action of TESTLAB and CANTATE³⁵. CANTATE is the acronym for the project 'Computer Access to

³⁴ MIRACLE's URL: <http://www.svb.nl/project/miracle/miracle.htm>

³⁵ CANTATE's URL: <http://www.svb.nl/project/cantate/cantate.htm>

NoTAtion and Text in Music Libraries' supported by the European Commission. The CANTATE project researched the current state of music libraries and music publishers to report on the extent to which music is already encoded and through which programmes. The project examined the encoding of music in Standard Music Description Language (SMDL) and has encoded a number of pieces of music. This has been carried out in conjunction with the design of the hardware and software system. The project developed a demonstrator of the client-server part of this system, excluding the input stages and the scanning, to show access to sample databases, the downloading and display of music files and conversion to printed sheet music.³⁶

With the completion of the TESTLAB, CATANTE project and the publication of 'New International Manual of Braille Music Notation', which was published by the Braille Music Subcommittee World Blind Union in 1996, there was an effort among music libraries in Europe to look for a way of creating a central catalogue of all Braille music held by major music libraries. This is because the production of Braille music is very expensive. The conversion of text to Braille costs, even with modern computer technology, as much as ten times more than the cost of the original text. Apart from the cost the production of Braille music requires knowledge of music and Braille music encoding. Braille can only present information in a series of cells with a combination of six dots in a linear stream. Where there is only one melody line the representation can be reasonably linear. But where at least two lines of music such as piano or organ music have to be read simultaneously, there are problems in presenting this as a single linear stream of information. Some present one bar of one hand and then one bar of the other; some present section by section (but then there are different ideas about the length of a section).

The production of music Braille requires a labour intensive effort and is very complicated. Out of this problem the MIRACLE project was born.

³⁶ In-house document produced by SVB (Studie en Vakbiblioteek voor visueel en anderszins gehandicapten, The Dutch Library for visually and print handicapped students and professionals).

Therefore it makes sense to share the effort amongst the music Braille producers around the world.

Overall Objectives

- To develop a system whereby special libraries can have access to and download Braille music in digital form from a central database
- To enable these libraries to make the most efficient use of the expertise available
- To reduce costs and duplication of effort
- To enable these libraries to contribute their productions to form a shared resource
- To establish common standards for production and where national presentation standards differ to keep variations to a minimum

Blind musicians around the world need Braille music because they need to read musical scores. Some play music by ear. They have to rely on their memory of all the notes. But in the case of a complicated piano piece one cannot be certain of hearing all the individual notes in all the chords. Blind musicians need to be able to read all the notes and their values, the expression marks and directions, just as sighted readers. So Braille is currently the only practical and widely used way to do this.

Music is a universal language that can span the distance between borders. This project is aimed towards all registered blind students and musicians, both amateur and professional, who need access to Braille music files. The application is based on a central catalogue of Braille music. This is accessible via an Internet server, based on the system developed in the CANTATE project. The catalogue entries are linked to digital files of Braille which can be either be accessed centrally or by the system from the database held by the individual institutions. Besides, the addition of 'Spoken Music'³⁷ and

³⁷ A new alternative 'Spoken Music' is being produced in the Netherlands as yet not available in any country. It is now produced through speech synthesis by SVB and can be

Large Letter Music files is expected for those musicians who cannot read Braille notation and yet need to read written scores or for partially sighted musicians. Across Europe the number of visually impaired readers amounts to several million people.³⁸ The number who could be served by the system can be increased through the addition of spoken and large letter music for those who cannot read Braille. In addition there will, as many libraries from all around world join the system, be a dramatic effect in the amount of resources and the number of users as well.

The MIRACLE project began in January 1999 and is planned to run for 2 years. The project is funded by the European Commission, the Libraries Programme of the TAP (Telematics Applications Programme). A consortium for the project was formed by the four original libraries, together with Shylock Progetti of Venice who had developed the CANTATE software. Two associate partners joined these partners, the Danish Library for the Blind (Denmark) and Regione Toscana Stamperia Braille (Italy). In addition there are currently five corresponding partners, who do not usually come to the meetings but influence the project by commenting on all drafts and sending in their contributions to discussions. A number of further corresponding partners will be added to the project. Institutions who are interested in the project can join it (contact: e-mail: vwessels@svb.nl).

The consortium estimates that most of the major special libraries around the world will have joined the system by the end of the two-year project. It is argued that the production costs are so high that libraries will be ready to join

produced in many languages from one file. Spoken Music allows people to read printed music notation through the use of sound. The music is both played and read. On the cassette tape one hears the piece of music or extracts played using synthesizer and computer. Then the piece that has just been played is read bar by bar and note by note. Not only is the note read but also its value and all the other information that is in the printed music, such as fingering, articulation, dynamics and all the phrasing indicators. Everything that is in the printed music is read aloud (e-mail: vwessels@svb.nl).

³⁸ The number of visually impaired people in Europe is estimated as 20 millions quoted from the document of Technical Annex, MIRACLE (SVB/TAV11/F) on 01/12/99.

and pay a reasonable cost where required rather than duplicate production themselves.

The requirement of library staff in all the partners to continue their normal daily work for visually impaired clients, SVB has subcontracted the project management to a Third Party, the FORCE (World-wide Support Libraries for Print-Handicapped) Foundation in the Hague. Staff at FORCE have many years experience of project management. They managed earlier projects including EXLIB, CANTATE and TESTLAB under the Libraries Programme of TAP, European Commission. FORCE carries out all management tasks by preparing the necessary documents, setting up meetings, maintaining the project information web site and e-mail lists etc.

5.3.2.4 DAISY (Digital Audio based Information SYstem) ³⁹

The DAISY project was initiated by the Swedish Library of Talking Books and Braille. It has developed a standard way to record audio digitally for visually impaired people. This is sometimes referred to as a 'Digital Talking Book' of DTB standard. Unlike analogue recordings which have linear structures and have to be read sequentially, the DAISY has varying features. For example, readers can access any page or any section immediately in a book by bookmarking rather than going through all the pages sequentially. The DAISY software also allows old talking book materials stored on master tapes to be converted to the new digital format. At the exhibition the 'RNIB Vision 2000' held at the Kensington Town Hall in London in June 2000 a playback machine, CD-based, 'Plex Talk', was displayed, which was developed by Flextor Co. Ltd. A member of the staff of the exhibition said that 4,000 talking books will come out by using the DAISY system by 2001.

Essentially the DAISY recording is stored on CD-ROM. The MPEG standard is used to compress the data so that up to 50 hours of recorded

³⁹ DAISY's URL: <http://www.daisy.org>

speech can be fitted onto a single CD-ROM. Although currently most DAISY products utilise CD-ROM it is possible technically to release through the Internet.⁴⁰ The possibility of downloading DAISY files will offer a radical new service model for mainstream libraries.

The most frequently raised question in the DAISY standard is whether it uses the human voice or synthetic speech. The answer is that it uses the human voice. Moreover, recording of books by using DAISY standard does not require much equipment compared with current studios which require a wide range of equipment to produce analogue talking books. It was observed at SVB that there was only one PC in a soundproofed room. It seems that a reader just reads a book in front of the PC and a technician monitors the recording outside the room.

Currently over 40 countries have joined the consortium of the DAISY project including several libraries in Asian countries.

5.4 Accessibility and electronic resources

Technology can be double-edged unless careful consideration is given. When Microsoft developed Windows 95, it was much easier to use than previous versions of Windows. However many visually impaired computer users immediately faced tremendous challenges after the introduction of the Windows 95. This meant that information on the screen was presented graphically and not in a text format and there were several windows on the screen at once. But DOS presents information in an 80 by 25 line display. So many visually impaired computer users around the world used DOS.

Undoubtedly the greatest innovation in the field of human-computer interaction of information technology is the Graphical User Interface (GUI).⁴¹

⁴⁰ Peter Brophy, The Integrated Accessible Library: A model of Service Development for the 21st Century, 1999, pp. 34-5.

⁴¹ Alistair D.N Edwards, 'The Rise of the Graphical User Interface' Library Hi Tech, Vol.14 (1), 1996,p.46.

GUIs are symbolic interfaces intended to improve the speed of communication between people and computers. Words are removed from the process of communicating with the computer, such communication being made rather by means of symbols or icons.

The Graphical User Interfaces are very effective because they represent information as familiar objects or visual images that are close to everyday experiences. In most cases they rely almost entirely on the capacity of sight. For the vast majority of new users the Graphical User Interface is much more usable than any previous technology. But unfortunately for most average visually impaired computer users GUI can be a great challenge. As aforementioned a blind man expressed his frustration after failing in his attempts to access 2 universities Web sites in Korea. I visited one of the two sites, which was completely designed with symbols and icons. Graphics are invisible to screen readers. Neither speech nor Braille can interpret graphics. If text itself is stored as a graphical image then there is a deafening silence, as if it does not exist at all.

Libraries around the world have started an electronic service providing online library catalogues and varying information through their Web sites. Information provided ranges from simple opening times, programmes and activities to electronic access to special collections and on line reference services etc. It is estimated that a great proportion of Web sites of mainstream libraries are not accessible by visually impaired clients because of the graphical user interface. Electronic information is rapidly shifting towards multimedia as its standard. In the early days of the World Wide Web, Web pages used visual images mainly for 'decorative' purposes, they now contain significant information content. But as the US National Council on Disability has remarked, 'There is essentially no multimedia product available which has been shown to be fully accessible to individuals who are blind, and very few multimedia products that are accessible to deaf or hard-of-hearing people. While the outlook for access to multimedia for persons with low vision may be slightly

better, there is still cause for concern.'⁴² Therefore in the US, some local governments⁴³ are already implementing Web accessibility standards which all their departments must follow. Such standards could become a legislative obligation for all public bodies.⁴⁴

Currently most Web sites, although those of public libraries are still in their early stages even in technologically well-advanced countries, are making heavy use of images, text in columns, colour, inappropriate backgrounds, tables and frames. Particular attention should be paid to this issue because in the near future the Web sites will become an important gateway to many of the libraries' services. Therefore the design of accessible Web sites will prove a great challenge for mainstream libraries delivering their new electronic services.

5.4.1 Accessibility of Web sites in university libraries (UK practice)

It seems that the first research in the world conducted on the accessibility of electronic resources services in higher education institutions was done by the REVEL project⁴⁵ in Britain in 1999. The REVEL is an acronym of the Resources for Visually Impaired users of the Electronic Library. REVEL was a two-year project starting in February 1997 and its final report⁴⁶ came out in May 1999. The project was funded by the British Library Research & Innovation Centre and the Joint Information Systems Committee (JISC) of the Higher Education Funding Councils. The REVEL project aimed to promote the

⁴² National Council on Disability Access, Multimedia technology by People with Sensory Disabilities, March 1998, cited in Peter Brophy, The Integrated Accessible Library: A model of Service Development for the 21st Century, p.28.

⁴³ City of San Jose World Wide Web Page Disability Access Design Standards available at <http://www.ci.san-jose.ca.us/oaacc/disaces.html>

⁴⁴ C. Waddell, Applying the ADA to the Internet: A Web Accessibility Standard, 1998, Available at : <http://www.rit.edu/~easi/law/weblaw1.htm>

⁴⁵ REVEL's URL: <http://www.mmu.ac.uk/h-ss/erlim/projects/reviel.htm>

⁴⁶ Peter Brophy, The Integrated Accessible Library: A model of Service Development for the 21st Century, the final report of the REVEL (Resources for Visually Impaired Users of the Electronic Library) Project, Manchester: Centre for Research in Library & Information Management, British Library Research & Innovation Report (168), The Manchester Metropolitan University, 1999.

development of a national, networked virtual library of resources accessible to, and where necessary designed for, visually impaired persons. The REVIEL project has examined a wide range of electronic information services available to UK higher education from the viewpoint of access by visually impaired people by using a variety of tools to check the accessibility of electronic information services.

In Phase 1 REVIEL conducted a survey of all higher education institutions in the UK to identify those that offer a specific library and information support service for students and staff with visual impairments and to determine the level of support in using print or electronic materials. Questionnaires were distributed to 126 libraries in universities and higher education institutions in the UK. A total of 51% were returned all indicating that they offered some kind of service, although the levels of services offered between institutions varied. Forty five per cent of the respondents stated that the library would be undertaking some form of service development for its visually impaired users. Respondents listed a number of planned service developments including the purchase and updating of equipment, provision of materials in alternative formats, involvement in projects and working groups to look into improved services, staff training, promotion of awareness in this area and general service expansion. Twenty two per cent of the respondents indicated that although they had no plans at present to develop their library services for visually impaired users, they were considering it or were waiting to see if demand for services increased before committing to further development. Others stated that they were interested in developing their services but were dependent on extra funding. Twenty three per cent of the respondents stated that the library had no plans to develop its services for visually impaired users.

The REVIEL project also checked the information on Web sites in UK higher education institutions to determine the level of support available to users with visual impairments. Out of a total of 180 Web sites a random sample of 86 Web sites were accessed. Each site was assessed to determine the information

provided firstly at university level and then more specifically regarding library support and service provision for visually impaired users. On a general level of provision within the university, 44 % specifically mentioned provision for visually impaired users, while 35 % mentioned general provision for disabled users. However, 21 % made no mention of support or provision of services at all.

The following is a brief summary of Phase 4 of the REVEL project (Total of 8 phases). This phase analysed the accessibility to visually impaired people of current services provided by higher education institutions via the World Wide Web. This phase was regarded as the most important phase by the REVEL project. The outcomes were then used to aid the development of guidelines applicable to electronic information service design.

5.4.1.1 Methods

Each site was assessed according to three Web Accessibility Checkers available on the Internet:

- BOBBY⁴⁷
- RNIB Webpage Accessibility Checker⁴⁸
- Lynx View⁴⁹

'BOBBY' is a free service of CAST⁵⁰ that will analyse single Web pages for their accessibility to people with disabilities. BOBBY will also examine a page's HTML to see if it is compatible with various Web browsers or HTML

⁴⁷ BOBBY's URL: <http://www.cast.org/bobby/>

⁴⁸ RNIB Webpage Accessibility Checker's URL:
<http://www.rnib.org.uk/webcheck/wwwch.htm> (no longer available)

⁴⁹ Lynx View's URL: <http://www.delorie.com/web/Lynxview.html>

⁵⁰ CAST (Centre for Applied Special Technology) founded in 1984 in the USA has had a long involvement in the development of access technology but recently has shifted its focus towards the design of disability-friendly learning systems including software. It is best known for its Web accessibility checker, BOBBY. Further information at <http://www.cast.org/>

specification. The 'RNIB Accessibility Checker' worked on the basis of a number of accessibility comments, the main ones being:

- Use of tables
- Use of italics
- Background setting
- Legibility of text

It also indicated Web sites according to a rating scale in terms of accessibility. The scale ranges from 0 % - 25 % which are considered 'poor', to 100 % for 'highly accessible'. This service was originally offered as a pilot scheme, free of charge but the RNIB now charges. 'Lynx View' is a text browser which allows Web authors to see what their pages will look like when viewed with a text-mode Web browser.

In the REVIEL project initially researchers who had no visual impairment performed the analysis but in order to gain a more accurate picture visually impaired people performed the same checks. Later a group of visually impaired people re-tested some of the JISC services. The group consisted of people with a variety of visual impairments and with knowledge and experience of access technology and World Wide Web.

5. 4.1.2 Scope

REVIEL analysed all the Web sites of the JISC services and 134 UK higher education library homepages.

5.4.1.3 Findings and Conclusions

JISC services

Of all the sites analysed, 11 were awarded the BOBBY Approved Icon, of these, 6 were rated for accessibility by the RNIB with 69 %, 2 with 77% and 1 with

85%. The other sites that were awarded the BOBBY Icon received a fairly low rating from the RNIB of 62% and 54%. Interestingly, 2 sites which did not receive a BOBBY Approved Icon with 11 and 12 accessibility errors respectively, gained an RNIB rating of 69%.

The findings by BOBBY highlighted a common problem which was the lack of alternative text to describe graphics, followed by problems caused by the use of tables. Some problems did not mean that a site would be completely inaccessible and BOBBY provided recommendations for improvement. The use of tables, for example, was often discouraged rather than outlawed. Similarly, the use of bullet point lists was discouraged in favour of using numbered lists.

The most frequent comments by the RNIB Accessible Checker related to the use of tables and legibility of text. Of the JISC sites analysed none fell below the rating scale of 51% - 75%. Three sites were in the top range of ratings: these were the JANET (Joint Academic Network) and EDINA (Edinburgh Data and Information Access) sites which both received a 77% rating and the UKERNA (United Kingdom Education & Research Networking Association) site which received a 85% rating. The comments relating to this scale were 'Good. Your Web pages are close to meeting the RNIB's standards. Consider whether any improvements can be made in light of the advice provided.'

Using the Lynx View programme which is a text only browser, a screen reader interpreted the Web pages. Apart from obvious problems such as a lack of alternative text for graphics, the common problem featured in most of the Web sites was a confusing appearance to the page. This was generally due to overcrowding of text and the use of tables.

The rating given by the RNIB page did not always agree with comments made by BOBBY. This drew attention to the fact that what may be viewed as a problem by BOBBY, was not necessary a view shared by the RNIB accessibility checker. This highlighted the fact that BOBBY, RNIB and Lynx are fairly simple program and do not take into account differences in human behaviour or the

various levels of visual impairment that exist. For this reason it was important that the results given were not taken at face value and required further investigation using the 'human element'. Nevertheless the results gave opportunities to check back to the relevant web page in order to evaluate why certain comments had been made and how appropriate the comments given were in terms of accessibility to real users.

Group testing of JISC services

To follow up the findings of the JISC analysis previously performed, further feedback was provided from a small group of blind users. They volunteered to take part in an evaluative session looking at a random sample of the sites which had previously been analysed. The volunteers were experienced in using the Internet and pwWebspeak access software package so that they could concentrate on the content rather than the access technology itself. Co-ordination of the session, the volunteers and the analysis, involved collaboration between public, academic and private sector institutes.

In general, the volunteers commented that sites did not provide an adequate explanation of the services they provided, what was included in the sites and what their acronym stood for. They also found it frustrating to have to read through a lot of text in order to get to the link they wanted. An example of this was where alternative text for an image has been included alongside the actual text. The screen reader will read not only the alternative text, but repeats of the same text as it appears in screen. When this happened at the top of every page users not only found it time consuming but also very tiring.

The main conclusions to arise from the session were the need for adherence to accessibility guidelines, for careful design of layouts and a recognition that accessibility is more about providing people with choices and the freedom to use access technology which is appropriate to their needs than about rigid solutions.

UK Higher Education Libraries' Web sites

A search was undertaken of 134 UK higher education library homepages. Each site was analysed by BOBBY, RNIB and the WAI of W3C (Web Accessibility Initiative, World Wide Web Consortium). Forty nine of the 134 sites were awarded the BOBBY Approved Icon, of these a number of sites were not only BOBBY Approved but did not have any other obvious barriers to accessibility which BOBBY could have missed. Some sites which were awarded the BOBBY Icon were considered in the context of partially sighted people. They used inappropriate typeface and font size. It is known that partially sighted people find it easier to read sans serif typeface and a minimum of 11 pt. Of the BOBBY Approved sites nearly 10% used a very small font size and although some of these were sans serif, not all were.

The W3C guidelines recommended that links should be placed one to a line and labelled clearly. Eleven of the approved sites used several links per line and some used a dash or a letter to separate the links, the provision of links often appeared somewhat confusing. Another of the W3C recommendations which has not been applied to all of the approved sites is the provision of a contact name for the web site owner. This gives visitors the opportunity to comment on the design of the site and if necessary point out any accessibility problems. Of the 49 approved sites, 31 provided a name and/or a hypertext link.

Two of the BOBBY Approved sites offer a Text Only version. One of them, Keele University, provides the Text Only option at the top of the page. This is very helpful for the visitor as it avoids wasting time travelling down the page as a screen reader would, before finding that a text alternative of the page exists.

Some of the sites that did not achieve an Approved Icon did however offer a text alternative. However display of the text alternative link was not at the top of the page and was displayed in purple text on a black background.

Several specific recommendations were given by W3C, WAI, BOBBY and RNIB.

- All images should be fully described using the HTML ALT tag.
- If the images are used for decorative purposes only, a null ALT tag should be applied – indicating that the image can be ignored.
- Where a page uses frames, a no-frames alternative should be offered. This is because without frames-capable browsers the visitor may have difficulty navigating the page. If frames are used, the HTML should provide sufficient information to determine the purpose of the frames.
- Tables which display text in columns should be avoided because they cause navigation problems when using a screen reader.
- Only contrasting colours should be used for text and background.

The REVEL project also developed Guidelines into a set of '20 Golden Rules' for Web page design (see Appendix 4).

Summing up, the REVEL project concluded that while most UK library and information services have avoided the worst accessibility problems, only a few achieved as much as they could. They suggested that the existence of a national framework within which accessibility of electronic library services could be promulgated would provide a means to address the issue of the accessibility of Web sites and to encourage attention to accessible Web design.

5.4.2 Accessibility of Web sites in public libraries (UK)

In January 1999 Sarah Ormes and Ian Peacock in Britain explored the accessibility of UK public library Web pages for visually impaired users by using

the Web Watch robot,⁵¹ a software tool which collects data about Web pages. Among UK public libraries, 97 home pages were analysed by focusing on the following features:

- Image
- Frames
- Tables
- Valid HTML

Analysing these features, of the 93 sites that contained images, 72 used the ALT tags and 25 sites did not use the ALT tags at all. Tables were used on 77 sites. Over 40 sites used 1 or 2 tables and 30 sites used between 3 to 7 tables. Some sites included up to 27. Eleven sites contained frames, of these, 8 sites used the NOFRAMES element that is displayed in Web browsers that do not support frames. All sites were validated against the HTML3.2 DTD. Only one site validated correctly. This showed that nearly all the homepages contain potentially problematic HTML, which can cause many problems for screen readers.

After analysing data Sarah Ormes and Ian Peacock, practitioners, concluded that the level of awareness of accessible HTML in public library Web pages is very patchy. There seems to be a reasonably high level of awareness of the images but this is not consistent –even within sites. The use of ALT tags with image maps is low and tables are heavily used. A cause for concern is the high level of invalid HTML. This is probably due to the developmental state of these Web sites and will no doubt improve as libraries become more familiar with the technology. The increased availability of HTML editing software will also ensure that valid HTML is created. In Summary, they said that UK public

⁵¹ Web Watch's URL: <http://www.ukoln.ac.uk/web-focus/webwatch>

library Web sites are in the early stages of development and this is reflected in the general low level of fully accessible sites.⁵²

5.4.3 A model of accessible Web site (NLB, UK)

During 1998 the National Library for the Blind (NLB) in Britain created a Web site named 'Fiction Café'⁵³ as part of the development of the NLB's electronic services. The Fiction café was the first phase of the project and aimed to allow visually impaired teenagers to browse and choose for themselves the books they wanted to read. The response to the Web site was fantastic. One user wrote to the NLB 'About your web site... from an accessibility standpoint, it is one of the best!!' and another said that 'You folks have really done a great job. Excellent site!'⁵⁴

Prior to the development of the Fiction Café the National Library for the Blind found out 4 key factors:

Firstly, it is difficult for visually impaired readers to browse. For visually impaired people there are scarcely any sources of book reviews. On the contrary, sighted people have plenty of information for a book browser including posters advertising the latest fiction and table - top displays in book stores before they make a actual choice. But the readers' opinion survey carried out by the Library in early 1998 revealed that, like everyone else, visually impaired readers want to browse and choose books for themselves.

⁵² Sarah Ormes and Ian Peacock, 'Virtually accessible to all?'

Library Technology [Assistive technologies special issue], Vol.4 (1), 1999, p.18.

⁵³ Fiction Café's URL: <http://www.nibuk.org/fiction-cafe>

⁵⁴ Helen Brazier and Simon Jennings, 'How not to make a meal of it: Accessible Web site design', Library Technology, Vol.4 (1), February 1999, p.10.

Secondly, computers and the Internet offer huge advantages to visually impaired people, by making it much easier to manage information and, potentially, offering access to a vast source of information. Access to the Internet is made possible through technologies such as speech synthesis, Braille display, or screen magnification. Young people are highly IT literate. At RNIB New College, for example, all students have e-mail accounts and use them daily.

Thirdly, there are visually impaired people all over the UK, and if they live in a centre of population they may be able to meet each other if they wish. But many visually impaired young people are now educated in mainstream schools, where they may feel isolated from others in a similar situation. The Internet offers the opportunity to be part of a virtual community, wherever they live in the world.

Fourthly, historically there has been a great dearth of books for visually impaired teenagers. As the British government had recognised, it is vital for lifelong learning that young people keep reading, and the National Year of Reading (1998/9) aimed to redress the negative image of reading, especially for boys. The answer of the NLB to these problems was the creation of the Fiction Café⁵⁵, a site where teenagers are able to browse and choose books independently, by offering taster from the books, introductions to the plots and information from other readers.

Having a firm affirmation of the needs of teenagers the project team contacted staff and pupils from 3 special schools for the blind to help develop a Web site. The Fiction Café was developed in collaboration with these staff and students and a reader development consultancy — Opening the Book. The project team said that the close involvement of users from the early stages proved to be invaluable in the design process. But completing the design of a Web site was

⁵⁵ Fiction Café, which can be found on the NLB Web site: <http://www.nlbuk.org/fiction-cafe>

not all plain sailing for them. The project team described their personal experience when they created it and what they learnt along the way about accessible design. They, first of all, reviewed a lot of published materials such as, Web Accessibility Initiative (WAI), WAI Quick Tips⁵⁶, Cascading Style Sheets (CSS)⁵⁷, Bobby Accessibility Checker, RNIB's Hints for designing accessible Web sites⁵⁸ etc. They found out that much of this advice concentrates on how accessibility is affected by the structure of individual Web pages but very little of it comments on the structure of a whole Web site. There were, however, many features that increase accessibility and convenience of a site for visually impaired users.

The following are some key features of the Web site of the Fiction Café:

A key feature we implemented following consultation with our users was to avoid the use of more than ten links on a single page. For the sighted user it is easy to scan a screen featuring 30 links and then select one. For the blind user, the process of browsing is linear and therefore slow. So, where numerous links are necessary, we have alerted users to the number of links, as well as limiting the number of links in any single list to ten. This gives our site a narrow and deep structure rather than a broad shallow one. There may be more steps or pages to navigate to reach the information required, but the process is well signaled, and the user is not overwhelmed with choices at each stage.

The visually impaired user, like any other, navigates by landmarks. Visual landmarks, such as layout, or colour, may be useful for partially sighted users, even if they cannot read the text, but cognitive landmarks must also be used. Pages containing similar information should be laid out in the same way, and horizontal rules can be used to provide consistent divisions within individual pages. For example, in the Fiction Café, the form used for ordering a book is separated from information about the book. As soon as the browser voices 'section separator', the user is aware they have come to the end of information about the book, and can decide either to proceed or to make another choice.⁵⁹

⁵⁶ WAI Quick Tips' URL: <http://www.w3.org/WAI/References/QuickTips>

⁵⁷ Cascading Style Sheets (CSS) allows the Web page designer to separate the text content of a web page from its appearance. This maximises the accessibility of the page, as the textual information used by the 'soft' Braille display, or the speech synthesis browsers, is uncluttered by information about font type, appearance and positioning.
URL: <http://www.w3.org/Style>

⁵⁸ RNIB's Hints' URL: <http://www.rnib.org.uk/wedo/training/audit.htm>

⁵⁹ Helen Brazier, 'How not to make a meal of it: Accessible Web site design', [Library](#)

The experience of the Fiction Café gave the National Library for the Blind a strong confidence in the further development of electronic services. The next project of the NLB was the development of an on-line public access catalogue which was available in 1999.

5.5 Web sites of libraries for people with visual impairment

Some countries have developed exclusive Web sites for people with disabilities in order to provide library catalogues, newspapers, magazines and forums with varied information about disabilities. The following are some of the well-known Web sites of this kind.

Elnet

The Dutch Library for the Blind created a Web site by developing a special software user-interface for people with disabilities. The Library thought that getting standards for universal accessibility on Web sites had a long way to go, and it would be an illusion to expect such good standards. So the Library developed adaptive interfaces that are capable of solving at least parts of the problems.⁶⁰ The new system is called 'Elnet' and offers at present a news-stand with dozens of daily newspapers and hundreds of magazines, thousands of digital documents for 110 different disciplines, a forum of public discussions about almost every subject such as guide-dogs, electronic reading, sports, cooking etc.

PLANET⁶¹

Print Disabilities Library Access Network, or PLANET project, was an Australian

Technology, 1999, Vol.4(1), February 1999, pp.10-11.

⁶⁰ Maarten Verboom, 'Electronic library services for the visually disabled in the Netherlands', Paper to the 64th IFLA General Conference, Amsterdam, The Netherlands, August 1998.

⁶¹ PLANET's URL: <http://www.vicnet.net.au/~planet>

Web site for visually impaired people.⁶² PLANET provides access to computer-based catalogues of alternative format materials via the Internet and varying information related to disabilities.

Before the establishment of PLANET there was co-operative action among special library and public libraries during 1994. At first the Association of the Blind's Braille and Talking Book Library and the Royal Victorian Institute for the Blind's Talking Book Library in Australia approached the Libraries Board of Victoria about providing public access to their catalogues. A number of public libraries were also concerned about improving services for their visually impaired borrowers. The Board suggested that the libraries should join forces and apply for the Special Assistance Grant-Services to Disabled Users, for a cooperative project between the specialized libraries and public libraries. Finally the grant for AS\$34,500 was approved in June 1994 and PLANET was born in 1996.

VISUNET⁶³

VISUNET is a service offered by the Canadian National Institute for the Blind (CNIB). The Web site provides a national library service for blind and visually impaired Canadians in both official languages, English and French. It attempts to resolve the issue of accessibility over geographical and other regional boundaries.⁶⁴ The VISUNET service integrates the CNIB Library's collection of materials in alternative formats with resources of other libraries around the world and on the Internet to form a virtual library for visually impaired people. Amongst the development of the VISUNET service is VISUTEXT, offering access to full text electronic materials collected and managed by the CNIB library. VISUNET has initiated three Community Access Projects in Toronto, training visually impaired users to access the Internet and use its resources

⁶² Edwina Kenrick, 'Printed Disability Library Access Network', *Link-up*, June 1996, p.18.

⁶³ Available from the CNIB Web site: <http://www.cnib.ca/library/siunet.htm>

⁶⁴ Rosemary Kavanagh, 'VISUNET: A Vision of Virtual Library Services for the Blind', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, 1997.

through local public libraries.⁶⁵

Domestic computer sites for visually impaired people in Korea

Currently there are two major Bulletin Boards for visually impaired computer users in Korea: 'Large Village'(Connection number: 02-339-1201) in Seoul and 'White Stick' (Connection number: 051-341-0017) in Pusan. These two sites provide a variety of information about disabilities, computers, e-mail, Internet, electronic publications, chatting, discussion etc. They are used extensively by visually impaired people. Besides, there are a number of computer sites for visually impaired people in Korea including, HANA, NANURI, REHAB.

5.6 Future developments

Awareness of the need for accessible Web sites is growing. More Web designers are getting involved and there are several good places to start. Such information also covers other accessibility issues such as the use of colours, fonts, general design, layout and awareness of keyboard friendliness (for people who cannot use a mouse). The following are some good places to get information about guidelines.

- A database of accessibility resources is available at <http://www.webable.com/weable/search.html>
- Five primary areas for accessible Web sites: technology, guidelines, tools, education & outreach and research & development, pursued by The Web Accessibility Initiative (WAI) are available at <http://www.w3.org/WAI>
- WAI accessibility guidelines offer general tips for accessible Web design, along with accessibility criteria for specific HTML features, such as tables, <http://www.w3.org/TR/WD-WAI-PAGEAUTH>
- Trace Research & Development Center — Designing More Usable Web Sites <http://trace.wisc.edu/world/web/>

⁶⁵ Peter Brophy, The Integrated Accessible Library: A model of Service Development for the

- Hints for Designing Accessible Websites, RNIB
<http://www.rnib.org.uk/wedo/research/hints.htm>
- Writing Accessible Web Pages; Tips and Guidelines. Accessibility Quick Reference Guide, Sun Microsystems
<http://www.sun.com/access/access.quick.ref.html>
- Web Design Group — Accessibility
<http://htmlhelp.com/design/accessibility/>

There is a Web site which is exclusively designed for librarians concerned with disability resources, Librarians' Connections: The DRM Guide to Disability Resources on the Internet.

- <http://www.geocities.com/~drm/DRMLibs.htm>

Conclusion

Compared with Western countries, Information Technology devices in mainstream libraries for people without disabilities particularly in academic libraries in Korea even seemed to be advanced. For example in materially affluent countries it was very rare for university libraries to have some facilities such as Video On Demand (VOD), film presentation centre or satellite TV corners but in Korea these are now nothing new. On the contrary, it was very rare for Korean university libraries to prepare a corner equipped with access technology for disabled students while in the UK this is becoming more common.

It is concluded that the current access technology developed in Korea and the capacity of mainstream libraries allows them to integrate disabled clients into their services, but the awareness of library professionals regarding the needs of disabled clients is very limited. This seems to be the biggest obstacle for the integration of disabled people into mainstream library services in Korea.

Chapter 6

The Human factors

Introduction

So far this thesis has concentrated on visual changes for accessible library services for people with disabilities. In other words, the issues on installing ramps, lifts, automatic doors, replacing signage, equipping computers with assistive technology, and designing Web pages etc. were discussed. This chapter considers an invisible area, that is, librarians' attitudes, knowledge and skills that are required in working with disabled clients. When disabled people make use of mainstream libraries they have psychological barriers as well as physical and technical barriers. These are mainly created by librarians' lack of knowledge of the characteristics of disabilities, a lack of handling skills with disabled users and a negative attitude towards them. No barrier is more weighted than psychological barriers in mainstream settings for most disabled people. For example, if people in a wheelchair have to enter a library building through the route of delivered goods instead of the main entrance, even though this is physically accessible, nevertheless, this can cause a tremendous psychological barrier to them. One might be very naive to expect those people who received such a demeaning treatment from the library to return. Besides, unwittingly librarians can show the syndrome 'How many sugars does he take?' by treating disabled people as incapable clients as they talk with the third parties instead of talking directly to the disabled users.

This chapter will cover varying issues related to human factors, such as the cause of psychological barriers, staff training, IFLA initiatives, library school

curricula and the urgent needs of user development in Korean libraries etc. Current practices in staff training around world will be also introduced.

6.1 Psychological barriers

Many disabled people indicate that the biggest barrier they face is not their disabilities but non-disabled people's attitudes and behaviour towards them. A deaf student once remarked that she does not worry about her disability but how librarians would treat her causes her great concern. She worried that they may regard her as stupid, treat her as a child, feel pity or regard her as a nuisance if she asks questions. This kind of psychological barrier for disabled people to access library services creates one of the worst hindrances in using mainstream libraries.

As discussed in the introduction of this chapter the psychological barrier does not limit personal interaction between librarians and their disabled clients. Through the entire nature of a library, librarians' unwillingness to have disabled people as clients is evident. Disabled people also want to be accepted and welcomed as clients by librarians as equals. They want to get the same treatment as those without disabilities. On the contrary, special treatments for disabled people also cause psychological barriers. Being different is very negative in our society. Paul Porter, a blind information officer at RNIB, who used to work for the Mitchell Library (a public library) in Glasgow said that anything for disabled people should not appear separated or different in mainstream library settings. When asked for his opinion about a special unit at a mainstream library for visually impaired people to use computers or to access electronic materials, he said that the unit should be integrated as part of the normal library set up.¹

¹ Interview with Mr. Paul Porter, Information Officer, Royal National Institute for the Blind, April 1998.

From the viewpoint of non-disabled staff at special libraries for disabled people, it is often said that the biggest barrier for disabled people is librarians' attitude in mainstream libraries. This was confirmed when I visited SVB (The Dutch Library for visually and print handicapped students and professionals) in Amsterdam. When asked what seemed to be the most difficult barrier for mainstream libraries to become accessible libraries, a staff member immediately said that 'it is librarians!' Another added that mainstream librarians seemed to be satisfied in only giving information to disabled people to contact special libraries like ours.²

There is another kind of psychological barriers, which involves to library staff who do not have the basic knowledge necessary to make them confident when dealing with disabled users. No one can do what he has not learned and experienced. In fact, most librarians nowadays have grown up without contacting disabled people, unless a family member is disabled. Moreover, throughout their whole school years from the primary school to the university 'disabled people', or 'disabilities' had been little taught as a subject. Only through reading some of them might have been informed a bit about the characteristics of disabilities and disabled people. However, most of the reading material particularly children's books describe disabled children as an object of pity. Therefore most librarians these days have very limited knowledge and experience in this area.

When I got an internship at the Linden Lodge School (a special school for the blind) in London, on the first day I couldn't help staring at disabled children. They looked very different at first glance. Their physical appearances and behaviour continuously drew my attention so I felt as if I were in a different world. Noticing me an informed member of staff at the school told me that the school ran a programme which lets children with and without disabilities get together by them joining with a neighbourhood school on a regular basis. On

² I visited the library on 1st March 2000 after the SEDODEL Seminar for a brief individual tour of the Library.

the first day children from the other school did not play with the disabled children but just stared at them. However, after initial hostile relations were overcome between them after the first day they appeared to play together very well.³

On my first attendance in some classes at the school as an observer and assistant teacher I was completely frustrated and exhausted at the end of the day. I did not know how to handle them. I had never admired throughout my life the abilities of teachers more than those of the teachers at the classes on the day. The discomfort, uncertainty and apprehension felt by my experience of the first day created a great psychological barrier for me to attend classes on the next day.

Those kinds of psychological barriers are based on the lack of librarians' knowledge and experiences in the characteristics of disabilities and the needs of disabled people. A new demand is being made on librarians in terms of staff training and education, which should be the most important issue in the integration of disabled people into mainstream library services. It is proved by the education sector where a considerable amount of time and effort is being spent on teacher training in mainstream schools. Since disabled children have been taught at mainstream schools it is generally recognised that teachers have not been prepared in the integrating education and therefore they should receive special training. In the library sector in many countries it is also recognised that staff training is most crucial in the process of inclusion of disabled clients. IFLA also emphasises the importance of training by stating that library schools should provide training in the provision of services for disabled people as a normal part of their basic curriculum to prepare librarians for their professional qualifications.

³ I had a one week work experience at the Linden Lodge School in October 1998.

6.2 Staff training

6.2.1 In Korea

In Korea the awareness of the general public towards disabled people at a national level was raised for the first time during the '88 Paralympic Games in Seoul Korea. The whole nation was completely amazed at the abilities of disabled athletes who came from all around world to participate in varying games. Besides, the passage of the *Act on Installation of Convenience Facilities for the Disabled* in 1997 made the general public aware of the rights of disabled people in society. Newspapers and TV have also played a key role to raise this awareness. But in the library community, the awareness of the reading and information needs of disabled people has not been raised for the majority of library practitioners and library educators. The term 'staff training' on disability issues has never been mentioned in Korean librarianship so far. Still the scope of the accessible library among library professionals in Korea is limited to physical aspects for people in a wheelchair.

So far there are only a few special agents who organise training sessions for their volunteer workers particularly in library services for visually impaired people. New volunteers, who will be involved in the production or delivery of talking books and Braille materials, are invited to an introduction course, which is mainly designed to sensitise them to the difficulties of blind people and to teach skills and etiquette in dealing with these people. Sometimes volunteers learn the difficulties and frustrations of blind people face in their daily lives through hands-on experience such as a role playing. But in mainstream setting this kind of training has never happened. In fact it is very rare for library practitioners in Korea to have an opportunity to develop themselves by participating in seminars, workshops, conferences or study tours. Although the National Library of Korea runs several training courses for practitioners across the country, the primary aim of trainees is to get a better

position when promoted. Most courses are compulsory and there is also a test at the end of the training. Therefore it is difficult to regard this training as a job-related specific training. Nevertheless, this is the only training opportunity for Korean librarians. During the year of 1999 the Library offered 10 different topics in the areas of Library management, IT, Cataloguing, Classification, Preservation, Reading and Programmes. The total number of the participants was 808. Each course generally lasted 12 days and there were some courses which were offered more than twice, for example the IT course ran five times during the year having 205 participants.⁴

Unlike librarianship in the UK and USA the practice of training and educating practitioners is not a major element of librarianship in Korea. Moreover, due to language barriers the majority of Korean practitioners have no communication channel with their counterparts abroad. It is literally impossible for Korean libraries to keep abreast of international standards in the current circumstance. There are few who are able to read up-to-date library publications written in foreign languages and to participate in international conferences, seminars or workshops. Only through domestic channels Korean librarians can develop themselves.

Therefore the benchmark of Korean libraries is not international but national. As pointed out many times, in Korea it is the strong trend among university libraries to install luxurious IT facilities such as VOD, satellite TV, film presentation. Few will regard this facility as necessary to their educational goal. In fact, this trend stems from the National Library of Korea. Two leading domestic electronic companies installed IT facilities in the premise of the Library. It is not unfair to say that their aims in setting up these expensive facilities are business. They are utilising the National Library as a publicity place for other domestic libraries. As a consequence many academic and public libraries are

⁴ The National Library of Korea, 'The Performance of the National Library of Korea in 1999', *Newsletter of Libraries*, Vol.10 (1), 2000, p. 29.

trying to follow the example of the National library as a benchmark. This trend epitomises the current practice of Korean libraries.

Getting different ideas, experiences, knowledge is indispensable for institutions who wish to make a step forward by contacting those in the same area from different countries. Particularly staff training in library services for disabled people is a completely new topic in Korean librarianship. Therefore to establish successful training programmes Korean library professionals require others' varying ideas, skills and knowledge, which have been acquired through their experiences of trials and errors.

6.2.2 In the world

Particularly mainstream libraries in the Western countries have paid much attention to the development of staff training programmes on disability issues in 1980s, and these have been more enforced since the 1990s particularly in the UK and USA after the passage of the DDA and ADA in these countries. Asian countries are also gradually showing interest in this area of staff training, particularly libraries in Japan and Malaysia. The following are some of the examples of staff training implemented in other countries.

Australia

Australians learned a lesson from their failure of staff training. In 1986 the *Disability Services Act* was passed by the Federal Parliament of Australia and included funding for training initiatives. The National Advisory Committee on Library Services for People with Disabilities proposed a national training initiative. Given that raising awareness of staff in libraries is fundamental for the direct improvement of library services offered by mainstream libraries to disabled people, the committee quickly identified staff awareness in disability issues as the single most important factor. The National Advisory Committee set out a strategy to develop jointly with the six states libraries and two territory

libraries a national training initiative. In its library sector with the leadership of the National Library of Australia co-operation and coalition among libraries in varying areas are made (Currently all state and territory libraries in Australia have advisory committees on services to disabled people; and they meet annually to develop joint strategies).

The National Advisory Committee was particularly keen that staff in public libraries, perceived as the most fundamental library sector in relation to disabled people, were given urgent and immediate training. The Committee gave priority to in-service training of staff already employed and wished this training to reach all employees, not just professional or paraprofessional staff. In addition to general introductory courses, the Committee acknowledged the importance of continuing education courses. So the Committee developed a curriculum for a training package in 3 modules as the first part of strategy.

Module 1 should be a general disability awareness package, focusing on attitudes, communication, the environment in which services are to be provided, legislation, consumer rights issues, the need for networking and consultation, etc. Module 1 should also provide a general knowledge of various disabilities and how they may impact users and service provision in general.

Module 2 should build on module 1 and deal with library specific issues such as standards for services, good practices, physical access issues, requirements for materials, selection criteria for resources and for staff, catalogues, distributors of materials, resource sharing, circulation and distribution issues, reaching out to users, educating users, promoting services, etc.

Module 3 was to be developed by individual libraries themselves and should cover local issues; for instance: consumer groups, networks, local services, usage of resources, and local arrangements and procedures.⁵

⁵ Susanne Bruhn, 'The Road to Equity and Excellence: An Australian Experience in Establishing Staff Training in Library Services for People with Disabilities', Resources Sharing & Information Networks, Vol.12 (2), 1997, p.83.

But the result of this strategy did not come to fruition. While libraries generally agreed that there was an urgent need for staff training in this area, state and territory libraries were generally unable to provide sufficient funding to develop a package. Besides, the federal department responsible for the administration of the *Disability Service Act* rejected this scheme by requesting proof of need and prior agreements from municipal libraries to enrol their staff in accredited courses. But the committee found the more crucial reason for the failure in other factors than the costs. They realised that they had sought a bureaucratic approach and had a bureaucratic result. They did not have consultation with disabled people during the process of development of the strategy. They did not fully appreciate the importance of involvement of disabled people in the development of staff training strategy. Besides, they acknowledge that they made the mistake of not reading the environment, of not working within a larger framework, and of not developing more politically opportune coalitions and alliances. It was said that political emphasis in the country was on education, training, and employment of disabled people and also no one really considered that libraries can lead in the public sector in staff training and awareness in disability issues in the social change process.

A few years later the contents of the curriculum designed by the Committee were succeeded by training packages made by two universities who developed a general awareness raising package tailored for academic and administrative staff at universities. The universities sold their packages to the library sector in order to recover the production cost of the packages. In addition individual libraries also developed their own awareness raising training programmes. Currently in Australia there are various staff training programmes designed by individual local libraries: seminars, conferences, talks by disabled people to local library staff, development of networking and interaction, sign language courses for staff, training in use of equipment and specifically purchased resources, use of access guidelines for their buildings, etc. In particular libraries in New South Wales set up disability expos in the area of

special equipment and technology to facilitate dialogue between local government and disability groups in the library setting. This initiative could be seen as awareness raising and training in the broad sense. Librarians in the area believed that demands by disabled people themselves are far stronger than those from library staff for better library services to them.

The overall conclusion of the Committee through the failure was that to be effective, awareness raising needs to be at the local level. It needs direct local contact, direct local pressure, and local solutions although at national level the facilitation of awareness and training is necessary.

The United States of America

Since the implementation of ADA many American libraries have felt the creation of awareness programmes to be the first step for the successful integration of disabled people into mainstream library services. At the national level the Library of Congress National Library Services for the Blind and Physically Handicapped published documents related to library services for disabled people. The American Library Association (ALA) also produced varying guidelines for training and educating library practitioners. Besides, all states have an ADA co-ordinator and some type of office of rehabilitation and disabled services which offer staff training programmes for public and private institutes. In academic libraries there are campus Affirmative Action, Equal Employment Opportunity offices or their disabled student organisation for in-service and workshop opportunities.⁶

At a local level the following shows the experience of the Queens Borough Public Library in New York in designing staff training programmes. At the beginning the Library tried various approaches to sensitizing the staff to the needs of disabled clients, over several years. Unfortunately, in spite of many efforts, there was only a slight residual effect. Throughout the years, staff would

⁶ Teri Switzer, 'The ADA: Creating Positive Awareness and Attitudes', Library Administration & Management, Vol.8(4), 1994, p. 206.

refer inappropriately to the hearing impaired or ask questions about basic service policies or procedures that had already been covered in training. At last they found good reasons for the lack of effect on staff. Their training courses were not related to and applied to day-to-day library services. As a result, the training, out of context, could be ephemeral or only memorable but not practicable.

Ensuring realistic expectations and a successful outcome, the Special Services of the library designed a short-term training course in cooperation with a deaf woman. She had a working knowledge of the library and staff. The deaf woman said 'My personal experiences at the library as a regular customer and as a sign language instructor made me aware that most staff members were ignorant of the proper way to communicate with people who might not hear them or understand spoken English.' 'They were also unable to recognise when someone else was not understanding them. This led to frustrating encounters for staff and customer alike.'⁷ She saw that the library staff needed more awareness and communication skill training and offered to provide it. The training was to focus on six areas needing improvement:

- sign-language classes;
- sensitivity training sessions;
- community service database contacts;
- public relations;
- Adult Learning Centre and English as a second language programmes;
- volunteer programmes for deaf young adults.

The United Kingdom

In Britain it is worth noting that a great momentum for services to disabled people has built up in libraries during the most difficult time. Due to local

⁷ Pat Hollander, 'Deaf-Advocacy at Queens Borough PL', American Libraries, Vol. 26 (6), June 1995, p.560.

government reorganisation in 1972-74 British public libraries experienced a drastic cut of library budgets. Book funds have been cut by an average of 34 per cent since 1979 while book prices have risen by 67 per cent. The number of public libraries in England and Wales which open 60 hours or more per week, has been cut from 229 to 32 since 1975.⁸ Yet during this time British libraries have seen a big step in library services for disabled people. With the leadership of the Library Association by organising varying staff training programmes, individual libraries developed their own staff training initiatives to facilitate library services to disabled clients. The following is one of the staff training programmes organised by the Library Association during 1980s.

In 1986 the Branch & Mobile Libraries Group and the Medical, Health & Welfare Libraries Group of the Library Association arranged a seminar.⁹ Approximately 60 librarians attended the seminar, which aimed to attack attitudes to disabled people. So the two groups had decided jointly:

- to examine and question librarians' attitudes about and towards disabled people;
- to learn and increase their own awareness of disability;
- to realise that there is a large consumer group virtually ignored by libraries.

For the seminar the Groups selected three speakers: one was Chairman, Portsmouth Disablement Information and Advice Line, who was a wheelchair user; one was a TV presenter on the Central Television programme 'Link' which campaigns for the rights of disabled people; the last one was a Domiciliary Librarian at Dorset County Library.

The first speaker, the Chairman, talked about the way in which libraries can help, especially regarding information. He said that certain information and

⁸ William Anderson, 'How library services for disadvantaged people can stimulate services for all', *The Library Association Record*, Vol.89 (10), 1987, p.522.

⁹ One-day seminar entitled 'Libraries and people with disabilities' at Portsmouth Central Library, 26th November 1986.

publications were a must, e.g., 'Disability Rights Handbook', 'Disabled Living Foundation Information Services', 'Caring magazine', registers of national and local charities, information on sports activities for disabled people, information on health care. He also mentioned that good physical access was the first stage in making the service available to all. The second speaker spoke about attitudes towards disabled people, and the way in which the general public consider them: for example, as if being disabled is a career; as if disabled people had no rights or responsibilities; or use of the medical model whereby an individual's right to control his/her own life is removed or ignored. She also talked about the attitude of the media. Too often disabled people are seen as heroic, or the implication is made that they should be grateful for the little that is done for them. The last speaker talked about Staff Training in Disability Awareness in Dorset County Library. The staff training programme was created in three stages.

Stage 1 involved senior staff and attempted to outline the policy and objectives of the Domiciliary Service, and to raise their level of consciousness about disabled people and their needs and how the library service could attempt to meet those needs. Disabled people acted as speakers for some of the sessions and generated interesting discussion.

Stage 2 was of a more practical nature, but again involved disabled people as speakers and facilitators. The half-day session was repeated over four weeks and all area staff, full - and part - time, attended. The sessions covered physical disabled people, mentally retarded people, visually impaired people and hearing impaired people. These topics were restricted to communication skills and attempted to dispel many of the fallacies about disablement. Staff were encouraged to participate and to ask questions at any time.

Stage 3 involved smaller groups or individuals for specialised training. Topics covered: initial visits and service assessments for readers who are housebound; spoken word cassette service; deaf awareness workshops.

The aim of all the training sessions has been to raise the awareness of the staff at all levels regarding the obstacles to daily living experienced by disabled people, and thereby attempting to overcome some of the fears and difficulties in communications; to make libraries easier for disabled people to use; to improve information provision; and to involve staff in the general education process.

At a local level the following shows a staff training programme designed by an individual library. The Newcastle City Libraries and Arts designed a staff training course during 1980s.¹⁰ At first they approached the Dene Centre, a local Disabled Living Centre, for assistance in designing a disability awareness course. In addition they consulted library colleagues in Dorset which was just mentioned above. The course was designed for five two-hour sessions on one afternoon on consecutive weeks. A first objective was to create an informal atmosphere among the group, so that each attendee would feel free to talk about their attitude to disability, a subject which they are often reluctant to discuss openly. It was decided therefore, to restrict the number to 10. Care was also taken to provide a 'mix' among the participants, so that they had staff with different types of library experience. The courses were run in two sessions:

Session 1 served as a general introduction, where participants explored their conceptions and misconceptions about disability. A talk by a disabled person was presented outlining the obstacles faced by disabled people.

Session 2 was concerned with specific impairments (hearing, visual and speech), as well as mental health and mental handicap. In all cases, they aimed not just to give an insight into the effects of these disabilities. Practical advice was also given - for example, on how to guide a blind person or how best to communicate with a hearing-impaired person.

¹⁰ Steve Gleadhill, 'Libraries need disability awareness courses', The Library Association Record, Vol.92 (3), 1990, p. 213.

In addition, they held some sessions at a local disability centre itself in order to be able to look at the wide range of aids on display. While not directly relevant to libraries, they got some ideas highlighting three major points: firstly, the extent to which help was available for disabled people experiencing difficulties; secondly, the problems which are often easily overlooked which disabled people face in everyday life; and lastly, by absorbing these lessons they could make life a little easier for disabled people by re-examining their own performance in making library use easy for those with disabilities.

In Britain as well as individual libraries' in-house training courses, some organizations for disabled people offer awareness training for local authorities such as schools and libraries, of which the Royal National Institute for the Blind is very active in this area. Currently the RNIB provides specifically library - oriented programmes which can be tailored to the authority's individual needs. The programme of a general one-day course is as follows:

- 09.00 : Registration and coffee / Exhibition
- 09.30 : Introduction
- 09.45 : What do you know about visual impairment?
- 10.30 : What is it like to be visually impaired?
- 11.00 : Coffee
- 11.15 : What can people with impaired vision see?
- 12.20 : Practical difficulties facing visually impaired people
- 13.00 : Lunch
- 14.00 : The *Disability Discrimination Act* in brief
- 14.10 : Information needs of visually impaired people
- 14.40 : Current service provision: consumer's point of view
- 15.00 : Tea
- 15.15 : Workshops on improving library and information services
- 16.00 : Feedback session
- 16.15 : Action planning

- 16.30 : Close

In 1998 the training cost £500 + VAT, plus expenses per day for a maximum of 20 participants.¹¹

6.3 Key elements of designing staff training

6.3.1 Consultation with disability associations

Many experiences in staff training in Western countries demonstrate that consultation with disabled individuals or disability groups is indispensable and cannot be overemphasised. The people with most information about disabilities are disabled people themselves. Therefore it is desirable to contact persons with disabilities in various areas, who are well known for representing the interest of disabled people. Each representative will describe his/her group of needs in terms of library services and suggest services they might provide. Some needs will be specific to a group, such as assistive technology for blind people and others will be general and shared by varying disability groups. As well as libraries learning a lot through consulting with these representatives, disabled people themselves also learn from one another.

In the case of involvement of disabled people the degree of involvement of the individual in the training is very important. Besides, the invitees with disabilities at in-house staff training programmes should be familiar with the structure and operations of the library services and with those who work in the library otherwise the training courses will end as a memorable event but have no practical implication.

¹¹ The Royal National Institute for the Blind, Factsheet on RNIB Visual Awareness Training for Librarians, unpublished, RNIB, 1998.

6.3.2 A designated person for staff training

IFLA guidelines state that responsibility for the development, implementation, and operation of library services to disabled clients should be assigned to a professional librarian holding the degrees, certification, and/or training pertaining to such professional status.¹² The British guidelines also state that 'a designated member of staff at a senior management level, with appropriate professional qualifications, should be responsible for the planning, implementation, operation and monitoring of services to visually impaired people.'¹³ Some libraries set up a department to deal with the needs of disabled people. In his article 'Libraries need disability awareness courses', Gleadhill argues that 'unwittingly, a special department could well create more problems for disabled people by its very existence! Library management may promptly forget the whole issue of disability, and leave it to the 'expert'.¹⁴ But dealing with the library needs of disabled people is an issue that should concern all library staff.

From the views of librarians which were collected by a survey for library services for hearing impaired people in Britain in 1995, most librarians prefer a large number of staff being trained rather than one member of staff taking all responsibility for disability. Being asked 'should one member of staff take responsibility for deaf contact to such great depth-studying their languages and culture and instigating a positive materials - buying policy, or should a large number of staff be trained in deaf awareness', some librarians wanted both approaches. When forced to choose, they all opted for the latter. It was found that one problem of the in-depth approach is worrying - that those staff with expertise will be 'called upon' to help individuals approaching front-line library

¹² J. M. Day (ed), Guidelines for library services to deaf people, Hague: International Federation of Library Associations and institutions, 1991, p.13.

¹³ Jean Machell, Library and Information Services for Visually Impaired People, London: Library Association Publishing, 1996, p.11.

¹⁴ Steve Gleadhill, 'Libraries need disability awareness courses', The Library Association Record, Vol.92 (3), March 1990, p.213.

staff. This was reported in several cases. 'Usually, if a problem arises, they just call 'Rosie!'¹⁵

In the case of Islington Central Library in London which was mentioned frequently in the previous chapters, the designated person is Principal of the library who raises disabilities issues in every aspect of library services including the library's overall planning, policy and budgets etc.

6.3.3 User training

User training programmes should be included in staff training. In many instances, disabled people have experienced difficulties in articulating their information needs to staff, because they are not sure of the exact nature of the information which they are seeking. Unlike non-disabled people, most disabled people have little or no knowledge of basic library resources and systems. In particular, blind people who lost sight in their early years may not know how the library is arranged and organised. They may even have no idea of how to use the library catalogue or simple search tools. It is easy for librarians to become frustrated with a user's lack of knowledge about how to use the library. It is especially frustrating when communication between the user and the librarian breaks down.

Therefore for user training programme it is best to involve some representative users from the start. It is better to ask them what they think they need to know and get them to evaluate the programme while it is running. Demonstrating is a very important method to use when working with deaf people, because they have a more visual style of learning than the hearing population. In other words, the 'show me' style of teaching is effective.¹⁶

¹⁵V. Roper, Y. Ansell, *et al*, The Hearing Impaired Library User within North-West England, British Library Research and Innovation Report (36), London: British Library, 1996, pp.36-38.

¹⁶ V. Roper, Y. Ansell, *et al*, The Hearing Impaired Library User within North-West England, 1996, p.123.

In user training one-on-one training is intensive and time consuming but can be very effective. It is a particularly useful technique for training visually impaired people in how to use sophisticated library equipment like computers with assistive technology or the Kurzweil Reading Machine, which can take up to a day to master. Generally speaking the more sophisticated the equipment the greater the level of training required. The Manchester Central Library in England, one of the TESTLAB sites mentioned in the previous chapter, has learned a lesson from the training exercise which took place in the special unit for visually impaired people and drew the following conclusions:

- Training has to be tailored to the individual with hands-on experience. We have shown that trying to undertake training in a group teaching situation would be inappropriate.
- The first stage of the training process should be carefully investigated to discover what the trainee already knows, as a technical expert is likely to assume a higher level of knowledge in an audience than probably exists in reality.
- Training is a specialist activity that requires the person giving the training having been trained in how to train. A detailed knowledge of a subject is no qualification for the ability to impart information to other people.
- The different areas or disciplines or skills in which people need to be trained need to be integrated and anyone undertaking training needs to know about all the areas and how they interact. For example, someone skilled in assistive technology needs to understand how the OPAC application itself works.¹⁷

Through my reading and observation in Britain it was noted that the provision of funding for IT equipment without funding for staff training often leads to

¹⁷ Interview with Mr. John Warburton, Head of the special unit for visually impaired people at Manchester Central Library of Manchester, July 1998 and Report on Training [An internal report submitted to the RNIB for the TESTLAB project] which was obtained at the library.

ineffective use of equipment. Although well-intended, the lack of expertise in libraries has resulted in far fewer people benefiting than could have been expected.¹⁸ Some staff members may have skills in using the latest technological equipment in assistive computer technology but the majority may have no knowledge whatever of its existence and its effectiveness. Most sophisticated IT equipment is expensive. Therefore for the maximum usage of IT equipment training staff members who will train users should be a prerequisite. Besides both staff training and user training in the use of IT equipment, it is also important to produce a user guide, available in all media e.g. large print, tape, Braille and disk.¹⁹

6. 4 Education in library schools

6.4.1 IFLA initiatives

Among the Sections of the International Federation of Library Associations and Institutes, there are three Sections in particular: the Section for the Blind, the Section for Libraries Serving Disadvantaged Persons and the Section for Education and Training, which have shown a keen interest in the continuing education of professionals in the field of services to disabled people. The Sections emphasise the importance of inclusion of library services to disabled people in library school curriculum. For better services to disabled people in mainstream libraries the Sections believe that library schools first sensitise students to the needs of disabled clients by offering courses.

In 1995 the Sections conducted an international survey to find out what library schools are currently doing about the inclusion of services to disadvantaged people in their curricular. Prior to this survey there was a

¹⁸ Tom Vincent, 'Communication: Information technology: expectations and realisations', *The British Journal of Visual Impairment*, Vol.14 (3), 1996, p.102.

¹⁹ Bernard Fleming, Factsheet on Library services to blind and partially sighted people: problems and solutions, unpublished, RNIB, 1998.

workshop organized by the three Sections. The workshop took place during the 1993 IFLA General Conference, Barcelona, entitled 'Interaction Between Library Schools and Specialized Library Services'.²⁰ The purpose of the workshop was to sensitize library educators to the needs of all disadvantaged persons, who are defined as 'Members of the community who are not able to avail themselves of conventional library services, who need support in using library services or who need library services which are adapted to their special needs.'²¹ Through the workshop there were five basic solutions suggested to achieve an inclusive curriculum such as:

- Education of the educators
- Identification of the users of the services to disadvantaged
- Establishment of compulsory courses in order to sensitize library students to the needs of persons with disabilities
- Preparation and inclusion of specific modules in most courses taught in library schools to sensitize library students in their course of study to the particular needs of the disadvantages
- Offering additional peripheral courses such as librarianship and social studies, psychology for librarians, law for libraries as part of the library school curricula.

The feedback of the results of the workshop indicated that the solutions were all rather vague. Therefore they thought that it was premature to suggest that any type of formal recommendations or guidelines be made from IFLA to the library schools or the library associations regarding services to the disadvantaged. Instead, they suggested that an international survey should be conducted first

²⁰ Anne M. Galler, 'The Inclusion of Library Services to Disadvantaged Persons in Library School Curricula: A Survey', *IFLA Journal*, Vol.23 (5/6), 1997, p. 365.

²¹ The definition is based on the terminology contained in the IFLA Medium-Term Programme, 1992-1997. For further detail see the Newsletter of the IFLA Section for libraries Serving Disadvantaged Persons and the Section of Libraries for the Blind. Text is available: <http://www.ifla.org/VII>

on library schools in order to strengthen such possible recommendations or guidelines.

According to the conclusion of the workshop a questionnaire was sent to the 430 library schools listed in the IFLA *World Guide to Library, Archive and Information Science Education* in 1995. Eighty eight responses received (21 %), of which 56 indicated that such courses were mandatory and 10 said they were elective. On the question of a course in the curriculum regarding library planning, which includes physical accessibility issue, 42 said 'yes'. In the area of assistive technology, being asked about a course in library automation included assistive technology most respondents answered 'No' (see Appendix 5, which contains the questionnaire and the results of the survey.)

By evaluating the result of the survey the Sections concluded that 'by distributing the questionnaire to 430 library / information / archives schools a first step was made to sensitize library school instructors and librarians to the existence of the problem of the disadvantaged. Some of the respondents who did not have much to offer in their schools at the moment indicated that as a result of the survey, they are thinking about the questions raised and would like to implement some sensitisation to the plight of the disadvantaged in their respective curricular.'²² In order to reach the widest audience possible the Sections published the result of the survey in *IFLA Journal* 23, 1997.

Prior to conducting this survey the Section of Libraries for the Blind had developed a series of world staff training seminars on library services to the visually impaired in developing countries. The seminars started from African countries first in 1980 then Asia in 1991, a follow-up for Asia in 1992, Latin America and the Caribbean in 1993 and in 1994. The Section recognised the needs for further training in developing countries. While the Section encourages sub regional training seminars organised by local initiatives such as the joint Malaysian-Japanese training seminars on computerised Braille production for

²² Anne M. Galler, 'The Inclusion of Library Services to Disadvantaged Persons in Library School Curricula: A Survey', *IFLA Journal*, Vol.23 (5/6), 1997 p. 370.

ASEAN developing countries, African Training Seminars in both English and French respectively were planned to follow up on the seminar held in 1980.²³ Besides, IFLA produced a textbook on library services to the visually impaired people edited by Bruce E. Massis in 1996 to give basics to both participants of those training seminars and to library school students.

6.4.2 Library schools in Korea

In Korea currently there are 40 library schools including 8 two-year colleges. One library school responded to the IFLA survey. It is assumed that no library school in Korea offers courses in the areas of library services for disabled people, except individual researches for graduate programmes. During my research in Korea I contacted several library school educators from five universities. None of these schools offer courses in this area. One professor remarked that disability issues are unpopular in the job market in the era of information technology therefore few students would take those courses under the current education system. From his view no library school lecturer would teach such courses since he would be taking a risk of losing his position unless he could teach a minimum of three courses in a term.

In fact, as pointed out previously, there is only 2 per cent of the population making use of their local libraries in Korea. Still Korean public libraries receive students as their major clients. Nevertheless, library schools in Korea are twice as many as those in Britain. Given this circumstance the most urgent measures which should be taken immediately by Korean library schools is to design a course for user development.

Library schools exist to train library manpower: without libraries there is no reason for library schools to exist. This is proved by a recent incident in Korea. Some universities released information about recruiting new students for

²³ IFLA Section of Libraries for the Blind, *Annual Report 1994-1995*,
Text available: <http://www.ifla.org/VII/s31/annual/ann95.htm> E-mail: IFLANET@ifla.org

the year 2000 through newspapers in which most library schools in universities were eliminated from the list of their disciplines. These measures came after the introduction of a new education system (named Hakboojae) at higher education institutions in which students can choose a subject after they enter the university and also are able to have plural subjects.

Facing up to a fierce battle for survival Jung Gun Kim, a professor of Library, Archives and Information Science at Pusan National University in Korea, said that library schools have already been falling into a crisis in which they may only remain as courses, not as a subject.²⁴ It is obvious that library schools in Korea are at a critical stage. This crisis can also bring a very negative impact on the social status of librarians and the future of libraries in Korea. There are many reasons which brought about this crisis. Prior to discussing the user development one should find out the most crucial reasons which brought this crisis otherwise seriousness of the user development could not be recognised in the Korean library schools for survival.

6.4.2.1 Library schools without libraries

Since the late 1970s library schools in Western countries started changing their name by adding the term 'Information' to their existing name such as 'Library and Information Science', 'Library, Archive and Information Studies' or 'Library, Document and Information Studies' etc. No Korean library school has been excluded from this international phenomenon. As a result in Korea the term 'Library' completely disappeared and was replaced by 'Documentation and Information', except for one library school where the term 'Library' is still retained.

The term Library was regarded as an inferior word in the information era from the viewpoint of some Korean academics in the library schools.

²⁴ Jung Gun Kim, 'The Reconstruction of Documentation and Information Studies in Korea: A Strategic Approach', *KLA Bulletin*, Vol.41(1), January/February 2000, p.11.

Consequently, since the change of their departmental titles, many people who were outside the library circle questioned what discipline might be known by this title? Although some library schools keep the term 'Library' in their English name it does not make any difference because no one uses English names in Korea.

It is therefore very ironic that library school educators in Korea who teach future librarians, degraded a library by eliminating the term Library from the name of their discipline. Young Ai Um said that why on earth even the term 'Documentation' was accepted but 'Library' could be rejected.²⁵ She jokingly made this comment but in a serious mood and tone. She is the one who strongly opposed the change of its name so the university, Hyosung Catholic University, she is working for, became the only one which kept the term Library. Won Ho Jo, Chief Executive of the Korean Library Association (KLA) greatly values her determination in this strange climate.²⁶ Um is the author of a book *Libraries in Korea* which is the only monograph introducing Korean libraries to the masses abroad. This book seems popular among major libraries in English speaking countries. A copy of the book has been placed on an open shelf in the Department of Humanities at the new British Library. It is very rare for the Library to place books on open shelves because most of books have been kept in the basement since the Library moved to a new house at St. Pancras.

Copying the trend of the library schools even public libraries in Korea started changing their name by omitting the word 'Library' from their name, for example, 'Life-long Learning Centre' or 'Information and Culture Centre' etc. Although the change in public libraries came from a different perspective — this is not the place to go into detail on this matter— the term Library is disappearing even from the public libraries.

²⁵ Young Ai Um, a professor of Library Science at Hyosung Catholic University, came to the School of Library, Archive and Information Studies (SLAIS) at the University College London in January 1999 as a visiting academic.

²⁶ Interview with Mr. Won-Ho Jo, Chief Executive of the Korean Library Association in August 1999.

As a consequence, matching their title indicated library schools in Korea have increased the number of courses which teach Information and Communication Technology (ICT) just like many library schools in North America. Naturally, the more emphasis on ICT the less the library related courses have been taught. A library school exists for a library. Computer and Information Technology are important subjects in a modern library school but the technology will be of little use unless it fits the level of demand from libraries on the spot.

6.4.2.2 Foreign library schools at Home

When the modern library school was introduced in Korea during the 1960s from America the library environment of these two countries was very different. Nevertheless, the curriculum of library schools in these countries has been almost identical. Even some American school text books which were designed for their practical use, have been directly used at the Korean schools. For instance, a text book which was used when I took a Reference Service course at a graduate school in America contains varying elements of reference services for American libraries. The book may be indispensable to the American librarians but not to Korean librarians unless it is adapted to suit Korean circumstances.

Furthermore, most papers published in major library journals in Korea have been written by library school lecturers. During the last decade these journals have contained a lot of articles about computers, information, network, cyberspace, electronic or virtual library etc. Few of these were useful because they were too difficult for librarians to understand and adapt to their own libraries' needs. Most of them were not ours but from America. But even to a librarian in America I found that they were difficult to understand.²⁷

²⁷ Hye Ok Park, Director of Library Systems, Henry Madden Library, Fresno, California was met in Korea by some members of staff at the National Library of Korea in August 1999.

Each country has its unique circumstance so library schools in one country can not be the same as those in another country. I found that American library schools are very different from British library schools. When I was taught at an American library school in the 1980s most of the courses were related to information and communication technology. On the contrary, here at University College London the major courses in 2000 are still the long-standing library subjects such as classification, cataloguing, bibliography, preservation apart from Information Computer Technology including electronic publications. Ia McIlwaine, a prominent scholar in the world of classification who is Editor-in-charge of Universal Decimal Classification (UDC), is Director of the school. The library school at UCL is one of the first schools of its kind in Europe. The school stands firm on a long history of British libraries. The year 2000 marks the 150th anniversary of the birth of the first public library law in Britain. Thousands of librarians both at home and abroad have passed through the door of the school. Ranganathan, well known in Korea, was one of the students at the school.

The Korean situation is much different in varying aspects from those in the UK and the USA. A library school in Korea should be the Korean library school, not that of the UK or of the USA. A plant which has grown in a different environment will die unless it takes root in the ground. For survival the plant must struggle to adapt to the soil.

6.5 User development

6.5.1 The opportune of user development

Ironically while some library school educators have unwittingly tried to destroy the physical library buildings by praising virtual libraries, some enlightened citizens and government officers have recognized the importance of public libraries. Even a business-man in Korea has built a number of children's libraries at home and several abroad. He is just like the Scottish Andrew

Carnegie (1835-1919) in Korea. As mentioned in Chapter 4 after the new government took power since 1998 the importance of public libraries has been emphasised more than ever before. Recognising public libraries as a cultural infrastructure the Department of Culture and Tourism (DCT) has invested money in new library building constructions.

Libraries will continue to exist in Korea but the less adaptable library schools will face extinction in this cold weather. In the library schools' perspective the current measures of universities represent a crisis but for the future of the libraries it is an opportunity. It is anticipated that the number of library schools at undergraduate level will decrease, while those at graduate level will increase giving emphasis more on library related courses. This is a great opportunity for the future of Korean libraries. First of all, there will be subject specialists. Currently there are few subject specialists in Korean libraries. This fact has played a fatal impact on the entire library work first collection development. A subject specialist from Firestone Library at Princeton University, New Jersey, who conducted research on the evaluation of the collection of the Seoul National University Library in 1993, was very alarmed when he was informed that there are few subject specialists in Korea. From the eyes of a Westerner a university library without subject specialists could not be imagined because in the Western countries it is not rare for librarians to get a doctoral degree.²⁸

The importance of librarians' subject knowledge cannot be overemphasised. The quality of library services starts from the librarian's subject knowledge. Books were often found to be classified incorrectly and shelved in the wrong places in the National Library of Korea. The Library is building a database of a national union catalogue which is used by other libraries in Korea. Sometimes complaints about inaccurately classified books have been made from individual libraries which use the same database for their

²⁸ One of the master's students in 2000 at the School of Library, Archive and Information Studies at UCL has a doctorate in Law.

cataloguing. Under the current library situation in Korea it can be a good strategy for library schools to raise future subject specialists.

Secondly, there will be an increase in the library population. The fact that only a small proportion of the population use libraries is a great opportunity from the business perspective. That is, it means a big market in which one can make a great profit if one is able to satisfy the customers. Most libraries in Western countries such as in the UK and the USA have already reached a grand age. It will be very difficult for libraries in these countries to increase their readership. For example, in Britain the Department for Culture, Media and Sport (DCMS) recently injected £2 million into public libraries for reader development.²⁹ Moreover, since the Year of Reading (1998/1999) every child at primary schools in Britain has received £1 worth as a book voucher. Although there are efforts both by government and library sides it seems difficult for libraries to increase membership. There are several reasons for the difficulty of user development in these countries, however this topic should be designated to specialists. Nevertheless, one obvious thing is that libraries in these countries have appealed mainly to the middle class. They almost reach their limitation by making 60 % of the population users. However, people in both the upper and lower classes have seldom used public libraries, in particular people in the lower class in society. Most disabled people fall under this category. These are poorer and less educated. So called, the phrase 'Home from Home' which is frequently used by libraries in these countries to make their libraries comfortable to users, is not for the people from the lower class but for the middle class. To the middle class the atmosphere of their local libraries is not much different from that in their homes therefore they can feel at home in the library. But to those in the lower class the library can appear as very tidy and quiet. Some library facilities look so grand to them that they may feel uncomfortable in making use of them. Librarians may also be conceived as

²⁹ The Library Association, 'Lifelong access', The Library Association Record, Vol.102(1), January 2000, p.4.

better educated than themselves so they may feel uneasy about approaching librarians. Therefore as long as libraries in these countries cannot go to the disadvantaged fully the user development will never be accomplished.

Unlike these countries, libraries in Korea find it much easier to increase the membership of libraries. Of course, libraries in Korea have also their particular difficulties but the fact that few people are library members is very positive in user development. In addition the Government is in favour of public libraries. If a human factor such as user care or user development is taught like courses in information technology at a library school in Korea a great demand from the public for libraries will be anticipated.

Once people have experienced benefits from their local libraries they will never allow themselves to be deprived of them. A library user in London, for example, made an appeal to the Department for Culture, Media and Sports (DCMS) in 1997 against the library authority decision in cutting the expenditure on library books. The Minister of the DCMS warned that the library authority must restore the budget to its original level. After that the local authority withdrew the decision of the reduction in the expenditure of library books.³⁰ As another example, when a local government in Wales in Britain planned to close one of the public libraries because of a drastic cut of the local government's entire budget in 1997, immediately residents collected signatures on a petition and forced the local government to withdraw its plan as they attended to the government meeting. Finally the local government scrapped its plan.³¹ There even is a Borough in London in which a fire station was closed but a public library was not closed.³²

As shown in these examples, once library users have benefited from the library they will never easily let it go. Therefore the most important issue in libraries in Korea is the user development. Currently there are 380 public

³⁰ It was written on a document of the local government in Brent. The document was displayed at Willesden Library.

³¹ A local newspaper said that during my tour of libraries in Wales in summer 1997.

³² London Borough of Barnet is the one, which has closed one fire station since 1997.

libraries and most of them are used by students. The number is too small in comparison with the volume of the nation's economy. As a result a number of book stores and book lending shops have been created. It is well known in the world of publishing that Korea is a country of many publications. This fact shows that there are so many people who love books. Nonetheless, it is much better for people to use their local libraries for free instead of spending much money on books, magazines, newspapers, tapes, CDs, videos, software, computers, etc. The reading needs of the public should be supported by public expense. No library professionals in Korea will neglect this fact.

6.5.2 Expanding and improving

Considering the above scenario the importance of pursuing user development and services in Korea to cater for the poor and needy cannot be overemphasised. Apart from the belief of Alex Wilson that if free and equal access is to be sustained the first priority for libraries should be to the culturally and economically disadvantaged, there is practical advantage if one targets disadvantaged people first in user development. Once they have enabled disadvantaged people to access their services the rest of the population automatically become library users. But vice versa it is not the same. For instance, during the last decade when a library in Tenstar, a suburb of Stockholm, Sweden, faced drastic reduction of staff positions and the acquisition budget, the psychological consequences for the staff were tremendous. The number of posts was reduced from 12 to 6.75 and the acquisition budget reduced from 338,000 Swedish Krona (£ 26,000) to 200,000 Krona (£14,000). There was even a threat of having to move from their large and beautiful premises. 'Could we in any way do something new and even better?' ³³ was a thought of the new director, instead of having an attitude of not

³³ Agneta Ehnmark, 'Room for Knowledge', *Scandinavian Public Library Quarterly*, Vol.30(1), 1997, pp.16-8.

being responsible for anything which had happened in the library. She found out that the only resource left was involvement and competence of the small staff. First, they sought the priority of the mission of the library in order to be of most use to the area it served. Secondly, they assessed what their resources were and where the needs were from the library service. Seventy per cent of the population of the area were immigrants. Unemployment was high and the social problems were vast. Those who could do so often moved to areas where the proportion of immigrants was smaller and sent their children to schools outside the areas, in spite of the proven high quality of the schools there. In an area like Tenstar, where the school's biggest worry was the children's poor command of Swedish, a well-provided library was an absolute necessity. Deciding that the priority of the library service should be given to the disadvantaged immigrant children first and foremost, the library put the children's department in the central area in the library. Changing the layout completely by putting their last Krona on an architect whom they know very well and together with her, they worked out a new plan for the library over a few intensive months. They closed for a week in spring 1994 and reorganized completely, sawed up bookshelves and moved every single book. Then, they conducted a project called 'Room for Knowledge' which was taken from a campaign run by the Swedish Library Association that year. Under this project, they bought dictionaries and reference works, language courses and books in easy Swedish, textbooks and tapes. Help with homework had long been a felt need. Language difficulties meant that many parents in Tenstar could not give their children the help they needed. They advertised in the local paper and made contact with a person, who started as early as autumn 1993 giving help with homework in the library. After 3 years, the person had about ten helpers, all working voluntarily, and many adult learners as well as children were getting help. Later that Spring in 1994 they received good news. The Swedish National Council for Cultural Affairs had granted money for their project and the local authority in Tenstar took over all financial responsibility. The delight and pride of

the staff was fantastic. The Room for Knowledge Project ended in 1997 and became an integral part of the library's regular work. Giving priority of library services to the needs of the disadvantaged children, the Tenstar library became a meeting place of immigrants and a place frequently visited by librarians in other local authorities.

Among the disadvantaged it is better for libraries to attend to the needs of disabled people first. Once a library has improved its overall library environment by removing obstacles for disabled library users, the rest of the population in particular the elderly, children in buggies, pregnant women etc. can also benefit from the improved environment.

Another example of this kind can be found in the Danish public libraries.

A few years ago, a prominent Danish futurologist gave a group of head librarians the advice that in future, they should design library services on the basis of the needs of society's formal and informal Establishment. Forming an alliance with the power base would guarantee that resources would continue to be allocated for continued library operations. In contrast, courting the weakest members of society was pointless, and would only lead to the marginalisation of the libraries.

This advice came as a shock to us in the audience, because it stood in stark contrast to the principles that serve as the foundation of Danish library legislation. In addition to their roots in information and cultural policy, these principles have social overtones. Danish library legislation is based on the premise that library services are for EVERY-ONE regardless of place of residence, intellect, age, language, political and religious conviction - and disability. Minority groups of all kinds must be considered in the selection of materials, by extending opening hours, and through a well-developed library network with special service arrangements for the physically disabled, and so on. Additional legislation attempts to influence the design of libraries so that users confined to wheelchairs also have easy access to the various services provided. In fact, one might almost gain the momentary impression that more regard is paid to the weak in Danish society than to ordinary users.³⁴

³⁴ Johannes Balslev, 'The Danish Model of Library Services to the Printheadicapped', Paper to the 63rd IFLA General Conference, Copenhagen, 1997.

Today as much as 80 % of the population in Denmark are making use of their local libraries. Johannes Balslev, a librarian at County Library of Rive Amt Esjberg in Denmark, said that in a way the prominent Danish futurologist was right. By joining forces with strong handicap organisations, Danish public libraries have been able to build a service that not only has no competition, but also enjoys wide political support. They concluded that without these strong organisations, they would not have come as far as they have today in terms of library services to people with disabled people.

6. 6 Considerations for future

This section will mention some Korean circumstances which are though not directly related to the human factors are considered as an important environmental factor in which the integration of disabled people into mainstream library services will be implemented.

6.6.1 Children with disabilities

According to a statistic of the 'Special Education Booklet '97' published by the Korean Special Education Association, the number of school going children with disabilities is 53,000 in Korea. They are placed either at special schools or special classes at mainstream schools. The estimated number of disabled children of school age is 215,000 (2.44 % of the total number of children). According to the statistic only one quarter of children with disabilities is taught either at special schools or special classes at mainstream schools. But there were no records about the other three quarters. It is assumed that they are all taught in general schools. But this assumption is not quite right if one knew the fact that most special schools are concentrated in big cities while children with disabilities are living across the country. This implies that many disabled children are left without being taught and barred from even primary education.

There are even some children who are living in big cities and are not taught at a school because of varying reasons.³⁵ Therefore it is thought that many disabled children especially in rural areas are separated from the opportunity of even the primary education. As a consequence they are unable to read books. For those who are placed in mainstream schools the situation is not much different from those of housebound children in terms of reading and information needs. Currently there are few mainstream schools who are able to pay attention to reading materials for their disabled pupils. Even text books for visually impaired children are not available in mainstream schools. In addition library services for visually impaired people in Korea offered by either special libraries or public libraries are concerned mainly with adults. Children's books in alternative formats are very scarce.

The reading needs of children with disabilities cannot be overemphasised. The process of literacy begins at birth, involves all aspects of a child's development and continues throughout life. Literacy progresses as the child gains an understanding of the functions of symbols and language by having experiences with books and experiments with writing. Out of these experiences the child gradually builds concepts about reading and writing. Nevertheless the importance of the reading needs of children with disabilities in Korea are less emphasised by library professionals.

6.6.2 Easy-to-read materials

It is frequently mentioned by disabled people that most books in libraries are too difficult to understand. In fact, any satisfactory library service for disabled people is dependent upon the existence of literature suited to the various types of disabled people. Realizing this fact many countries have made every effort to

³⁵ During my research in Korea it was found that a deaf woman was kept at home from birth to age 20s because her deafness was a great disgrace to her family. She was brought to a special class at Wangsung Church in Seoul. The staff of the church said that it is

make easy-to-read materials for disabled people and illiteracy. Since 1970 Scandinavia especially Norwegian government has paid much attention on suitable reading materials for disabled people after the Government implemented the social integration of people with disabilities into education system and society. It was found that one in ten of the disabled population in Norway suffers from impaired reading abilities which necessitate some adaptation of written texts and also the types of modification required. The Norwegian government therefore earmarked funds for the development of specially adapted literature. Authors, artists and publishers were greatly influenced by the measures and a fair amount of specially adapted literature has been produced since that time.

Librarians in Australia also realized a need for easy-to-read materials. This is especially for books in general information or enjoyment, outside of the educational setting. In this connection, the National Library 's conference the 'Right to Read: Publishing for People with Reading Disabilities' was held in Melbourne in May 1990. The aim of the conference was to stimulate the creation and publishing of suitable, age appropriate and relevant literature for specific groups within the larger group of people with literacy problems- namely those people in their community who have intellectual disabilities, specific learning disabilities, acquired dyslexia following brain injury or are prelingually deaf.³⁶

There are some people who object to the adaptation and simplification of fiction and non-fiction into an easy-to-read version. They may see the easy-to-read products as watered down, in particular if it is a classic novel. But without the availability of an easy-to-read version, people with reading problems would be excluded from a large part of their cultural heritage. On the basis of this belief, 'Guidelines for Easy-to-Read Materials' were published under the

anticipated that many disabled people are housebound and miss the educational opportunities so they are unable to read and write.

auspices of the IFLA Section of Libraries Serving Disadvantaged Persons in 1997.³⁷ These guidelines have two main purposes. Firstly, the guidelines describe the nature of and need for easy-to-read products and identify some of the main target groups. Secondly, the guidelines offer suggestions for publishers of easy-to-read materials and those organizations and agencies that serve reading disabled persons.

So far the importance of the easy-to-read materials for disabled people has not been raised among library practitioners in Korea. As service providers librarians are in a good position to draw the attention of those who are involved in the production of books to easy-to-read materials for people with disabilities particularly prelingually deaf people.

6.6.3. Copyright

When organizations such as libraries and agencies wish to convert printed materials into alternative formats for visually impaired people they will usually encounter copyright problems. Fortunately in Korea it is permissible to make Braille and audio copies on a non-commercial basis without prior permission and payment. According to a new copyright law, which was revised in December 1999 and was implemented on 1st July 2000 in Korea, publicly available 'literary and artistic works' can be converted into accessible formats (Braille and audio copies) and distributed to visually impaired people. In the revised law a term 'Distribution' is added to the clause of the article 30 of a copyright law. From the point of view of organizations which serve visually impaired people the revised one is not different from the old one. In Whan Seo, Director of R & D of Welfare policy at the Korea Welfare Association for the Blind, commented that the revised law extends its scope by adding the term

³⁶ Susanne Bruhn, 'What is There to Read' [Abridged version of a paper which was given at the Australian Council for Adult Literacy conference, October 1992] , Link-up, February 1993, p.4.

³⁷ Bror Tronbacke (ed), Guidelines for Easy-to-Read Materials, Hague: IFLA, 1997.

'Distribution', but what did the conversion mean in the past without distribution? In practice, therefore, there is no difference between the new one and the old one.³⁸

Furthermore although the copyright law in Korea is recently revised it never mentions electronic copies of original works. Nowadays diskette books (meaning original works converted and stored in diskettes) are very popular among visually impaired readers in Korea. Almost every day new books are coming out on domestic computer sites and are downloaded by visually impaired people.³⁹ Visually impaired people read them through Braille, Speech or Enlarged screen. According to the current law this practice is an obvious infringement of copyright but there are few organizations and visually impaired readers who are aware of the copyright infringement. Most of them regard an electronic copy as a permissible format.

Until now no lawsuits against the copyright law concerning the electronic copies has been made in Korea. It is not known that whether copyright holders ignore this practice by assuming that electronic copies of original works might be accessed by a small minority that is, only visually impaired readers, like those of Braille or talking books. Somewhat, they seem to be less concerned with untrustworthy third parties, sighted people, who can access the electronic version of their original publications illegally. It is therefore easily anticipated in the near future that there will be a conflict between visually impaired people and copyright holders in Korea.

Currently in most countries it is normally copyright infringement to convert materials into an accessible format, store them electronically and transmit the electronic copy without permission (except Denmark and Finland).

³⁸ In Whan Seo, 'Current Status and Prospects for Braille and Audio Libraries for the Visually Impaired People', Paper to Information Society and People with Disabilities in the 21st century [Proceedings of a seminar], organised by Korean Nazarene Association of Rehabilitation & Welfare and held at the Assembly Library, Seoul, Korea, 26 November 1999.

³⁹ For example, Pusan Braille Library for the Blind has put 10 diskette books per month on a computer site named 'White Stick' as do many other special libraries and agencies for the visually impaired people.

Most copyright holders give permission for conversion into formats such as Braille because they can only be read by a small number of people. Electronic copies cause more problems and permission is likely to be refused because of a number of concerns. Particularly security of electronic material and piracy is a real worry. Even if permission is granted for visually impaired people electronic versions have the potential to be accessed by everyone if not kept securely and this could adversely affect the sales of the paper version.

Speaking from the point of view of visually impaired readers it is wrong and unfair that they need to ask for permission to read a publicly available work. During the SEDODEL conference a visually impaired participant raised a question that whether publishers prevent black people or gay people from reading books. This implied that visually impaired people should be allowed to read books without permission just as sighted people. It is not in the spirit of copyright law to expect someone to ask for permission to read a publicly available work, so there should be a distinction between those who need to copy to read and those copying for other purposes.⁴⁰ For visually impaired readers it is impossible to read the original work unless it is converted to an accessible format. At a time of rapid increase in the amount of information, accessing information and staying legal are the most important issues for visually impaired people and organizations working on their behalf. In any case, accessibility to information for disabled people should not be barred by copyright laws.

Conclusion

It was recognised that the most difficult barrier for disabled people to make use of mainstream libraries is librarians' attitudes towards them. But the change of their attitudes is not an easy job because one's attitude is based on one's

⁴⁰ Judy Watkins, Overcoming the Copyright Hurdle: Exceptions and Licences. Paper to the SEDODEL Seminar 'The Right to Read Visually Impaired Readers and the Rights Holders' Amsterdam, 1st March 2000.

philosophy. Therefore changing attitudes cannot be done over night. It will take much time for librarians to get appropriate attitudes to disabled people and accept them as the rest of clients without disabilities. The more librarians build knowledge and experiences in disabilities and disabled people the easier disabled people make use of the library. Nowadays children seem to be better to handle and understand their disabled peers than adults because they are taught in an integrated education system. The educational environment has made them get more positive attitudes towards their disabled peers.

A good library service starts from well-trained and qualified librarians. Without this human resource the rest of the material resources in mainstream setting cannot be fully utilised by disabled people. The Korean scenario staff training should be sought in the issue of user development, which is the most urgent single topic faced by library practitioners and academics as well. They need to find a right target group to increase their membership within the limited resources, who will never disappoint those who will spend time and efforts on reader development.

Chapter 7

Proposals

Introduction

Given that over one million people with disabilities (there are 4 million people according to private statistics) in Korea have been excluded from tax-supported mainstream library services, drastic measures should be taken on a national level. In the information era, having access to library and information services should be a fundamental right to anyone who wants to develop themselves, and to live independently. In a time, particularly, of general integration of people with disabilities into mainstream Korean society, library services for people with disabilities could be a test of the government's commitment to the social integration of disabled people. Indeed, from an economic angle, the adaption of local libraries could be a most appropriate means for the government to promote this. As proven by the British experiences in Chapter 5, there are no other institutions in city or town centres that attract the general public more than public libraries, regardless of age, gender, religion, social status and educational backgrounds.

The prospect of public libraries integrating library services for disabled people among the rest of their clients could be a great opportunity to promote their services and to raise their status in society. Unlike those in Western countries, public libraries in Korea have never been regarded as the backbone of society by either the general public or the government.

As I observed abroad, the success of implementation of library services for people with disabilities in a mainstream context depends on the degree of cooperation between the government and library community. Therefore this

chapter proposes a holistic package of interactive initiatives to produce the best results. In framing the package, I have often been guided by good practices and guidelines of the integrated library services I observed abroad, since some problems currently faced by the Korean libraries are not much different from those faced by libraries abroad. Nevertheless there are still, so I have sought solutions tailored to the Korean environment.

7.1 National Level

In the absence of policy and guidelines for library and information services for people with disabilities at a national level, it would be advisable to organize a summit meeting first to gather broad input on the topic. The meeting should be initiated by the Director General of the National Library of Korea, since the National Library represents the library community. Further, the initiation of the meeting by the Director General means that library services for people with disabilities would be spearheaded by the government and supported financially by tax payers.

To effectively discuss various issues related to the integration of library services for people with disabilities, the meeting should last for 2 days and the following people should be included among the participants:

- The Director-General of the National Library of Korea
- The President of the Korean Library Association
- Heads of libraries, regardless of their type and size
- Representatives from the government departments which are responsible for disability issues and library and information services, including the Department of Culture & Tourism, the Department of Education, the Department of Health & Social Welfare, the Department of Labour and the Department of Home Affairs
- Representatives from institutions for or representing people with disabilities
- Individuals with disabilities

- Academics and practitioners involved in the provision of library services for people with disabilities

It is suggested that the meeting should begin with panel discussions on issues and ideas for addressing the task of integrating library services for disabled people, by dividing the participants into several groups. At the end of the first day of the meeting, it is recommended that a public hearing be held on the topic. Holding a public hearing would provide the opportunity to hear from people with disabilities and their advocates, so that they can tell their stories. This would enlighten the discussions of the summit participants the following day. The output of this meeting should be in the form of recommendations to the Government. As a follow up measure, it is recommended that a national body for library services for people with disabilities be established, which will be the central institute for the promotion of library services for people with disabilities into mainstream provision.

The body will lay down an infrastructural framework to help individual libraries to prepare for the provision of library services for people with disabilities by conducting research, developing materials and IT devices, and by providing information and consultations to individual libraries.

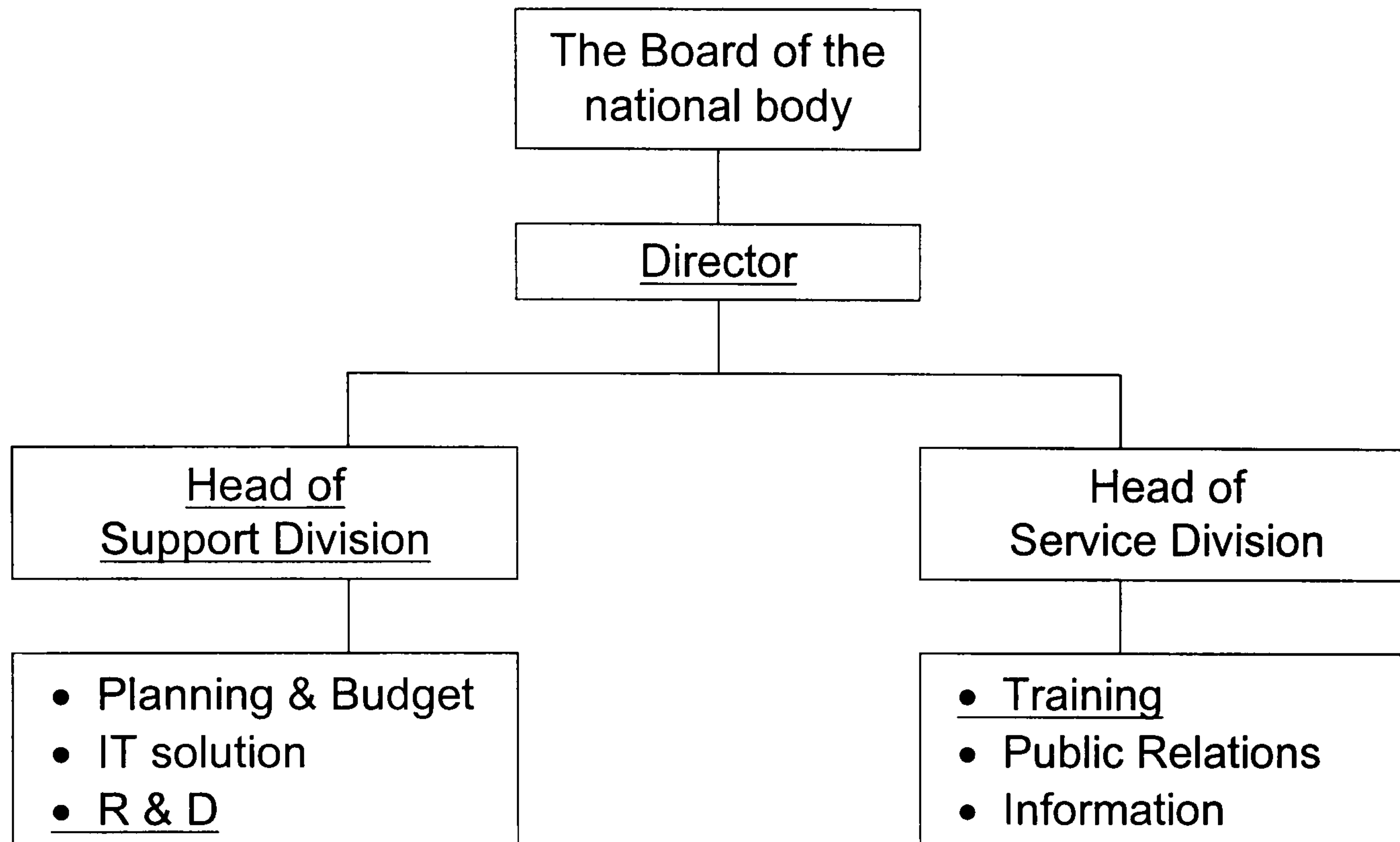
7.1. 1 The national body for library services for people with disabilities

The aim of the body would be not only to advise the Government to draw up appropriate policies but also to promote and guide individual libraries to address access and equity, with particular attention to services for disabled people, and to maximise library resources available currently. The body would thus play the role of a co-ordinator among individual service providers for disabled people.

7.1.1.1 The structure of the national body

- The governance of the national body would be the responsibility of its Board.
- The national body would comprise around 50 people and of which 10 would be the Board members, who could be recommended from the members of the summit meeting mentioned above. They should be appointed from various backgrounds. Among the members of the Board at the least one or two members should be disabled individuals or members of a disability association and approximately one quarter of the employees of the national body should be recruited from people with disabilities, because they could effectively speak on behalf of disabled people, and are more familiar with the needs of disabled people than those without disabilities.
- The national body could come under the jurisdiction of the Department of Culture and Tourism because this department is in charge of developing the nation's library and information policy. In reality, however, it will never be easy for the body to work efficiently and effectively under the Department. This is because in Korea there are three different government authorities which directly control libraries. The Minister of the Department of Culture and Tourism has no right or power to control the purse strings and personnel of individual library authorities. Therefore it seems appropriate to me that the national body should come under the jurisdiction of Prime Minister.

7.1.1.2 The organization of the national body



7.1.1.3 The Key activities of the national body

- Developing a comprehensive national plan

Developing a comprehensive national plan for library and information services for people with disabilities would lay down an infrastructural framework for effective and efficiently co-ordinated library services for disabled people- otherwise individual service providers are likely to sink or swim by their own devices. The plan should cover broad subjects, including financial solutions, and also provide individual libraries with practical guidelines and standards.

- Creating awareness of library and information needs

It is essential to create awareness of the library and information needs and rights of people with disabilities among library professionals, the general public and the government. The body can make use of various methods to raise the awareness of library practitioners such as in-house training, seminars,

workshops, publications, and video tapes, and can also raise the awareness of the general public by means such as exhibitions, newspapers, TV, Websites, or word of mouth and so on. In partnership with the National Library of Korea, the Body could organize various training programs covering areas such as making people more sensitive to the difficulties and problems of disabled people and their information and reading needs, assistive information technology and accessible web sites, alternative format materials, communication modes, disability etiquettes and skills in dealing with disabled clients. As mentioned in Chapter 6 the National Library of Korea has run training programs for library practitioners nationwide using its own facilities. Therefore the national body should work in partnership with the National Library for training practitioners.

- Preventing disabled people from being excluded

Information services through web sites are popular among libraries. To prevent disabled people from being excluded from the services, the body should guide individual libraries to design web sites accessible to disabled viewers. To promote accessible web site design the national body should first check the accessibility of existing library web sites, and find the common problems which make them inaccessible to disabled people. Good practices of accessible web sites in libraries both at home and abroad should be introduced. In addition, guidelines for accessible web site design should be produced. At the least among university libraries, the installation of assistive information technology equipment should be compulsory when multimedia/information service rooms are set up.

- Playing the role of coordinator among library service providers

To minimize the duplication of efforts and to maximise the availability of resources both in mainstream and other library service providers, the national body should play the role of coordinator to help individual libraries cooperate with one another in resource sharing. As one of its major coordinating efforts, the national body should separate the producers of alternative format materials from distributors. At present, disability institutions and special libraries both

produce and distribute alternative materials to visually impaired people. Therefore the duplication of efforts and undesirable competition has been generated within their very limited resources. On the other hand, the resources of mainstream libraries have not been utilized much by disabled people.

As coordinator, the national body should make the special institutions producers and mainstream libraries distributors of alternative materials to the end-users. It is often pointed out by visually impaired people that the current alternative materials are very limited, mainly to adult fiction and adult non-fiction books, and children' books, whereas textbooks and reference materials for university students are very scarce.

To overcome the dearth of these materials the national body should coordinate the individual producers to specialize production to specific subject areas. Apart from the production of talking books (analogue) and Braille, more digital talking books produced using DAISY technology, diskette books and large print books need to be produced.

- Providing individual libraries with information, consultations and advice.

Due to mainstream libraries having little experience in serving disabled clients, they should be helped from the outside in the areas of staff training, physical access to buildings and facilities, adapted information technology equipment, alternative reading materials, modes of communication with disabled clients, fundraising, and so on.

Apart from personal contact, the national body should issue monthly or bimonthly newsletters covering various topics related to library services for people with disabilities both in printed version and electronic versions for library practitioners, interested groups and individuals. Additionally, through its web sites, the national body should provide the general public with information related to disabilities or disabled people, such as library services, new publications, education, employment, rehabilitation, health, social welfare, volunteers, and a directory of organizations comprising of or for people with disabilities.

- Conducting research and development

The national body should conduct research and development on various areas related to library services for the disabled, in partnership with business sectors, higher education institutions and research centres. No research and development centre for the Korean library community exists, although its necessity has been recognized by many library professionals for a long time. At present most assistive IT devices used by disabled people in Korea are foreign-made. Disabled consumers complain about the poor quality of Korean-made devices. In fact, due to high development cost and a small market, the business sectors are not interested in the development of assistive information technology devices for disabled people. Therefore the national body should encourage business sectors to be involved in the development of new IT devices or new format reading materials, by providing funds. The national body should participate in international research and development projects in the area of library services for disabled people. The DAISY project mentioned in previous chapters could be a good example of an international project. Among Asian countries several institutions have been involved in the DAISY to develop a new generation of talking books, which are contained on CDs, but in Korea the project was introduced through Japan with Japanese-made playback machines purchased for the digital talking books.

- Enforcing government law

The national body should act as enforcer for the government, in driving library authorities to comply with the *Act on the Installation of Convenience Facilities for the Disabled*. If a law exists but no one follows it, the law is nothing but a name. Further, the body should initiate the amendment of the Library and Reading Promotion Act to make the integration of disabled library services in mainstream library services compulsory.

7.1.1.4 Budget

The cost of the establishment of the national body for library services for people with disabilities is estimated to be as follows:

(unit Korean Won)

Personnel: 2,000 million

IT devices: 800 million

Office equipment: 500 million

Utilities 100 million

Publications 100 million

Rent for premise (if not provided) 200 million

Research funds: 500 million

Other expenses: 800 million

The total cost: 5,000 million Won

(After obtaining the basic equipment and facilities required for setting up the Body, the yearly budget of the body is estimated 3,000 million.)

7.1.2 The National Library of Korea

The role of the National Library of Korea in facilitation of accessible library services for people with disabilities is crucial. To accommodate the needs of disabled people the Library should play as a role model for individual libraries nation-wide. It was well known that when the Library opened a digital information room in 1994 many academic libraries immediately followed this practice, and now it is practiced by public libraries in Korea.

In a time of digital information services that provide mainstream libraries with many opportunities to offer their doors to long lost disabled clients, the role of the National Library should be emphasized and visualized more than ever

before. As key steps towards providing accessible library services, the National Library should effect the following :

7.1.2.1 Making information services through web site accessible

The National Library has started digitising printed materials since 1995 and so far approximately 100,000 titles among 3 million printed materials are digitised in full text, and made available through its web site.

Furthermore, the Library planned the National Digital Library Project, with a budget of 110 billion Korean Won, in the Spring of 2001. The project includes the construction of a new building which will be used partly for housing all the offline items, and 40 billion Won of the total will be spent on digitising, licensing electronic materials and purchasing further IT devices. The project, when approved by the government, will be launched in 2002 and completed in 2008.

To make these digitising materials provided by the Library accessible to people with disabilities, the project team of the Library should work in partnership with the national body and associations for disabled people from the outset. Much consideration should be paid to the following areas:

- Web site design for sensory-impaired people in particular
- Selecting materials to be digitised on behalf of disabled people
- Creating an accessible environment in which disabled people are fully integrated with other library users when they visit and use the facilities and IT devices of the Library. To do so the library should
 - install adapted IT devices for disabled people
 - develop a large-print online public access catalogue
 - provide a mode of communication for hearing-impaired people
 - make facilities accessible to people in a wheelchair

these materials. For some disabled people these materials compensate for 'Mookjadosoh' (meaning printed books for the visually impaired, equivalent to ink-print books of English speaking countries). As a consequence bibliographic control over alternative materials has not been recognized until now. They are left completely in the hands of individuals, and institutions which provide library services for these clients.

7.1.2.5 Making a national union catalogue for alternative materials

At present there is only one issue of a national union catalogue for alternative materials in Korea, which was published by the Korean Braille Library Council in 1994. It seems that, due mainly to financial difficulties, the Council cannot produce it regularly. To establish bibliographic control over the nation's collections of alternative library materials, the National Library should maintain this union catalogue by receiving deposit copies and including them in the Korean National Bibliography. Given the dearth of alternative materials, maintaining a national union catalogue is an indispensable tool for resource-sharing, and for discouraging duplication.

7.1.2.6 Creating an interlibrary loan system

The construction of a national catalogue for alternative materials would lay the foundation for an inter-library loan system. When the catalogue has been prepared, the next step would be to create a system in which alternative materials are shared between libraries. Given that few mainstream libraries own alternative materials in their collections, it is currently practically impossible to conduct inter-library loans between them, since they have little to share with others. Thus, the National Library should make every effort to collect alternative materials through the deposit scheme, and to maintain and expand the National catalogue, as mentioned. Further, the national body, should in turn aim to

7.1.2.2 Allocating a budget to services for disabled clients

The National Library of Korea should allocate a certain amount of its total budget to services for the disabled in a regular manner, but not on an ad-hoc basis. This budget will be spent on building and facilities, library materials, IT devices, equipment, training and so on.

7.1.2.3 Introducing services for disabled people through its web site

These days the number of national libraries that announce their services for disabled people on the web has gradually increased. At least the followings should be included among the National Library's available services:

- An accessible entrance
- Interpreting services for hearing impaired users
- Online public access catalogue, and the Internet with adapted IT devices
- Listening devices
- Wheelchair-accessible desks
- Contact persons

7.1.2.4 Enforcing legal deposit to alternative format materials

To promote resource sharing between library service providers for disabled people, especially visually impaired people, the National Library should create an inter-library loan system. To do so the Library should first enforce the legal requirement for publishers who produce alternative format materials to deposit copies of their titles. So far, only a few titles in Braille are deposited to the Library. Talking books (produced in digital and in analogue) and diskette books are not deposited, although these have become much used by disabled people. This is probably due to the producers of these materials being unaware of the deposit requirements, and also to the Library being unaware of the value of

ensure that producers pay more attention to extending their alternative ranges of titles, and specialise more within this area of production, and that mainstream libraries build collections in alternative materials by purchasing first basic titles, then accumulating titles in specialist areas.

Nevertheless, the National Library should create a interim inter-library loan system in which resource sharing is practiced immediately. In this case, mainstream libraries would usually be the borrowers, and the producers and National library the lenders. Whether the loan system is one way or not does not make any difference to the end-users. More crucial for end-users is the convenience with which they can make use of alternative materials. That is, the system should let the end-users borrow and return alternative materials through their local libraries in the same way as the people without disabilities, and without having to contact producers directly as they do currently. For a smooth and voluntary transition of library services for disabled people from special libraries to mainstream, at the beginning the system should allow the users to choose from where they wish to obtain their resources.

7.1.3 The difficulties of an interlibrary loan in alternative materials

In general the success of inter-library loan system depends on the mutual cooperation of individual participants as they comply with the regulations imposed. But in the case of the interim loan system mentioned above, its success depends on the willingness of the lenders, especially the special institutions. Sometimes, it might seem as if the integration of people with disabilities into mainstream library services could be a threat to the special institutions which currently provide library services for these people. Actually, I have felt this many times during my research both in Britain and Korea. This is because the library service of these institutions is one of their core functions, and thus a major source for sustaining themselves. It could be feared that no institutions will be willing to share their own resources with those who would

take their long-lasting clients away. In this scenario, far from cooperating, they could be even become rivals and compete with to make disabled people their clients. This is unlikely to happen in Korea, however.

The major reason is that currently most librarians in mainstream libraries are unwilling to recognize disabled people as their customers. Rather, they are willing to pass disabled people over to others who provide library services, by making many excuses themselves in rejecting the needs of these clients. Therefore it is hard to anticipate that mainstream libraries will actively rival the special institutions.

Further, special institutions should be willing to share their resources with mainstream libraries if they are really seeking the benefit of disabled people over the long-term. As mentioned in the previous chapters, the library services provided by these specialist institutions are unlike those provided by mainstream libraries. Generally, the former stem from the desire for the welfare of disabled people, the latter from the desire for meeting reading and information needs. If the goal of the specialist establishments is to help disabled people to live independently in mainstream society, integrating services for disabled people into mainstream library services could be seen as an opportunity for these institutions in many ways, rather than as a threat. The special institutions should be advocates of the promotion of mainstream library services for disabled people. Without cooperation from these special institutions, however, the establishment of an inter-library loan system for alternative materials would be much more difficult.

7.2 Local level

7.2.1 Primary mission

The mission of library services should be clearly understood by library authorities that people with disabilities have a right to equitable library services.

This implies that first, disabled people living, working or studying in an area should be allowed to have access to the library within that area in the same way as other people. Secondly, given that disabled people enter libraries for the same reasons as anyone else, to achieve equality of access to library services, libraries should apply the same standards for the general public to the needs of disabled clients in facilities, equipment, materials, programmes and services.

7.2.2 Planning

Individual libraries should develop an action plan for services for disabled people. Planning should be integrated into the overall library planning process including the budgeting process in which the library should determine what percentage of its budget should be allocated to meet the needs of disabled clients.

Library planning must include advice and information from disabled individuals and their agencies in the community. Outside advice means that the library is able to identify needs and to establish priorities by organising focus groups. Moreover, libraries can avoid expensive mistakes by consulting with them. Advice can also be sought from the national body if it is set up, from other libraries with well-established services and from professional library sectors.

In the planning process the library should include evaluations of its activities and services to assess the effectiveness in meeting user and non-users needs and to determine further improvement of its services. The measures of evaluation could include:

- membership and circulation figures
- surveys of users and potential users
- user suggestions and complaints
- records of communications with individuals and groups through various

contacts on regular or irregular basis.

7.2.3 Designated staff

To carry out library services for disabled people effectively libraries should designate a member of staff at senior management level for the coordination of services. The designated staff member will have responsibilities including:

- promoting library services for disabled people
- designing in-house staff training programs
- participating in various meetings, seminars, workshops, conferences etc. relating to disability issues as a representative of the library.
- consulting with disabled individuals and their agencies
- facilitating co-operation between libraries (e.g. resource sharing)
- contacting related government departments
- seeking outside funds, etc.

The staff member should have good communication skills (both oral and written), should be creative and highly motivated.

7.2.4 User research

Prior to designing appropriate services some basic question should be asked to discover the true needs of these clients. Such information will help librarians to plan and select the proper materials, equipment, technological expertise, etc. The following questions could be included:

- How many disabled people are in the area?
- Who currently use the library?
- What kind of difficulties do clients have?
- How do these clients currently use the library - do they bring along assistants to help them?

- What technology is available?
- What is the provision for potential users?

To collect information and data for non-users libraries could contact other agencies, organizations and service providers. Based on this information and data libraries could select priorities in service provisions and also short and long term objectives could be made.

7.2.5 Physical access

Government regulations especially the *Code of Practice of the Act on Installation of Convenience Facilities for the Disabled* should be consulted to ensure that libraries and their various components are accessible to disabled people. However, these standards are minimal for library buildings, thus, it is essential to consult disabled library clients, local disability organisations and architects both in the design of new buildings and in alterations to existing buildings. Chapter 4 discussed standards in physical access to library buildings in the UK, which will give insight into physical access in various aspects.

In the case of alteration of existing buildings it is good to go through the building in a wheelchair and try to experience it from the users' perspective. Once those basic observation are made priority should be sought within the financial limitation.

7.2.6 Library provision for reading and information resources

Disabled people have the same reading and information needs as other people. Standard library services available to able-bodied people must be made available to disabled people. Library resources come in many forms: printed materials, cassette tapes, video tapes, microfiche & film, CDs, computer disks, CD-ROMs and the Internet. Many of these are already in library collections and may be suitable for disabled clients but not previously identified. Therefore

these should be exploited first. There are also special format materials suitable for hearing impaired people and visually impaired people.

For hearing impaired people there are:

- books on sign language
- easy-to-read books (well illustrated and limited vocabulary books)
- videos especially captioned

For visually impaired people there are:

- Braille and tactile materials
- talking books and magazines
- audio materials
- electronic materials

Reading resources for disabled people must appeal to a variety of interest and needs. But by comparison with those for sighted people, especially materials published for visually impaired people, they are very small both in number and types of materials. Therefore libraries should seek ways to make printed materials available to visually impaired people through the provision of assistive technology and other services including personal reading.

The information needs of disabled people are not different from the general public but in addition disabled people require specific information related to their disabilities. Public libraries are in a good position for helping disabled people and their advocates including parents with disabled children by developing collections and building a database in this area. There are considerable difficulties in acquiring information for those who are desperately seeking information at the critical stage. Currently in Korea for parents who have just got out of hospitals with newborn disabled babies and for those who recently acquired disabilities there is very little help when they need it most. Although there are many agencies providing information, disabled people are

still information poor. The practical difficulties faced by disabled information seekers are not the dearth of information providers but the lack of organisers of the maze of information sources. The nature of librarians is to collect information and organise precisely, and redistribute them. Public libraries seem the best institutes in a community to provide this kind of services. Information which is most required include:

- Disability benefits
- Availability of clinics and hospitals
- Early education for disabled children
- Higher education at home and abroad
- Employment and Rehabilitation
- Aids and equipment for daily living
- Local and national disabled organisations

This information is also useful to professionals and laypersons who work with disabled people.

7.2.7 Assistive technology and technical aids

There is a wide range of reading aids and equipment available, which facilitate disabled people to access resources. Before buying this equipment libraries should identify the true needs of current users and potential users by consulting with focus groups. Besides, the library should consider what technical aids and equipment are available in other organisations including the education sector and rehabilitation centres for disabled people in the community in order to avoid expensive mistakes by purchasing identical items. Most high-tech devices for disabled people are expensive, thus a network of technical aids shared between organisations could be established.

In planning the purchasing technical aids for libraries, both low and high

technical devices should be included.

Specially devices for visually impaired people include:

- Magnifiers to be handheld
- CCTV (magnifiers using a television screen to enlarge text and image)
- Screen magnification software
- Screen reading software
- Optical Character Recognition machine
- Braille printers
- Braille display (softbraille)
- Cassette players

For the maximum use of these devices staff members should be familiar with the various forms of assistive technology so that users can be assisted when using them. Besides, user manuals and instructions should be available in accessible formats such as tape, large print, disk, Braille etc. Furthermore to maximise the utilisation of library resources especially technical aids promotion and publicity are required to inform targeted people of the aids and equipment in the community. Promotion and publicity could be done through mass media, local disabled organisations, disabled students groups, rehabilitation centres, clinics, hospitals, social services organisations, personal contact, word of mouth etc.

Nowadays many libraries, particularly university libraries create their own Web sites. It is a good place for publicity of library services to target groups. Increasingly university Web sites in the UK contain information about library facilities, resources, equipment, services for disabled students. In this country some universities welcome users' comments and suggestions about anything about library services for the further improvement of its services.

7.2.8 Staff training

Awareness training should be given to everyone both part-time and full-time workers such as library administrators, existing staff both at professional and clerical level, new employees and volunteers. All staff should be able to respond to basic matters that do not require expertise in disability issues through in-house awareness training programmes. On the other hand a designated staff member for disability issues should have to take further specialist training offered outside of the library because it is impossible for all staff members to have specialist training.

In designing in-house training programmes consultations and advice should be sought from outside. Persons with disabilities and representatives of disabled organisations could be invited as speakers in training sessions.

For the enhancement of communication with disabled clients it is recommended to have at least one staff member to learn sign language and Braille or as an alternative to secure volunteers who are able to do that.

Given that most disabled people have little experience and knowledge of libraries, user training should be included in staff training programmes, particularly for the use of special equipment and devices individual user training should be placed.

7.3 The Korean Library Association (KLA)

The Association should play a key role to stimulate library professionals nationwide to be aware of the rights and needs of disabled people regarding access to mainstream library services. As an advocate of the library sector the Association should be able to push the central and local governments to take appropriate measures financially and legally in order to meet the needs of individual libraries for the provision of library services for disabled people.

7.3.1 A forum

The first thing that should be done by the Association is to hold a forum to discuss the issue of integration of library services for disabled people into mainstream libraries. During my research it was found that in Korea currently there are several academics and practitioners who continue researches or have interests in the issues of disabilities (see Appendix 6). Gathering together these individuals the Association could create a national forum at the Association's conference. Holding a forum is the first step. By doing so, the Association could create further initiatives for the promotion of the integration of library services into mainstream settings.

7.3.2 Establishing Section for library services for people with disabilities

In the past there was a section for library services for people with visual impairment within the Korea Library Association. Now it does not exist any more. The Association should revive the section and extend its scope to the interests of other disabled populations such as the hearing impaired and the mobility impaired. After forming a section for people with disabilities the KLA can create various initiatives relating to the issues of integration through this section. The members of this section could consist of persons from general libraries, special libraries, library schools and disabled individuals.

7.3.3 Making a single unified membership association

The KLA should increase the membership of the Association. Currently only a small proportion of the total population of practitioners, academics and library school students are members of the Association while there is a number of groups, clubs, councils and associations related to the library and information

sector. In order to be strong the Association should amalgamate all these parties into one single strong unified membership association. The Korean Braille Library Council which consists of members of special libraries for visually impaired people should be responsible for the amalgamation. The Council was formed in 1986 and has worked actively by organizing meetings, workshops and seminars for the improvement of library services for visually impaired people. Since the beginning of the 1990s this Council has built a relationship with Japanese Braille libraries in order to exchange ideas, experiences and keep itself up-to-date technology in the area of visually impairments. This Council also published a national catalogue for alternative materials for the first time in 1994. The catalogue was published primarily to avoid duplications because there is a number of agencies who produce alternative materials. Therefore the need for cooperation with disability agencies within the KLA cannot be overemphasised. The disability agencies have built a lot of knowledge and experience on the characteristics of visually impaired people and the needs for their reading and information by serving them for decades. The disability agencies will also benefit from the cooperation because most of them are social workers and have no background of librarianship.

7.3.4 Developing a programme of prizes and awards

It is recommended that the Association set up a panel of library building awards to stimulate libraries to design good library buildings practically and aesthetically both for new constructions and alterations of existing ones. The criteria of judgement should include special features of the buildings relating to usage by disabled clients. The most important elements in physical features is that all facilities aimed for the use of disabled clients should be fully integrated into the rest of the overall library setting and should be made available for disabled people to use independently.

The Association can develop this awards scheme with the cooperation of

other sectors such as architects, information and communication vendors, library suppliers and the advocates of disabled people. Currently there are three architectural associations in Korea. They can help in developing the library building award scheme. The year 1999 was 'The Year of Architecture' in Korea so an organizing committee was set up (further information: <http://www.arch99.or.kr>).

Drawing media attention to the building awards scheme of the KLA is another subject but is crucial for the success of this initiative. If this scheme goes smoothly the Association will raise its image in society because currently few know of the existence of the Association except the library sector. Besides, the library building awards can act as a communication channel for individual libraries to share ideas and experiences in this area.

7.3.5 Producing standards / guidelines

Standards of library services for disabled clients are an indispensable tool for the profession, the administration and financial authorities. 'Standards convey the essential nature of tasks through succinct statements of objectives. Standards can also provide benchmarks by which librarians, administrators or users can measure performance, and they can place quantitative values on what needs to be provided or achieved.'¹ IFLA and library associations in many countries have produced guidelines for library standards for disabled clients.² It

¹ The State Library of Victoria, Disability Services: Draft Guidelines on Library Standards for People with Disabilities, 1999.

Text is available: <http://www.slv.vic.gov.au/slv/disabilities/standard/disindex.htm>

² Useful guidelines:

- a) John M. Day (ed), Guidelines for library services to deaf people, The Hague: IFLA, 1991.
- b) Roundtable for Libraries Serving Special Populations, New York Library Association, Guidelines for Libraries serving persons with a hearing impairment or a visual impairment, New York: New York Library Association, 1987.
- c) Jean Machell, Library and Information Services for Visually Impaired People: National Guidelines, Share the Vision/Library Association, London: Library Association Publishing, 1996.
- d) Canadian Library Association, Canadian Guidelines on Library and Information Services for People with Disabilities, 1997.

is recommended that general guidelines be produced for the overall library services for people with disabilities to increase the awareness of librarians to the needs of these populations. Further focused are specific issues such as design of accessible buildings and Web-sites, provision for hearing impaired people and visually impaired people, technical aids and assistive technology etc. These publications will also benefit library schools and professionals who work for disabled people.

7.4 Library schools

As discussed in Chapter 6 raising memberships in public libraries seemed to be the single most urgent issue in librarianship in Korea. The general public in Korea has never enjoyed the benefits of library services except using them as study halls since the establishment of the library profession. This is a great challenge to library schools which are established as formal institutes to educate future library professionals.

Library school educators could use this unpleasant situation as an opportunity by developing new curricula which enable students to create integrated library services for disabled people from the start of their careers. Education is vital to the creation of fully integrated library services for disabled people. The awareness of library professionals of the needs of disabled people should be raised from the schools of librarianship. Ignorance or misconceptions of librarians about disabilities are the most frequent cause of inadequate or non-existent services. In this respect education of library schools should be addressed in a way which dispels attitudinal barriers and misconceptions about disabilities. In addition further issues related to library services for disabled people should be fully integrated in their curricula.

It is recommended that courses offered by library schools should contain disability issues as a major component of the courses. For example, in

designing of Web-sites on IT courses, accessible Web-sites design should be included as a content.

Besides, the promotion of scholarships or bursaries could be encouraged in order to attract more disabled people into the library profession. There are many benefits to have more disabled people in the library career. After all they will play a vital role for the integration of disabled people into mainstream library services.

7.5 Summary of recommendations

National Level

Recommendation 1. The government should spearhead the promotion of the integration of disabled people into mainstream library services by designating a national body for library services for people with disabilities. The aims of the national body would be to: first to promote and guide individual libraries for the provision of library services for disabled clients and second, to maximise library resources available currently, in which the body will play the role of a coordinator among individual service providers for disabled people.

Recommendation 2. the national body should develop a comprehensive national plan for library and information services for people with disabilities which lays down an infrastructural framework for the effective and efficient library services for disabled people.

Recommendation 3. The national body should provide individual libraries with information, consultations and advice for the provision of library services for disabled clients. Attention must be paid to: Legislation relating to disabled people including Building Standards; Provision of appropriate resources and materials; Planning new building and improving access in existing buildings;

Access computer technology and technical aids; Accessible Web-sites design; Internet resources.

Recommendation 4. The national body should coordinate library services for visually impaired people by separating producers of alternative materials from their distributors to maximise the current library resources both at special sectors and mainstream sectors. Special libraries will be national producers of alternative materials while mainstream libraries will be distributors to end-users.

Recommendation 5. The National Library should extend its legal deposit system to alternative materials which are produced for the use of visually impaired people. Especially Braille and talking books are major compensations to printed materials for those who have difficulties in reading print. The Library should treat these alternative materials equally with printed materials for sighted people for the promotion of bibliographic control and resource sharing.

Recommendation 6. The catalogue of alternative materials should be maintained. Given the dearth of alternative materials the Library should maintain the national union catalogue, which is an indispensable tool for resource sharing and for minimizing duplication efforts.

Recommendation 7. The National Library should create an interlibrary loan system between special institutions and mainstream.

Recommendation 8. The most important element in the provision of library services for disabled people is the staff awareness and understanding of the rights and needs of disabled people. Given that so far awareness courses exist nowhere in Korean librarianship the National Library must work together with the national body in the area of training librarians. To heighten sensitivity on the needs of disabled people and to help develop positive and appropriate attitudes

the training courses of the National Library should be the starting line for the promotion of staff training nationwide.

Local level

Recommendation 9 Individual libraries should develop an action plan for services for disabled people. Planning should be integrated into the library overall planning process including the budgeting process in which the library should determine what percentage of its budget should be allocated to meet the needs of disabled clients.

Recommendation 10 To carry out library services for disabled people effectively libraries should designate a member of staff of the senior management, who must be in charge of all aspects of disability issues in the library. The staff member should have good communication skills (both oral and written). He/she must also be creative and highly motivated.

Recommendation 11 For the provision of library services for disabled clients some basic questions should be asked to discover the true needs of these clients. Such information will help librarians to plan and select the proper materials, equipment, technological expertise, etc. In order to collect information and data for non-users libraries could consult with other agencies, organizations and service providers. Based on this information libraries can select priorities in service provisions and also make short and long term objectives.

Recommendation 12 Libraries should comply with the 'Code of Practice of the Law on Installation of Convenience Facilities for the Disabled' for physical access in buildings and facilities. In addition, it is essential to consult with disabled library clients, local disability organisations and architects both in the

design of new buildings and in alternations to existing buildings.

Recommendation 13 Disabled people have the same reading and information needs as anyone else. The standard of library services available to able-bodied clients must be made available to disabled people by building collections to meet a variety of interests and needs among these groups. Besides, disabled people require specific information relating to their disabilities such as the availability of disability benefits, clinics and hospitals, early education for disabled children, higher education at home and abroad, employment and Rehabilitation, aids and equipment for daily living, local and national disabled organisations. This information could also be useful to professionals and laypersons who work with disabled people.

Recommendation 14 There is a wide range of reading aids and equipment which facilitate disabled people to access resources. Before buying this equipment libraries should identify the true needs of current and potential users by consulting with focus groups. Besides, most high-tech devices for disabled people are expensive and so libraries should consider what technical aids and equipment are available in other organisations and develop a network to share these technical aids. For the maximum use of these items promotion and publicity are required to inform the target group in community.

Recommendation 15 All staff including library administrators and volunteers should be given awareness training through in-house staff training programmes. In designing in-house training programmes consultations and advice should be sought from disabled associations or disabled people. Persons with disabilities and representatives of disabled organisations could be invited as speakers in training sessions. Given that most disabled people have little experience and knowledge in libraries, in staff training programmes user training should be included particularly, for the use of special equipment and devices.

The Korean Library Association

Recommendation 16 The Korean Library Association should hold a forum to discuss the issue of integration of library services for disabled people into mainstream libraries. Currently there are several academics and practitioners who continue to research or have interests in the issues of disabilities. Gathering together these individuals the Association could create a national forum at the Association's conference. Holding a forum is the first step. By doing so, the Association could develop further initiatives for the promotion of integration of library services into mainstream settings.

Recommendation 17 The Association should revive the section for library services for the blind which previously existed within the Association and extend its scope to the interests of other disabled populations such as the hearing impaired and the mobility impaired. The members of this section could consist of persons from general libraries, special libraries, library schools and disabled individuals.

Recommendation 18 Currently only a small proportion of the total population of librarians are members of the Association while there are a number of groups, clubs, councils and associations relating to library and information sector. The Association should amalgamate all these parties into one single strong unified membership association to strengthen itself. The Korean Braille Library Council, which consists of members of special libraries for visually impaired people should be consulted by the Korean Library Association at the issue of amalgamation.

Recommendation 19 One of the missions of the Association is to promote the highest standards of professional practice. To pursue high standards there

should be opportunities for practitioners to develop themselves and build knowledge in their interested areas. It is recommended that the Association should work in partnership with the national body and the National Library to training librarians in particular the needs of disabled people.

Recommendation 20 The Association should set up a panel of library building awards to stimulate libraries to design good library buildings practically and aesthetically both for new constructions and alterations of existing ones. The criteria for judgement should include special features of buildings for the use of disabled clients. The most important elements in physical features is that all facilities aimed for the usage of disabled clients should be fully integrated into all library settings and should be made available for disabled people to use independently.

The Korean Library Association can develop this scheme with cooperation of other sectors such as architects, information and communication vendors, library suppliers, and disabled individuals and their advocators. Drawing media attention to the building awards scheme of the KLA is crucial for the success of this initiative.

Recommendation 21 Standards of library services for disabled clients are an indispensable tool for the profession, the administration and financial authorities. It is recommended that the Association produce guidelines for both general and specific areas for individual libraries for the provision of library services for disabled people. These publications will also benefit library schools and professionals who work for disabled people.

The Library schools

Recommendation 22 Education is vital to the creation of fully integrated library services for disabled people. The awareness of library professionals of the

needs of disabled people should be raised from the schools of librarianship. It is recommended that courses offered by library schools should contain disability issues as major component of the courses. For example, in designing of Web-sites at IT courses, accessible Web-sites design should be included as a content.

The Government

Recommendation 23 The government should determine that library services for disabled people are supported by the government funds but not by charities.

Recommendation 24 Public libraries are the most appropriate institutes through which the government could promote social integration of disabled people into mainstream society. To accomplish social integration of disabled people and the enhancement of living standard of the nation through public libraries the government should set the priority of national policy on the development of public libraries services by allocating appropriate budgets for the provision of library services for disabled people.

Recommendation 25 The government should enforce the current legislation, the Law on Installation of Convenience Facilities for the Disabled. If laws exist but no one follows, the laws are nothing but the name.

Conclusion

Successful library services for disabled people depend on the cooperation between interested groups by making all human and financial resources available put together. It cannot be reiterated often enough that the initiatives at local level should be supported at national level. The creation of a national coordinating body, I have therefore proposed in this chapter, should lend formal

structured backup to individual libraries in the provision of library services for disabled people.

Central to integrated library services is that all personnel in the library career field should accept and treat disabled people the same as the rest of their library populations.

Restoring the rights of access to information and reading needs of disabled people, the most disadvantaged groups in information era, should be one of their prime responsibilities. On the basis of this awareness true integrated library services will be established in mainstream sets.

Conclusion

The integration of disabled people into mainstream society has been a top item on the political agenda in many countries since the last decade of the twentieth century. This movement was influenced by the International Year of Disabled Persons (IYDP) proclaimed by the United Nations in 1981. Until now disabled people have experienced various discriminations, prejudices and exclusions from society caused mainly by the lack of awareness of able-bodied people. As a result, most disabled people have lost equal opportunities in education, employment and all sorts of activities in society, that has contributed to disabled people being unable to use their abilities and has made them live lives more dependent upon others. Recognising these negative effects the United Nations proclaimed the IYDP under the theme of 'full participation and equality' in order to stimulate each government to tackle these practices of exclusion and discrimination towards disabled people.

Understanding this international phenomenon, the Korean government like many other governments has enforced the integration of disabled people into mainstream society by enacting related legislation. Particularly implementing a new education act, the government has encouraged disabled children to be taught at general schools. It was understood by the government that education for disabled people in the mainstream sets is the first step for social integration and that is also considered as the best solution to develop the potentials of disabled people which can help them to live independently. In addition, the Government has tried to improve the built environment for the access of disabled people by enacting the *Act on Installation of Convenience Facilities for the Disabled* (AICFD).

Libraries are part of society and reflect social trends. Making library services accessible for disabled people in mainstream provision is fair and what

they deserve. One of the distinguishable features of the library among other institutions in society is its educational role which helps people to develop their potentials by making use of various information and reading resources. In this respect the library is regarded as the most appropriate institution which leads to social integration in mainstream society. Nevertheless, so far library professionals in Korea have barely recognised the needs of information and reading resources for disabled people. By this token unusual practices of libraries, in the light of an international trend, especially in university libraries, have been made by installing expensive luxurious IT devices as "accessories" rather than for educational purposes for able-bodied students while there is nothing for disabled students. This practice proves the complete lack of awareness of Korean library professionals on the issues of disabilities.

This research, which examines the current practices of library services for disabled people focusing on a number of broad issues related to disabilities, comes at the time when the need for reform of library services for disabled people is urgent in order to cope with the challenges posed by the current social trend of integration of disabled people at home and abroad.

The research investigated many issues in three areas: physical, technological and human aspects which are seemingly the prime factors influencing accessible library services for disabled people in mainstream sets. The study revealed that present provision in terms of physical buildings and IT facilities for library services for disabled people in mainstream sets is lacking. This is attributed to the human factors, that is, the inability of Korean library professionals to understand the domestic social and political climate surrounding disabled people and also to communicate with their counterparts abroad, which has left them isolated from the international scene in the area of disabilities. The two human factors of concern seem to me to be the failure of Korean library schools to see the reality of domestic libraries and the lack of opportunities for library practitioners to develop themselves.

Before proceeding to suggesting solutions of these problems I would like to set out the findings which are the most urgent obstacles to efficiency for accessible library services in Korea. First, from the perspective of physical buildings one problem, I found, is the lack of architects with knowledge and experience in library projects and the lack of interest in this area by library professionals. This factor seems to be a general problem in library building projects in Korea. Without overcoming this deficiency it is difficult to construct accessible library buildings for disabled people. Another problem is the lack of guidelines both for new constructions and alterations. *The Code of Practice of the Act on Installation Convenience Facilities for the Disabled* is minimal and insufficient in making accessible library buildings for disabled clients. Especially when altering existing buildings it is very difficult for individual libraries to decide what is the best solution within the limited space and finance. Last but not least is the lack of legal enforcement in the construction of new library buildings. Even newly constructed library buildings are still inaccessible for disabled people although it is recognised that the total cost of accessible library buildings is not much different from those of inaccessible library buildings if the accessible library building is sought early, at the stage of library design. This means the lack of the government's determination in the improvement of physical environment for the disabled people.

Secondly, from the perspective of Information Technology one of the biggest problems is the lack of awareness of IT impact on the lives of disabled people. There are few library professionals who know that even totally blind people are surfing over the sea of information through the Internet and deaf people use e-mail as much as their hearing counterparts. Almost the entire library stocks can be accessed by visually impaired people through assistive technology such as OCR systems. New opportunities for mainstream libraries are looming. Not making alternative materials for print disabled people but using assistive technology now mainstream libraries can open their doors to disabled people. They can offer them both the printed and electronic materials.

Nevertheless, unfortunately there are few who are aware of the impact of IT for disabled people, and the possibility of IT application to mainstream libraries in order to accommodate the long-lost disabled populations.

Another problem is the Web site design. The Graphical User Interfaces are very effective for sighted people because they represent information as familiar objects or visual images that rely almost entirely on the capacity of sight. On the contrary for visually impaired people the GUI is a great challenge because screen readers are unable to read visual images, icons, symbols and colours. If text itself is stored as a graphical image then there is a deafening silence, as if it does not exist at all. In the early days of the World Wide Web, Web sites used visual images mainly for decorative purposes but now they contain significant information. It was found that currently many Web sites in Korea are making heavy use of images, symbols, tables, colours, inappropriate backgrounds etc. Particular attention should be paid to the design of Web sites.

Thirdly, one human factor — the negative attitude of librarians towards disabled people — is said to be the biggest obstacle preventing or discouraging them from making use of mainstream libraries. These difficulties can be solved to some extent through staff education and training. But the problem is that in Korea no institute currently provides training courses on disability issues for library professionals. Besides, no library schools offer courses in this area.

This research concludes from my observation that some of the 'human factor' problems lie in library school curricula. Korean library schools resemble American library schools. Since this discipline was introduced in the 1960s from the United States the curricula of most Korean library schools have been not much different from those in American library schools although the library environment between these two countries is totally different. In the 1960s when the American library schools were introduced, the library memberships in the United States were already sixty per cent of the populations, while in Korea only a number of students living in big cities were using their local libraries as study halls and in those days in Korea there were less than 15 public libraries.

Now 40 years later since the establishment of library schools in Korea still only two per cent of the populations are making use of their local libraries. This means that acting as American schools Korean library school educators failed to see the reality of the Korean circumstances. Consequently library practitioners, graduates from library schools, have completely failed to increase the memberships of libraries by being unable to meet the needs of both current and potential Korean users. What they have taught at library schools became inapplicable on the spot.

Hence, the most crucial problem in accessible library services in Korea is not the matters of material or technological resources but is the matter of human resources. That is, library practitioners have not been accustomed to perceive library users as an important component of a library. As a result they have paid little attention to what users come to libraries and what they really want there. Therefore without understanding the issue of user care / user development it is very difficult for Korean library professionals to be aware of the issue of the integration of disabled people into mainstream sets. This is proved by the fact that the movement of social integration of disabled people in Korea is almost a decade old but no library school educators and practitioners pay attention to this issue.

The solution to the problems I identified in this study lies in developing an integral approach, that means all the components of library community such as library schools, library associations, and libraries at national and local level should work in partnership for the establishment of effective library services for disabled people. In Chapter 7 I developed a set of proposals which aim at all the subjects of library community. Believing that the backbone of this approach will be the leadership from central level I suggested the establishment of a national coordinating body to lend formal and structured backup for individual libraries. It cannot be overemphasised that initiatives at local level will need support at national level. Above all, any planning to initiate accessible library services for disabled people should be developed in consultation and

partnership with disabled individuals or their associations in order to minimise the loss of financial and human resources.

Throughout my recommendations I emphasised that any planning aimed at disabled people should not be separated from but integrated into the overall library planning. Library schools also should integrate the subjects of disabilities into all the courses they offer rather than introducing special courses.

In developing my proposals my prime objective is to draw the attentions of library professionals from various library sectors to the issue of disabilities and to provide a source for discussion for the future establishment of library services for disabled people. At the same time my objective is to provide guidelines which will serve as a foundation on which libraries both at national and local level could develop policies and procedures for accessible library services for disabled people.

In this study the disabled people I covered are those whose disabilities are obvious such as hearing impairment, visual impairment and mobility impairment. But people with mentally retarded, learning disabilities and dyslexia were excluded. Given the time limitation and the time that would have been required to investigate people with all kinds of mental problems, the research was limited to these three areas. Further research in the area of disabled people, I hope, should extend to people with mental problems. Especially for people with dyslexia libraries should pay special attention. Dyslexia is an invisible disability. People with this disability have extreme difficulties in reading and writing although their intelligence is not less than those who are proficient readers. On the contrary, many dyslexics are very bright. It is well known that Albert Einstein, a famous scientist, had great difficulty in reading and writing.

According to a statistic of the European Dyslexia Association (EDA) there are 25 million people with dyslexia in the EU countries, that is, approximately 8 per cent of the population in its membership countries are

dyslexic.¹ Hence, libraries in the European countries currently show the increased awareness of this group of people.

Another topic for further research in this area will be the issue of economic benefit when implementing library services accessible for disabled people. Perceived high cost is a common excuse for opposing the implementation of mainstream library services for disabled people. But there are definitely long and short term economic benefits. In the long term, if one considers the role of a library to help disabled people to develop their potential, how much does it cost to society when potentially productive disabled people remain uneducated, unemployed and isolated? In the short term, if the existing resources can be utilised as much as possible, the value of the existing investment would be increased. At present most mainstream libraries have not been accessed by disabled people and this wastes money.

Recently in Korea a plan to set up a new special library for the blind was announced publicly. For this building project a seminar was held at the National Assembly Library on 26th November 1999 organised by the Korean Nazarene Association of Rehabilitation & Welfare and sponsored by the Ministry of Education, the Ministry of Labour, Union of Korean Disabled Association etc.² The estimated cost of the building project is ₩ 21 billion (£12 million) as a two year project starting from 2002. The library will be located in Chungnam province in Korea. It is understood that given the poor provision of library services for disabled people in Korea this scheme has been sought. But in the context of the current social trend of the integration of disabled people into mainstream society this project seems to be out of fashion. Apart from the cost, unwittingly creating a special library itself can promote exclusion or separation of disabled people from the mainstream society, which will also be against the current national policy.

¹ Gyda Skat Nielsen, 'Dyslexia, an invisible handicap - a challenge for the libraries', *Scandinavian Public Library Quarterly*, Vol.3, 1998, p.7.

² *Korean Nazarene Association of Rehabilitation & Welfare, Information Society and People with Disabilities in the 21st century* held in Seoul, Korea, 26 November 1999.

Bibliography

Electronic Sources

Americans with Disabilities Act 1990
<http://www.usdoj.gov/crt/ada/statute.htm>

BOBBY
<http://www.cast.org/bobby/>

Canadian Library Association, Canadian Guidelines on Library and Information Services for People with Disabilities, 1997
<http://www.cla.amlibs.ca/disabils.htm>

Cascading Style Sheets (CSS)
<http://www.w3.org/Style>

City of San Jose World Wide Web Page Disability Access Design Standards
<http://www.ci.san-jose.ca.us/oaacc/disacces.html>

Computer Access to NoTAtion and Text in Music Libraries (CANTATE)
<http://www.svb.nl/project/cantate/cantate.htm>

The Council for Museums, Archives and Libraries (UK), Library Services for Visually Impaired People: a Manual of Best Practice
<http://www.nlbuk.org>

Digital Audio based Information SYstem (DAISY), An international consortium for the new digital talking book standard,
<http://www.daisy.org>

Disability Discrimination Act 1995 (UK)
<http://www.hmso.gov.uk/acts/acts1995/95050.--a.htm#er>

Disability Rights Commission (UK), Overcoming physical barriers to access for disabled customers: a practical guide for smaller service providers, 2000,
<http://www.drc-gb.org/drc/InformationAndLegislation/Page323.asp>

Disability Rights Task Force, From Exclusion to Inclusion
[Final Report of the Disability Rights Task Force, Britain], 1999
<http://www.disability.gov.uk>

DRM Guide to Disability Resources on the Internet
<http://www.geocities.com/~drm/DRMLibs.htm>

Expansion of European Library Systems for the Visually Disadvantaged
(EXLIB)
<http://www.svb.nl/project/exlib/exlib.htm>

Fiction Café, National Library for the Blind (UK)
<http://www.nlbuk.org/fiction-cafe>

Human Rights Committee World Blind Union, The United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities, A User's Guide, 1995.
<http://fbraille.com.uy/hright>

IFLA Section of Libraries for the Blind, Annual Report 1994-1995,
<http://www.ifla.org/VII/s31/annual/ann95.htm>

Innes, Graeme, A User's guide, The United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities, 1995.
<http://fbraille.com.uy/hright>

Kobayashi, Fugio, The problem when Deaf and Hearing Impaired use libraries,
<http://www.asahi-net.or.jp/~gw2f-kbys/defprb-e.htm>.

Library of Congress, The Network of the National Library Service for the Blind and Physically Handicapped, Library of Congress,
<http://www.loc.gov/nls/referebce/facts-network.htm>

Lynx View
<http://www.delorie.com/web/Lynxview.html>

McLachlan, Neil H., Access to Newspapers and Journals for Visually Impaired People: The Talking Newspaper Association of the UK.
<http://www.ariadne.ac.uk/issue10/tnau>

Music Information Resources Assisted Computer Library Exchange
(MIRACLE)
<http://www.svb.nl/project/miracle/miracle.htm>

Paik, Nam Jung, Internet course, Korea Welfare Foundation for the Visually Handicapped in 16-17th July 1998.

<http://www.kntl.co.kr/KntlWord/Pcline/199608/608ndo07.html>

People's Network Online Web Site (UK)

<http://www.lic.gov.uk/pno>

Print Disabilities Library Access Network, or PLANET (Australia)

<http://www.vicnet.net.au/~planet>

Resources for Visually Impaired Users of the Electronic Library (REVIEL)

<http://www.mmu.ac.uk/h-ss/cerlim/projects/reviel.htm>

RNIB Webpage Accessibility Checker

<http://www.rnib.org.uk/webcheck/wwwch.htm> (no longer available)

RNIB's Hints for designing accessible Web sites

<http://www.rnib.org.uk/wedo/training/audit.htm>

The State Library of Victoria (Australia), Disability Services: Draft Guidelines on Library Standards for People with Disabilities, 1999.

<http://www.slv.vic.gov.au/slv/disabilities/standard/disindex.htm>

Testing Electronic Systems using Telematics for Library Access for the Blind (TESTLAB)

<http://www.svb.nl/project/testlab/testlab.htm>

Waddell, C. Applying the ADA to the Internet: A Web Accessibility Standard, 1998,

<http://www.rit.edu/~easi/law/weblaw1.htm>

WAI Quick Tips

<http://www.w3.org/WAI/References/QuickTips>

Web Watch robot

<http://www.ukoln.ac.uk/web-focus/webwatch>

Printed Sources

Anderson, William, 'How library services for disadvantaged people can stimulate services for all', The Library Association Record, Vol.89 (10), 1987, p.522.

Archer, Mick, 'Talking tough', Special Children, Issue108, February 1998, pp.11-12.

Armstrong, Emma, 'Public Library Provision for Children with Visual and Hearing Impairments', Paper submitted in partial fulfillment for the Degree of Master of Arts in the School of Library, Archive and Information Studies at University College London, 1995.

Balslev, Johannes, 'The Danish Model of Library Services to the Print-handicapped', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, August 1997.

Barnes, Colin, Disabled people in Britain and Discrimination: A Case for Anti-discrimination legislation, London: Hurst in association with the British Council of Organizations of Disabled People, 1991.

Basu, S.G., 'Public Library Services to Visually Disabled Children', Doctoral thesis submitted to the School of Library and Information Studies, Florida State University, USA, 1987.

Batt, Chris, 'The Cutting Edge 32', Public Library Journal, Vol.12(4), July/August 1997, pp.88-91.

Bergman, Lena, 'Projects of Talking Books', Scandinavian Public Library Quarterly, Vol.28(2), 1995, pp.28-31.

Birmingham Central Library, Comedia Case Study, the Central Library, A Study of Birmingham Central Library in the City Centre, Gloucester: Comedia, 1993.

Bishop, Barbara A., 'The State-Supported University Libraries of Alabama: Serving the Needs of Patrons with Disabilities' College & Research Libraries, Vol.56(1), January 1995, pp.17-28.

Brazier, Helen and Jennings, Simon, 'How not to make a meal of it: Accessible Web site design', Library Technology, Vol.4(1), February 1999, pp.10-11.

Brophy, Peter and Craven, Jenny, The Integrated Accessible Library: A model

of Service Development for the 21st Century, the final report of the REVIEL (Resources for Visually Impaired Users of the Electronic Library) Project, Manchester: Centre for Research in Library & Information Management, British Library Research & Innovation Report (168), The Manchester Metropolitan University, 1999.

Brown, Sally, 'Design for all', Disability Now, November 1999, p.23.

Bruhn, Susanne, 'What is There to Read' [Abridged version of a paper which was given at the Australian Council for Adult Literacy conference, October 1992], Link-up, February 1993, pp.3-8.

Bruhn, Susanne, 'The Road to Equity and Excellence: An Australian Experience in Establishing Staff Training in Library Services for People with Disabilities', Resource Sharing & Information Networks, Vol.12(2), 1997, pp.79-87.

Burgin, William R., 'Fashion Your New Library from Old', North Carolina Libraries, Vol.55(2), Summer 1997, pp.59-64.

Burton, C., Greenhalgh, L. *et al*, London: Library City, The Public Library Services in London: A Strategic Review, supported by Department for National Heritage, Gloucester : Comedia, 1996.

Cahling, Ulla, 'The Supply of Books to the Blind and Partially Sighted in Sweden', Scandinavian Public Library Quarterly, Vol.3(2), 1970, pp.84-95.

Carlsen, Ka-Jo, 'The Norwegian Talking Book Project - why a project?', Scandinavian Public Library Quarterly, Vol.28(2), 1995, pp.25-27.

Chalfen, Daniel Hilton and Farb, Sharon E., 'Universal Access and the ADA: A Disability Access Design Specification for the New UCLA Library Online Information System', Library Hi Tech, Vol.14(1), 1996, pp.51-56.

Chartres, Stephen, 'Leisure and Information services for Visually Impaired People: Local Authority Library Services Survey Summary of Findings, July - September 1997' , unpublished, RNIB, 1998.

Cheah, H. M. and Koh, T.S., 'Internet libraries in science education, Libraries in national development', Paper to the 10th Congress of Southeast Asian Librarians, Kuala Lumpur, 21-25 May 1996.

Clunies-Ross, L. and Keil, S., Factsheet on numbers of visually impaired children in the UK in 1997, unpublished, RNIB, cited in the Council for Museums, Archives and Libraries, Library Services for Visually Impaired

People: a Manual of Best Practice, London: The Council for Museums, Archives and Libraries, 2000.

Collins, John, 'Understanding the problems of being partially sighted', Looking ahead: A practical look at new developments in library and information services for visually impaired persons, VIP, Paper to the 2nd International Conference on Library Services to Visually Impaired Persons, University of Nottingham, Sutton Bonington Campus, 15-18 July 1994, Leicester, England: Ulverscroft Large Print Books Ltd.

The Council for Museums, Archives and Libraries, Library Services for Visually Impaired People: a Manual of Best Practice, London: The Council for Museums, Archives and Libraries, 2000.

Craddock, Peter, 'Talking Newspapers and Library and Information Needs of the visually Handicapped', An Leabharlann, Vol. 7(2), summer 1978, pp.54-55,57-58,60-61,63-65.

Craddock, Peter, 'Sharing The Vision', Interlend '96 Information Rich, Information Poor: Filling the Gaps, Paper presented to a conference, University of Kent, 11-13 July 1996, Forum for Interlending (FIL), edited by Stephen Prowse, London: The British Library, 1996.

Craddock, Peter, 'Share the Vision', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, August 1997.

Cram, J., 'Engaged in triumphant retreat: public libraries and the social impact of the Internet', LASIE, Vol.21(1), 1996, p.6, cited in David J. Jones, 'Time capsules or time machines? Challenges for public library buildings', The Australian Library Journal, Vol.46(4), 1997, pp.394-403.

Cullinan, Tim, Visual Disability in Elderly, London: Croom Helm, 1986.

Cushman, Ruth Carol, 'The Kurzweil Reading Machine', Wilson Library Bulletin, Vol.54(5), January 1980, pp.311-315.

Damon, Rose, 'The Internet: made for blind people', New Beacon, (944), July/August 1996, pp.4-7.

Day, J. M.(ed), Guidelines for library services to deaf people, Hague: International Federation of Library Associations and Institutions, 1991.

Day, J.M., 'The World Wide Web as an Information Resource for the Deaf Community', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, August 1997.

Donnellan, Craig(ed), Disabilities, Vol.17, Cambridge: Independences, Educational Publishers, 1998, p.27.

Edwards, Alistair D.N., 'The Rise of the Graphical User Interface' Library Hi Tech, Vol.14(1), 1996, pp.46-50.

Ehnmark, Agneta, 'Room for Knowledge', Scandinavian Public Library Quarterly, Vol.30(1), 1997, pp.16-8.

Evans, Cathy, 'A chance to welcome more users', The Library Association Records, Vol.99 (6), June 1997, p.22.

Fleming, Bernard, Factsheet on Library services to blind and partially sighted people: problems and solutions, unpublished, RNIB, 1998.

Galler, Anne M., 'The Inclusion of Library Services to Disadvantaged Persons in Library School Curricula: A Survey', IFLA Journal, Vol.23 (5/6), 1997, pp. 365-370.

Gleadhill, Steve, 'Libraries need disability awareness courses', The Library Association Record, Vol.92 (3), 1990, p. 213.

Gooding, Caroline, Disabling Laws, Enabling Acts, Disability Rights in Britain and America, London: Plato Press, 1994.

Gunde, Michael G., 'What every librarian should know about the Americans with Disabilities Act', American Libraries, Vol.21(9), September 1991, pp.806-809.

Hagemeyer, Alice, 'Special needs of the Deaf Patron' in Ruth A. Velleman, Serving Physically Disabled People: An Information Handbook for All Libraries, New York: R.R. Bowker Company, 1979.

The Hankook Ilbo,(a major daily newspaper in Korea) 8th June 2000, p.30.

Hodge, Margaret, 'A step at a time', Disability Now, November 1999, p.17.

Hollander, Pat, 'Deaf-Advocacy at Queens Borough PL', American Libraries, Vol. 26(6), June 1995, pp.560-2.

Horne, Dan, 'If You Build It, They Will Come!', North Carolina Libraries, Summer 1997, p. 85.

Jall, Ole, 'The Talking Book in Denmark', Scandinavian Public Library Quarterly, Vol.27(2), 1994, pp.23-6.

Jeal, Yvette, Roper, Vincent de Paul, *et al*, 'Deaf people and libraries - should there be special considerations? Part2: material and technological developments', New Library World, Vol.97 (1126), 1996, pp.13-18.

Jones, David J., 'Time capsules or time machines? Challenges for public library buildings', The Australian Library Journal, Vol.46 (4), 1997, pp.394-403.

Kamisar, Hylda, 'Users', That all may read: Library Service for Blind and Physically Handicapped People, Washington, DC: The Library of Congress, 1983.

Kang, Young Woo, Dream of Father and Son, Seoul: Word of Life Press, 1998.

Kavanagh, Rosemary and Freeze, Barbara, 'VISUNET: A Vision of Virtual Library Services for the Blind', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, August 1997.

Kavanagh, Rosemary and Moodie, Michael, 'Preparing for the millennium: Linking libraries for the print-disabled', Paper to the 64th IFLA General Conference, Amsterdam, The Netherlands, August 1998.

Kawamura, Hiroshi, 'International Instruments for access to information for all', Paper to the 62nd IFLA General Conference, Beijing, China, August 1996.

Keller, Helen, The Practice of Optimism, previously published under the title of My Key of Life, London: Hodder and Stoughton, 1907(?).

Kelly, Thomas, A History of Public Libraries in Great Britain, 1845 - 1975, London: The Library Association, 1977.

Kenrick, Edwina, 'Print Disability Library Access Network', Link-up, June 1996, pp. 18-9.

Kim, Hyun Kyung, A Study of Multimedia information Services for Visually Handicapped , A master's thesis at Choong Ang University, Korea, 1996.

Kim, Hyung Sik, 'Improvement of circumstance for the social integration of students with disabilities', The direction of special education, Paper to the 5th anniversary of the foundation of The Korea Institute of Special Education, Seoul Education Center, 12 May 1999.

Kim, Ji Bong, 'A tour of Public Libraries in Japan', Newsletter of Libraries (The National Library of Korea), Vol.9 (9), 1999, pp.23-25.

Kim, Jung Keun, 'The Reconstruction of Documentation and Information

Studies in Korea': A Strategic Approach, The Korean Library Association Bulletin, Vol.41(1), January/February 2000, pp.11-13.

Kim, Jung Keun and Kim, Jong Sung, Digital Library: Dreams, Madness, and Reality, Seoul: Min Eum Sha, 1997.

Kim, Sham Shup 'Restructuring Education for Inclusion', The direction of special education, Paper to the 5th anniversary of the foundation of The Korea Institute of Special Education, Seoul Education Center, 12 May 1999.

The Korea Braille Library Association, The National Catalogue of Braille Libraries: 1996, Seoul: The Korea Braille Library Association, 1996.

The Korea Institute for Special Education, Special Education, How to Change in 2000s, Ansan, Korea: The Korea Institute for Special Education, 1997.

The Korea Institute for Special Education, Korea Institute for Special Education (KISE), 1999.

Korea Rehabilitation Association for People with Disabilities, The Direction of Welfare Policy for Disabled People 2000 [A report of WHO workshop], 1987.

Korean Nazarene Association of Rehabilitation & Welfare, 'Information Society and People with Disabilities in the 21st century' [Proceedings of a seminar], held at the Assembly Library, Seoul, Korea, 26 November 1999.

Korean Wheat Evangelical Association, 1999 Information Booklet: Much Fruit of Love, Seoul: Korean Wheat Evangelical Association, 1999.

Koren, Marian, 'The right of information as a condition for human development', Paper to the 63rd IFLA General Conference, Copenhagen, Denmark, 1997.

Leach, Allan, 'Library services in the United Kingdom', Paper to the Expert Meeting of Libraries for the Blind, prior to the IFLA General Conference, Brighton, the United Kingdom, 1987.

Lean, Katy, 'Library Services to Disabled Students: Outreach and Education', Reference Librarian, (53), 1996, pp.13-25.

Lee, Chong Jae, 'A study on the Library Service for the Visually Handicapped Persons', A master's thesis in the Department of Library Science at Sung Kyun Kwan University, 1986.

Leisure Services Committee, London Borough of Islington, 'Report of the Director of Leisure and Library Services' [An agenda item, subject: Improving

Library and Information Services to Visually Impaired People Project, on 3rd October 1996].

The Library Association, 'How library services for disadvantaged people can stimulate services for all', The Library Association Record, Vol.89 (10), 1987, p.522.

The Library Association, 'Lifelong access', The Library Association Record, Vol.102(1), 2000, p.4.

The Library Association, 'Funds on the Way', The Library Association Record, Vol.102(3), 2000, p.127.

The Library Association and the Library Information Technology Centre, 'Talis to supply landmark library', Library Technology, Vol.5(3), 2000, p.37.

Lippman, L., Attitudes Toward the Handicapped: A Comparison between Europe and the United States, Springfield MA: Charles C Thomas Publisher, 1972.

London Borough of Islington Council, 'News Release' on 5th May 1999.

London Borough of Islington Council, 'News Release' on 11th May 1999.

Machell, Jean, Library and Information Services for Visually Impaired People: National Guidelines, Share the Vision / Library Association, London: Library Association Publishing, 1996.

Mackay, H., 'Can we know too much? Information and morality', LASIE, Vol.26 (1,2,3), 1995, pp.6-17, cited in David J. Jones, 'Time capsules or time machines? Challenges for public library buildings', The Australian Library Journal, Vol.46 (4), 1997, pp.394-403.

Mapo Library, Seoul Korea, 'A Plan of a Special unit for the Visually Impaired' [An internal document], 1997.

Marcus, Rebecca B., Being Blind, New York: Hastings House Publishers, 1981.

Martin, Michael and Grover, Brian, Hearing Loss: Patient Handbook 24, Edinburgh: Churchill Livingstone, 1986.

Martin, Michael and Grover, Brian, Ears and Hearing, London: Macdonald & Co. (Publishers) Ltd, 1990.

Massis, Bruce E.(ed), Library Service for the Blind and Physically Handicapped: An International Approach, IFLA Publication 23, Vol. 2, München: K.G.Saur,

1982.

McQuigg, Karen and Khan, Jennifer, 'The Helping Hands Project: Exploring Public Library Services for the Deaf and Hearing Impaired', Link-up, June 1996, pp.7-11.

Miles, M., 'Disability in an Eastern Religious Context: historical perspectives', Disability & Society, Vol.10 (1), 1995, p.49.

Murphy, Alison (com), 1999 Library & Information Statistics Tables, Loughborough, England: Library & Information Statistics Unit at Loughborough University, 1999.

National Council on Disability Access, Multimedia technology by People with Sensory Disabilities, March 1998, cited in Peter Brophy, The Integrated Accessible Library: A model of Service Development for the 21st Century, p.28.

The National Library for the Blind, A short history of The National Library for the Blind: 1882-1982, Cheshire, England: National Library for the Blind, 1990.

The National Library of Korea, Newsletter of Libraries, Vol. 8(7), 1998, p.10.

The National Library of Korea, 'News', Newsletter of Libraries, Vol.9(2), 1999, pp.3-15.

The National Library of Korea, 'News' Newsletter of Libraries, Vol.9(10), 1999, pp.3-20.

The National Library of Korea, 'The Performance of the National Library of Korea in 1999', Newsletter of Libraries, Vol.10(1), 2000, pp. 28-33.

The National Library Service for the Blind and Physically Handicapped (NLSBPH), Library of Congress, 'A History of the National Library Service for Blind and Handicapped Individuals, the Library of Congress', That all may read: Library Service for Blind and Physically Handicapped People, 1983.

Naylor, Bernard and Chambers, Robert, 'University of Southampton: the Hartley Library', European Research Libraries Cooperation, Vol.7(1), 1997, pp.189-210.

New York Library Association, 'Guidelines for Libraries Serving Persons with a Hearing Impairment', Library Trends, Vol.41(1), Summer 1992, pp.164-72.

Nielsen, Gyda Skat, 'Dyslexia, an invisible handicap - a challenge for the libraries', Scandinavian Public Library Quarterly, Vol.31(3), 1998, pp.7-10.

Opdahl, Synnove, 'Library Service for the Blind in Norway', Scandinavian Public Library Quarterly, Vol.2(3), 1969, pp.149-58.

Ormes, Sarah and Peacock, Ian, 'Virtually accessible to all?', Library Technology [Assistive technologies special issue], Vol.4 (1), 1999, pp.17-8.

Ototake, Hirotada, Gotaihumanzoku, Tokyo: Kodansha Ltd, 1998, translated by Kyung Bin Chun, Seoul: Chang Hae Publishing Co., 1999.

Owen, David and Henry, Michael, 'Technology opens a new world for the blind...' The Library Association Record, Vol.85(12), 1983, pp.458-9.

Paik, Su Jin, 'The Improvement of the Braille Library Services through New Media', A master's thesis submitted to the Department of Library, Archives and Information Studies at Pusan National University, 1998.

Parston, G., Danger of Dogma, The Guardian, 10 August 1994, cited in Bob Usherwood, Rediscovering Public Library Management, London: Library Association Publishing, 1996.

Perheentupa, Lissa, 'The Finnish Library for the Blind', Scandinavian Public Library Quarterly, Vol.2(3), 1969, pp.159-164.

Pickersgill, Christine and Gateshead Access Panel, Design to Enable, Gateshead, England: Gateshead Access Panel, 1997.

Pirog, Karen, 'Attitudinal and Physical Barriers Facing the Disabled Library Patron', Current Studies in Librarianship, Vol.9(112), Spring/Fall 1985, pp.41-45.

Porter, Paul, 'The Reading Washing Machine', Vine, (106), 1997, pp.34-7.

Prine, Stephen and Wright, Kieth C., 'Standards for the Visually and Hearing Impaired', Library Trends, Vol.31(1), 1982, p.94.

Public Library Buildings 1993, Library Journal, Vol.118(21), December 1993, pp.58-64.

Public Library Group of the Library Association, '1999 Public Library Buildings Awards', Public Library Journal, Vol.14 (4), Winter 1999, pp.105,110.

Quin, Wilham Rae, Understanding Childhood Deafness, Glasgow, UK: Caledonian International Book Manufacturing Ltd., 1996.

Robinson, Cynthia A. and Dowd, Frances Smardo, 'Public Library Services to Disabled Children: A National Survey of Large Systems', Journal of Youth

Services in Libraries, Vol.10(3), Spring 1997, pp.283-90.

Roper, V., Ansell, E. *et al*, The Hearing Impaired Library User within North-West England, British Library Research and Innovation Report (36), London: British Library, 1996.

Rose, Damon, 'The Internet: made for blind people', New Beacon, (944), July / August 1996, pp.4-7.

Roundtable for Libraries Serving Special Populations, New York Library Association, Guidelines for Libraries serving persons with a hearing impairment or a visual impairment, New York: New York Library Association, 1987.

Royal National Institute for the Blind, 'Disability Discrimination Act', New Beacon, (937), December 1995, pp.20-21.

Royal National Institute for the Blind, 'The new Ministers for disability issues' New Beacon, (955), July/August 1997, p.20.

Royal National Institute for the Blind, 'Your words could save their sight' [An information booklet], London: RNIB, 1998.

The Royal National Institute for the Blind, Factsheet on RNIB Visual Awareness Training for Librarians, unpublished, RNIB, 1998.

Selvin, Hanan C, 'The Librarian and the Blind Patron' in Ruth A. Velleman, Serving Physically Disabled People: An Information Handbook for All Libraries, New York: R.R. Bowker Company, 1979.

Seo, In Whan, 'Current Status and Prospects for Braille and Audio Libraries for the Visually Impaired People', Paper to Information Society and People with Disabilities in the 21st century [Proceedings of a seminar], organised by Korean Nazarene Association of Rehabilitation & Welfare and held at the Assembly Library, Seoul, Korea, 26 November 1999.

Seo, Kwang Yun, 'General Study for Access', Planning for an Effective Accessible Facility for People with Disabilities, Seoul: Korea Research Meeting for A/P Decade, 1997.

Shapiro, J., No Pity, cited in Barbara A. Bishop, 'The State-Supported University Libraries of Alabama: Serving the Needs of Patrons with Disabilities' College & Research Libraries, Vol.56(1), January 1995, p.19.

Simmons, Sylvia, 'People's Network', The Library Association Record, Vol. 102 (1), 2000, pp. 26-7.

Switzer, Teri R., 'The ADA: Creating Positive Awareness and Attitude', Library Administration & Management, Vol.8 (4), Fall 1994, pp.205-76.

Theunisz, M., 'Report on the Final Measurement of the TESTLAB User Survey' [TESTLAB: Testing Systems using Telematics for Library Access for blind and visually handicapped readers Libraries project 4003/A], unpublished, SVB/CGL, 1998.

Thiele, Paul E., 'Libraries, The Blind and the International Year of Disabled Persons', Library Service for the Blind and Physically Handicapped: An International Approach, IFLA Publication 23, Vol.2, edited by Bruce E. Massis, München: K.G.Saur, 1982.

Tronbacke, Bror (ed), Guidelines for Easy-to-Read Materials, Hague: IFLA, 1997.

Tucker, Jean, 'The Role of the Public Library in the Provision of Library and Information Services for Visually Impaired People', Paper submitted in partial fulfillment for the Degree of Master of Arts in the School of Library, Archive and Information Studies at University College London, 1992.

Tucker, Richard, 'TESTLAB –Testing Electronic Systems using Telematics for Library Access for the Blind: a project under the TAP Libraries Programme', Vine, (106), 1998, p.29.

Tucker, Richard, 'How VIPs Read', Paper to the SEDODEL Seminar, The Right to Read: Visually Impaired Readers and the Rights Holders, Cristofori Salon, Amsterdam, 1 March 2000.

Underwood, H.H., Modern Education in Korea, New York: International Press, 1926, pp.153-154, cited in Chong Jae Lee, 'A study on the Library Service for the Visually Handicapped Persons', A master's thesis at Sung Kyun Kwan University, 1986.

Union of Physically Impaired Against Segregation (UPIAS), Fundamental Principles of Disability, London: UPIAS, 1970, p.2, cited in Caroline Gooding, Disabling Laws, Enabling Acts, Disability Rights in Britain and America, London: Plato Press, 1994

Usherwood, Bob, Rediscovering Public Library Management, London: Library Association Publishing, 1996.

Verboom, Maarten, 'Electronic library services for the visually disabled in the Netherlands', Paper to the 64th IFLA General Conference, Amsterdam, The Netherlands, August 1998.

Velleman, Ruth A., Serving Physically Disabled People: An Information Handbook for All Libraries, New York: R.R. Bowker Company, 1979.

Vincent, Tom, 'Communication: Information technology: expectations and realisations', The British Journal of Visual Impairment, Vol.14 (3), 1996, p.102.

Vitzansky, Winnie, 'The Development of National Strategies for Library Service for Blind and Print Handicapped People in Denmark', Paper to the 62nd IFLA General Conference, Beijing, China, August 1996.

Walling, Linda and Karrenbrock, Marily H., Disabilities, Children, and Libraries: Mainstreaming Services in Public Libraries and School Library Media Centers, Englewood, New Jersey: Libraries Unlimited. Inc., 1993.

Warburton, John, 'Report on Training' [An internal report of Manchester Central Library submitted to the RNIB for the TESTLAB project], 1998.

Watkins, Judy, 'Overcoming the Copyright Hurdle: Exceptions and Licences', Paper to the SEDODEL Seminar, The Right to Read Visually Impaired Readers and the Rights Holders, Amsterdam, 1 March 2000.

Wesley, Tom, 'Information technology: A Key to access', Looking ahead: A practical look at new developments in library and information services for visually impaired persons, VIP, Paper to the 2nd International Conference on Library Services to Visually Impaired Persons, University of Nottingham, Sutton Bonington Campus, 15-18 July 1994.

Wigmore, Hilary and Morries, Deirdre, 'Opening doors to disabled people: improving services for the disabled library user', The Library Association Record, Vol. 90 (3), March 1988, pp.153-6.

Williams, Robert (com), 'New Public Library Buildings 1997', Public Library Journal, Vol.12 (5), September/October, 1997, pp.105-7.

21c Special Education Forum, 'A survey of attitude of teachers and parents toward the inclusion of children with disabilities', cited in Sham Shup Kim in 'Restructuring Education for Inclusion', The direction of special education, Paper to the 5th anniversary of the foundation of the Korea Institute of Special Education, 12th May 1999.

List of Abbreviations and Acronym

ADA	Americans with Disabilities Act
AFB	America Foundation for the Blind
AICFD (Korea)	Act on Installation of Convenience Facilities for the Disabled
ALA	American Library Association
ASEAN	Association of Southeast Asian Nations
Calibre	Cassette Library (UK)
CANTATE	Computer Access to NoTAtion Text in Music Libraries
CAST	Centre for Applied Special Technology
CNIB	Canadian National Institute for the Blind
CSS	Cascading Style Sheets
DAISY	Digital Audio Based Information System
DBB	Denmarks Blindebibliotek, Danish National Library for the Blind
DCMS	Department for Culture, Media and sport (UK)
DCT	Department for Culture and Tourism (UK)
DDA	Disability Discrimination Act (UK)
DfEE	Department for Education and Employment (UK)
DoE	Department for Education (replaced by DfEE) (UK)
DRC	Disability Rights Commission (UK)
DTB	Digital Talking Book
EDA	European Dyslexia Association
EDINA	Edinburgh Data and Information Access
EXLIB	Expansion of European Library Systems for the Visually Disadvantaged
FORCE	World-wide Support Libraries for Print-Handicapped
GCSE	General Certificate of Secondary Education (UK)
GUI	Graphical User Interface
HAD	Harrow Association for Disability (UK)
ICT	Information and Computer Technology
IFLA	International Federation of Library Associations and Institutions
IYDP	International Year of Disabled Persons
JANET	Joint Academic Network (UK)
JISC	Joint Information Systems Committee (UK)
KISE	Korea Institute for Special Education
KLA	Korean Library Association
KRM	Kurzweil Reading Machine

MIRACLE	Music Information Resources Assisted Computer Library Exchange
NLBB	Norsk Nys-og Blindeskrifbibliotek, Norwegian National library for the Blind
NLB	National Library for the Blind (UK)
NLSBPH	National Library Service for the Blind and Physically Handicapped (USA)
NUCAF	National Union Catalogue of Alternative Formats (UK)
NWRLS	North West Regional Library Service (UK)
OCR	Optical Character Recognition
OPAC	Online Public Access Catalogues
PIP	Pilot Interlending Project (UK)
PLANET	Print Disabilities Library Access Network (AUSTRALIA)
RADAR	Royal Association for Disability and Rehabilitation (UK)
REVEIL	Resources for Visually Impaired Users of the Electronic Library (UK)
R & D	Research and Development
RNIB	Royal National Institute for the Blind (UK)
RNID	Royal National Institute for the Deaf (UK)
SEDODEL	Secure Document Delivery for Blind and Partially Sighted People
SMDL	Standard Music Description Language
STV	Share the Vision (UK)
SVB	Studie-en Vakbibliotheek, Dutch Library for visually Handicapped Students and Professionals
TAP	Telematics Applications Programme
TESTLAB	Testing Electronic System using Telematics for Library Access for the Blind
TDD	Telecommunication Devices for the Deaf
TNAUK	Talking Newspapers of UK
TPB	Talboks-och Punktskrifsbiblioteket, Swedish Library of Talking books and Braille
UDC	Universal Decimal Classification
UKERNA	United Kingdom Education & Research Networking Association
UKIID	United Kingdom Institute for Inclusive Design
UPIAS	Union of Physically Impaired Against Segregation (UK)
VOD	Video On Demand
WAI	Web Accessibility Initiative
WFD	The World Federation of the Deaf
WHO	The World Health Organization
W3C	World Wide Web Consortium

List of Appendices

- Appendix 1. Assistive technology devices developed in Korea
- Appendix 2. Price List of assistive technology devices
- Appendix 3. Assistive technology devices at special unit for disabled people in mainstream libraries
- Appendix 4. 20 Golden Rules for Web Page Design by REVIEL
- Appendix 5. The Results of IFLA Questionnaires
- Appendix 6. List of Korean professionals who have interest currently in the issue of disability (Interviewed)
- Appendix 7. Interview / discussion checklist
- Appendix 8. Observation checklist
- Appendix 9. List of subjects of interview (UK, Korea)

Appendix 1

Assistive technology devices developed in Korea

Screen Magnification Software

- Magnifier by Jae Sun Park in 1993.

Document Scanner

- Silnoon by Sambo Try Gem in 1990 (ceased)
- Neuro OCR by Samhong Data System in 1995
- Aruami Sound Version by Hyapsan Computer in 1994
- Sound Version by Hyapsan Computer in 1995
- Anypage by Samsung in 1998

Screen Reading Software

(for DOS)

- KOY Program by Oun Young Kim in 1989
- Hangul BEX by Dr. Folk and Kil Patrick in 1990
- Vocal words by Felex in 1990
- Malbud by Daicom Corp. in 1992
- SN (Sorinoon) by Hasang Rehabilitation Centre in 1992.
(2.0 version developed in 1993)
- SRD (Screen ReaDer) by Ooh Yong Sorn in 1996.
- Soribom by Han Mae Soft in 1997.

(for Windows)

- Magic Voice by Samsung in 1996
- Karasade II by Daicom in 1996 (ceased)
- Guawon Vocal Magician by Guawon System in 1997
- LG Sound word by LG in 1997.

Speech Synthesisers

- Karasade by Daicom Corp.in 1992.
- Soundphia 97 by Samsung in 1997

For Internet Usage

- Eyes 2000 by e-Trek Infodigm and Chungbuk University in 2000
This programme consists of a screen reader 'Eyes' and Web Browser 'WebEye'

Trial version available at: 1) <http://ccmtown.co.kr> 2) <http://john.chungbuk.ac.kr>

Appendix 2

Price List of assistive technology devices

Screen Magnification Software

(1998)

- Lunar for Windows NT £ 495
- Lunar for Windows 95 £ 290
- Lunar SVGA for Windows 3.1 £ 225
- Lunar 2 for DOS £170
- Super Vista SVGA £2395
(DOS, Windows and Window '95 compatible)

(2000)

- Magic for Windows 95/98 £ 270
- Magic for Windows NT £ 355
- Zoom Text Xtra level 1 (Compatible with Windows NT & 98/95) £ 300
- Zoom Text Xtra level 2 (Compatible with Windows NT & 98/95) £ 400
- Zoom Text Xtra Plus level 1 (Includes Zooms Text for DOS) £ 400
- Zoom Text Xtra Plus level 2 (Includes Zooms Text for DOS) £ 500
- Magnum 95 For Windows 95, 3.1/3 & DOS £ 390
- LP-Windows Large Print Version 7 £ 345
- LP-Windows Large Print & Speech Version 7 £ 445

Document Scanners

(1998)

- Oscar + HPScanJet £1295
- Recognita for DOS £ 259
- Typical PC for OCR work £ 995
- Parallel port scanner from £129
- Textbridge Pro £ 99
- FineReader £72 - £1150
- HP 5100 scanner £250

(2000)

- Kurzweil 1000 Scan & Read Software £675
(Includes AT&T FlexTalk Software Speech & Jennifer)

- Kurzweil 3000 Scan & Read Software £725
(Includes AT&T FlexTalk Software Speech & Jennifer)
- Recognita With HP Scanner 5P £795
- Lesefix 2000 Scanner System £2700
- Black Window Scanner £92
- Textbridge Pro £60

Screen reading Software

(1998)

- Business Vision (DOS) £375
- Hal 5 for DOS £170
- Winvision (Windows) £395
- Winvision 97 & Access 32 £395
- Jaws for Windows £550
- ScreenPower for Windows £1595
(inter-mixed)
- ScreenPower £395

(2000)

- JAWS for Windows (Includes Eloquence Software Speech) £550
Supports Windows 98,95 & DOS Window
- JAWS for Windows NT (includes Eloquence Software Speech) £895
Supports Windows NT/2000 & 98, 95 and DOS Window
- ASAP Screen Reader with Micro Talk (for DOS only) £920
- ASAW For Windows 3.11/95 £550
- Windowbridge for Windows 3.11 £465
- Pro Talk 32 for Windows 95 £550
- Pro Talk 32 for Windows NT £2380
- Outspoken For Windows 95, 3. £595
- OutSpoken Upgrade £195

Speech Synthesisers

(1998)

- Judo Portable Synthesiser £450
- Europa 2 Internal Synthesiser £285
- Sprit £299
- DECKTalk Internal £750
- Apollo 2 Desk Top Synthesiser £415
- Dolphin Orpheus £250
- DECKTalk Express £750
- ACCESS £150

(free with Winvision)

(2000)

- DEC-TALK Express Synthesizer £795
- DECtalk Express Speech Synthesiser £750
- DECtalk PC Card & External Speaker £750
- Artic 216 Speech Card £319
- Artic Mini Transport 1000 £578
- Artic SynPhonix P27 PCMCIA £642

Braille Displays

(1998)

- Powerbraille 40 £5795
(40 Braille cells for lap-top computers)
- Powerbraille 80 £8495
(80 Braille cells for desk-top computers)
- Combi Braille 25 £2495
(20 Braille cells for palm-top and lap-top computers)
- Combi Braille 45 w/o speech £3995
- Combi Braille 85 w/o speech £6495
- VD32 vertical braille display £2250
(with numeric keypad)

(2000)

- BookWorm £975
- Braille Top £3955
- Modular 40 £5370
- Modular 80 £8485
- ALVA Delphi Multimedia 440 £6236
- ALVA Delphi Multimedia 480 £8879
- ALVA Delphi 480 - 80 Cell Braille Display £10784
- ALVA Delphi 440 - 40 Cell Braille Display £6760

Braille Translation Software

(1998)

- Ciper for Windows 95/NT £245
- Ciper for DOS £170
- Braille Maker Express (DOS) £495
- Braille Maker Windows £195
- Braille Maker Professional (DOS) £495

- Duxbury for Windows £595
- Duxbury for MAC £645

(2000)

- Braille Master £285
- Braille Maker Express £100
- Duxbury for Windows £385

Braille Embossers**(1998)**

- Romeo £1850
- Juliet £2895
- Thomas £2287
- Basic S (single sided) £1795
- Everest (single and double sided) £2595
- Everest 4 x 4 (double sided A3 stapled) £4885

(2000)

- Index Basic S £1595
- Index Basic D £2050
- Index Everest D £2400
- Index Basic Cabinet £500
- Index Everest Acoustic Hood £440
- Index 4 X 4 PRO 17" Drop Paper £4600
- Index 4 X 4 Pro 23" Drop Paper £5100

CCTV**(2000)**

- Aladdin Companion £995
- Aladdin Classic 14" Black/White Screen £1295
- Aladdin Ultra Pro 75, 17" Black/White Screen £1795
- Aladdin Rainbow 14" Colour & Black/White Screen £1995
- Aladdin Rainbow Pro 14" Colour & Black/White Screen £2095
- Aladdin Genie Pro Colour & Black/White Screen (Excludes Monitor) £2295
- 14" MagniLink Penguin Mono CCTV - Manual Focus £1295
- 14" MagniLink Albatross Colour CCTV - Manual Focus £1995
- 17" MagniLink Albatross Colour CCTV - Manual Focus £2150
- 21" MagniLink Albatross Colour CCTV - Manual Focus £2350
- MagniLink Colibri Split Screen (without Monitor SVGA) £2195
- 14" MagniLink 709 Colour CCTV - Auto Focus £2345

- | | |
|--|-------|
| • 17" MagniLink 709 Colour CCTV - Auto Focus | £2500 |
| • 21" MagniLink 709 Colour CCTV - Auto Focus | £2707 |
| • 14" MagniLink 409 Mono CCTV - Auto Focus | £2305 |
| • 17" MagniLink 409 Mono CCTV - Auto Focus | £2400 |
| • 21" MagniLink 409 Mono CCTV - Auto Focus | £2485 |

Appendix 3

Assistive technology devices at special unit for disabled people in mainstream libraries

University libraries

1. The Adaptive Technology Centre in Auchmity Library at University of Newcastle in Australia:

- 3 Dos screen readers (Vocalose, Arctic Business Vision and Mastertouch)
- 1 Window screen readers (JAWS)
- 1 Hewlett-Packard Flatbed Scanner with OCR software
- 1 Kurzweil Personal Reader
- 1 Aladdin-Genie Closed Circuit TV
- Several workstations with screen enlargement software
- 1 Braille Embossor (Braille printers)

Public Libraries

1. The Visually Impaired People's Unit at Central Library in Manchester in the UK:

- Horizon CCTV: print and graphics can be magnified up to 20 times onto 12 inch TV screen incorporated into the model.
- 2 Kurzweil Reading Edge machines
- Jaws screen reader for Windows has been introduced.
- Apollo speech synthesisers
- Hal screen readers for MS-Dos
- 2 computers available to users which can produce speech output from the screen reader and a speech synthesiser.

- 3 Recorded speech services
- Guardian Electronic Newspaper: This is downloaded each day from the Internet and made available on a computer for people to access via speech or in large-print on a monitor.
- Sony professional standard recording equipment for staff to prepare tapes for users. The equipment can be hooked into the Kurzweil readers to permanently record the spoken text on tape.
- APH cassette players with variable speed and the ability to mark passages with electronic signals which provide an audible beep.
- Braille embosser to produce Braille output quickly from a disk file.
- A Perkins Braille to create users' own Braille output.
- DTP software to provide output from word-processed document files in large print, either in standard 18pt or larger.
- A flat bed scanner: to provide text on disk for people to use on their own computers but the files created can also be output in Braille or large print.

2. Special Needs Center in the Phoenix Public Library in the USA (1993)

- 1 Kurzweil Personal Reader
- 1 Apple IIe computer with a DP10 Large Print Display Processor and Echo synthetic speech or Dectalk synthetic speech output
- 1 Apple IIe computer with regular screen and Echo Speech output
- 1 Video print enlarger with large screen
- 1 VersaBraille Classic - a magnetic tape-based paperless Braille
- 1 VersaBraille II - a micro disk-based refreshable Braille computer
- 1 IBM XT with SynPhonic synthetic speech
- 1 VersaPoint Braille Embosser printer
- 1 386 microcomputer with DECtalk speech and CD-ROM player
- 1 Macintosh computer with built-in synthetic speech

Software for the APPLE IIe

- BEX (Braille Edit Express) - a word processing programme with Grade II Braille translator programme
- Wordtalk - a line-oriented word processing programme with synthetic speech
- Micro Illustrator - a manual communication instruction programme that produces sign language graphics on the screen
- Talking Writer - an introductory programme to teach keyboard skills utilizing Echo synthetic speech

Software for the IBM and/or the 386 Microcomputer

- VocalEyes - a screen reading software
- Dusbury Translator - a programme that translates text into Braille
- HOT DOTS - a programme that translates text into Braille

- PROCOMMPLUS - a communications programme
- ZOOMTEXT - a screen enlarger

Software for the Macintosh computer

- MACWRITE - a basic word processing programme
- Microsoft Works - integrated software
- READY, SET, GO - a desktop publishing and page formatting package
- inLARGE - a screen enlarger
- outSPOKEN - a screen reading software

Appendix 4

20 Golden Rules for Web Page Design by REVIEL

1. Adhere to the official W3C HTML specifications.
2. Maintain a clear distinction between content and structure, such that a user is able to access content without an imposed structure. W3C refers to this as 'graceful transformation', and emphasizes the need to ensure that pages can be read on a wide variety of hardware e.g. devices without mice, or using large font sizes.
1. Keep the layout of all pages as simple as possible and maintain consistency throughout the site, with particular attention paid to the order in which elements occur. Visually impaired users can then learn the layout from one page and apply it to subsequent pages. Similarly, keep the navigation structure simple, clear and consistent.
4. Offer a text index or site map, so that users can navigate directly to pages.
5. Fully describe all images, video clips, audio files, etc. (using the ALT tag). This is especially important where a 'clickable image' is provided for the sighted user to select an area and established a link by a mouse click- visually impaired users should be able to access an equivalent text list.
6. Provide a text alternative for all Java and JavaScript, and avoid their use for effects (like scrolling text) which can be difficult for partially-sighted users to access.
7. Similarly, use event handlers (such as OnMouseover) with care, bearing in mind that a user with a screen reader may not generate the expected event.
8. Where images are used simply for 'decorative' purposes, rather than to provide information, use a null ALT tag (ALT="") which will enable the browser to skip the image.

9. Provide a description of all links (again using the ALT tag) and if possible separate links by some non-link text.
10. Place links one to a line and label them clearly.
11. Only use contrasting colours for text and background.
12. 'Wallpaper' (i.e. a decorative background), shadowing and watermark images should be avoided as they mask content for partially-sighted readers.
13. Where a font is specified, preference should be given to *sans serif* fonts such as *Arial*, which are easier for partially-sighted users to read.
14. Do not use audio only for significant information content. Again, provide a descriptive text alternate.
15. Avoid automatic refresh or 'splash screens' (which some designers use to send users to a new page automatically after a predetermined time). With a typical refresh time of 5 to 10 seconds, this usually happens before a screen reader has had chance to read the first page!
16. Use tables with care and do not over-elaborate them. Try to avoid the use of tables to control displayed format. Where tables are used care should be taken to provide appropriate headers.
17. Where pages use frames the home page should offer a no-frames alternative which is applied consistently throughout the site. It is also desirable to provide links from the home page or text index to each frame.
18. Whenever a page is updated ensure that all the text-alts are updated consistently at the same time.
19. Provide an email address on each page, or at least on the home page, so that users can send queries if there is something they cannot read or need explained. More generally, make the site hospitable to comments on accessibility.
20. Test all pages for accessibility before they are launched, using a tool like 'Bobby'.

Appendix 5

The Results of IFLA Questionnaires

Q.1: Is there a survey or general course in the curriculum of your library school which includes basic principles of service to all groups in society:

66 answered 'Yes'
 18 answered 'No'
 4 did not answer this question
 56 of the 66 indicated that the courses are mandatory
 10 indicated that the courses are elective

Q.2: Indicate please if the curriculum of your library school has a specific course dealing with any or all of the following categories of disadvantage:

There were 13 categories indicated in the questionnaire to choose from. Respondents identified that they include services to the following groups in their curricula:

• Aboriginal people	4
• Blind	30
• Deaf	27
• Elderly	24
• Ethnic minorities	20
• Handicapped (mentally)	25
• Homeless	17
• Hospital patients	22
• Housebound(Shut-ins)	20
• Immigrants groups	15
• Mobility impaired	25
• Multicultural persons	21
• Prison inmates	24

The respondents also added other categories not included in the above list: seniors, children, young adults, educationally disadvantages, unemployed, rural populations and people with literacy problems. Forty respondents chose not to answer this question, or answered n/a.

Q. 3: Is the treatment of special formats such as Braille for example, included in the cataloguing courses?

Most respondents (66) answered 'No' to this question. Some of the formats mentioned in the answers were:

- Braille & tactile 7
- all types of AV 7
- talking books 3

Other categories mentioned individually (one each) were: computer software, CD-ROMS, three-dimensionals, motion pictures, etc.

Q.4: Is there a course in the curriculum of your library school regarding library planning, which includes physical accessibility issues?

The answers were as follows:

Forty-two said that they have a course that includes such issues (most mentioned management courses in which this topic would be included). Forty-two said that they do not include the topic in their curriculum. Four said that this was not applicable.

Q.5: Is there any course in your curriculum which addresses the disadvantaged as part of its course materials?

Most (70) answered 'No' to this question. There were nine "not applicable" responses. Nobody had a specific course on the topic, but the ones who answered Yes, provided the following information regarding the courses in which the mention of disadvantaged may be included: collection management; information counselling, community information, service to children (exceptional, handicapped, blind, etc.) information services for unserved communities; library services to special target groups and library services to people with special information needs. The topic of disadvantaged in the broadest sense seems to be included most often in a course entitled "services to public libraries"

Q.6: Is there a place in the curriculum of your library school for students to pursue individual research in the areas of the disadvantages?

This question had two parts,

Part I: Do you offer seminar courses on this topic?

'Yes': 12, 'No': 14

Part II: Do you have dissertations at the undergraduate, Master's or Doctoral level?

Undergraduate:	5
Master:	51
Doctoral:	22

Q.7: Are students currently involved in or have they in the past studied the topic of the disadvantaged through individually funded research or a research grant?

Seventeen schools answered 'Yes' to this question, mentioning individual research as well as some funding mostly from ministries of Education.

Q. 8: Is there a course in library automation and are elements of adaptive technology included in such a course?

Most respondents answered 'No', however, among the ones who answered 'Yes', many mentioned the fact that they have a course on library automation, but did not indicate that this course included adaptive technology. The few who actually mentioned the fact that adaptive technology (a/t) is included in some types of automation course, mentioned the following:

Course contains a brief overview of tactile recognition. Limited attention is given to adaptive technologies some attention given in information technology courses to adaptive technologies.

Distributing the questionnaire to 430 library schools the Section for Libraries Serving Disadvantaged Persons concluded that the step was made to sensitize library school instructors and librarians to the existence of the problems of the disadvantaged.

Appendix 6

List of Korean professionals who have interest currently in the issue of disability (Interviewed)

1. Prof. Jung Pyo Sohn, Department of Document & Information Studies,
Kyungbuk National University,

Writing: A study of the Public and Special Library Services to Mobility handicapped Persons in Korea. Paper submitted as part of Ph.D project, Services for Special Need, to the Dept of Library Studies, Yensei University, 1985.

2. Prof. Hae Sung Chung, Department of Library Studies
Hyosung-Cathoric University,

Writing: A Study on the Expansion of Users in Public Libraries, 1987, Paper to the National Public Library Seminar, Kumi Library, 22- 23 October 1987. He has studied in the area of disabled people and the elderly in public library service.

3. Prof. Jae Bong Jeon, Department of Library and Information Science,
Daegu University,

Writing: A Study for the Factors that affect the Library Services for the Visually Handicapped, Doctoral thesis, Sung Kyun Kwan University, 1992. His recent paper, 'Management of Library Services for Visually Impaired People in Public Libraries' was published in Journal of Social Science Research (The Social Science Research Institute Daegu University) Vol.6 (4), 1999, pp.47-72.

4. Ms. Ok Kum Park, Librarian, Central Library, Daegu University

Writing: A Study of the Library for the Visually Impaired, Master's thesis, Department of Document & Information Studies, Kyemung University, 1997

5. Ms. Su Jin Paik, Librarian, Medical Library, In-jae University,

Writing: The Improvement of the Braille Library Services through New Media, Master's thesis, Department of Library, Archives and Information, Pusan National University, 1999.

Appendix 7

Interview / discussion checklist

Individual libraries in mainstream sets

- Do disabled people come to your library?
- What kind of assistive technology devices are there in the unit for the visually impaired at your library?
- How often the facilities, equipment and materials are used by disabled people?
- Do you give user training courses? If yes, what topics are taught?
- Does your Web site accessible for visually impaired people?
- What skills or qualification are required for staff who serve disabled people?
- What opportunities are there for staff to attend any professional training, seminar, workshops and lectures on issues of disability?
- Is there in-house training for awareness of disabled users? Who designs and what kind of subjects are included?
- Who is in charge of disability issue in your institution?
- What general or specific problems do you face in serving disabled people?
- Is there written policy relating to library services for disabled patron?
- What strategies do you have for meeting future challenges?
- Do you know the DDA (UK) / AICFD (Korea) and its implication in the library?
- Do you have general comments or advice you may want to share on the subject?

Special libraries / Disability associations

- How many disabled people are making use of your library?
- How do you deliver materials?
- What kind of information do disabled people frequently ask for?
- What kind of assistive technology currently is available for visually impaired people at home/ work/ library?
- Do you offer IT courses for users?
- What is your major problem in mainstream libraries when providing library services for disabled people?
- What is the major reason for not decentralising your alternative materials to local libraries which could be access points?

- What skills or qualification are required for staff for library services for disabled people?
- What is the most difficulty do you face in serving disabled?
- Who supports your institution financially?
- Do you have general comments or advice you may want to share on the subject?

Individual disabled persons

- Do you go to your local library, if yes/no, why?
- What is the biggest barrier in using the library?
- Are there information / reading materials what you want to get?
- Do the staff helpful?

Library administrators

- What is the major reason for not offering library services for disabled people?

Library school educators

- If there are no courses which aim at library services for disabled people at your school, do you think in future these courses are necessary? If yes, how do you design these courses?

Appendix 8

Observation checklist

Individual libraries in mainstream sets

- Physical buildings: ramps, lifts, doors, stairs, furniture etc.
- Usage of access technology devices
- Location of these devices
- The amount of materials for sensory disable people
- Instruction / information for how to use equipment?
- Publicity

Special libraries / disability associations

- Physical condition of alternative materials
- The volume, type and subject coverage of the collections
- Membership of disabled people
- General equipment and supplies standards of facilities
- Production facilities of alternative materials (talking books, Braille, talking newspapers, digital talking books (DAISY))

Internship/ workshops/ exhibitions

- Facilities and equipment
- Teaching and reading materials for visually impaired children
- Teachers' skills in teaching and handling with disabled children
- Characteristics of visual impairments
- Various access technology currently available, its price and vendors.
- Limitation of the current technology

Appendix 9

List of subjects of interview (UK)

No.	Name	Position / Designation	Date
1.	Ms. Caroline Hall	Principal Information and Access Officer, Central Library, Islington, London	Nov.1997
2.	Mr. Ajamu Mutumwa	Community Care Development Officer, Barnet Council, London	Jan. 1998
3.	Mr. Stephen Chartre	Research and Development Associate, RNIB, London	Jan. 1998
4.	Ms. Kath Caster	Librarian, Linden Lodge School, London,	Apr. 1998
5.	Mr. John Warburton	Head of the Special Unit for the blind, Central Library, Manchester	July 1998
6.	Staff	National Library for the Blind, Stockport, England	July 1998
7.	Mr. Colin Spence Sep.1998	Librarian, Central Library, Islington,	
8.	Ms. Kath Caster	Librarian, Linden Lodge School, London,	Oct. 1998
9.	Ms. Ann Allen	Volunteer Co-ordinator, Barnet's Home Visiting Scheme, London	Mar. 1999
10.	Ms. Sally Payton	Rehabilitation Officer, Barnet Social Services, London	Apr. 1999
11.	Mr. Paul Porte	Information Officer, RNIB, London	Apr. 1998
12.	Mr. Alan Issler,	Principal Librarian, Central Area, Islington,	May 1999

(correspondence)

13. Others Librarians, disabled library users, students with disabilities, parents with disabled child, etc.

List of subjects of interview (Korea)

No.	Name	Position / Designation	Date
1.	Mr. He Chang Yun	Director of the National Library of Korea,	Jun. 1999
2.	Staff	The Korean Library Association,	Jun. 1999
3.	Ms. Mi Song Lee	Librarian, Talking book Library, Hasang Welfare Center for People with Disability,	Jun. 1999
4.	Ms. Young Mi Lee	Teacher, Seoul Blind School	Jul. 1999
5.	Mr. Jang Min Kim	Manager of Rehabilitation at Home , Pusan Welfare Center for the Visually Handicapped	Jul. 1999
6.	Mr. Oon-tae Phak	Chief of Pusan Braille Library (c/o) Pusan Namgu Library	Jul. 1999
7.	Prof. Jung Gun Kim & Jung Tae Choi	Dept. of Library, Archives and Information Studies, Pusan National University.	Jul. 1999
8.	Ms. Shu Jin Paik	Librarian, Medical Library, In-jae University, Pusan	Jul. 1999
9.	Mr. Jung Ho Kim	Computer technician, Hasang Welfare Center	Jul. 1999
10.	Prof. Young Ai Um & others	Dept. of Library Studies, Hyosung-Catholic University	Jul. 1999

- | | | |
|-------------------------|--|-----------|
| 11. Ms. In Sun Yu | Staff, Braille Library, Daegu University | Jul. 1999 |
| 12. Prof. Jung Pho Shon | Dept. of Document & Information Studies,
Kyungbuk National University | Jul. 1999 |
| 13. Prof. Nam Suck Kim | Dept. of Document & Information Studies,
Gyemung University | Jul. 1999 |
| 14. Staff | IT officer, Korea Braille Library | Jul. 1999 |
| 15. Mr. Hyang Sup Choi | Director of Planning & Research Section,
Korea Institute for special Education, Ansan | Jul. 1999 |
| 16. Mr. Won Ho Jo | Chief Executive,
Korean Library Association | Aug.1999 |
| 17. Ms. Kyun Hae Youk | General manager, Korea Braille Library | Aug.1999 |
| 18. Prof. An Shu Im | Dept. of Special Education,
Daegu University | Aug.1999 |
| 19. Prof. Jae Bong Jeon | Dept. of Library and Information Science,
Daegu University | Aug.1999 |
| 20. Mr. Nam Jung Paik | Director of Dept. of Rehabilitation,
Korea Welfare Foundation for the Visually
Handicapped | Aug.1999 |
| 21. Ms. Young Ok Oh | Librarian at a room for the visually
impaired, Mapo Library (a public library, Seoul) | Aug.1999 |
| 22. Others | Librarians, church pastors, disabled people,
parents with disabled children, etc. | |

*If one part suffers, every part suffers with it;
if one part is honoured, every part rejoices with it.*

1 CORINTHIANS 12: 26

