CHAPTER II
LITERATURE REVIEW

2.1 Purpose
A review of literature was conducted to gain knowledge through previous writings on
the provision of library services for VIPs. Besides reviewing previous research, this
literature review also sought to review relevant information on important aspects of the
provision of library services for VIPs. These important aspects include the provision of
library materials, library equipment, library services, and library management. It also
includes the problems faced by libraries providing services for VIPs and the facilitating
factors in the provision of these services; and factors which hinder the provision of
library services for VIPs. This literature review is intended to provide a better
understanding of the topic.

Section 2.3 of this chapter reviews the literature pertaining to the first research question
of this study about the current status of provision of library services for VIPs. Section
2.4 reviews the literature concerning the second research question on the problems and
facilitating factors in the provision of library services for VIPs, while Section 2.5
reviews the literature pertaining to the third research question concerning the factors
that hinder the provision of library services for VIPs.

2.2 Approach
The approach taken to obtain literature on this topic was to search in the following
information sources and databases:
(i) Books

Searches were conducted from the OPAC (Online Public Access Catalogue) of the University Malaya Library (UML) and the OPAC of the National Library of Malaysia.

(ii) Journal articles

Electronic journal articles were searched for from online databases. These articles were research or non-research based. The online databases searched included Emerald Intelligence + Fulltext, Expanded Academic ASAP Plus @ INFOTRAC, Library Literature & Information Science Full Text @ WilsonWeb, LISAnet, and ProQuest.

(iii) Conference papers

Conference papers in both print and electronic formats were searched. The print format was searched from UML’s OPAC and the National Library of Malaysia’s OPAC. As for conference papers in electronic format, a search was conducted of the IFLA (International Federation of Library Association and Institutions) website and also using the Google search engine.

(iv) Dissertations

Relevant dissertations were searched for using Digital Dissertations (UMI) @ ProQuest and also UML’s OPAC.

(v) Online articles / information

Articles and information were also obtained online by conducting online searching using the Google search engine.
Various keywords were used to conduct the searches through the OPAC, the online databases, and the online search engine (Google). These keywords include *blind, visually impaired, visual impairment, print handicapped, library services, computer assistive technology, Braille, large print, and magnifiers*. Some of the keywords were used separately and some were combined to obtain the most relevant search results.

### 2.3 Current status of provision of library services for VIPs

No known previous research could be located on the current status of provision of library services for VIPs in Malaysia. Two studies were found to have been conducted in the United Kingdom which were about the provision of library services for VIPs by public libraries from the service providers’ perspective. These studies differ from the author’s study as the present study includes both public libraries and special libraries. Also, the two studies were conducted in a developed country, whereas, Malaysia is still a developing country. Nevertheless, both studies provide important and relevant information to the body of knowledge of this topic.

One of the UK studies was by Craddock (1985) on “The Public Library and Blind People: A survey and review of current practice”. This was the first large scale research conducted on this topic in the UK and it has set precedents for subsequent studies (Davies, Wisdom and Creaser, 2001). This study had the main objective of finding out the role of public libraries in the provision of library services for the blind in the UK. The results of the study found that “few libraries have identified the blind as a target group and that the dominant role is one of referral to other agencies” (Craddock, 1985, iv).
Although the study by Craddock (1985) had provided much insight to the provision of library services by public libraries in the UK, the results were about two decades old and did not reflect the state of current provision.

The other research on the provision of public library services for VIPs in the UK was a study conducted in 1999 by The Library and Information Statistics Unit (LISU) at Loughborough University. The research team comprised of Professor Margaret Kinnell, Liangzhi Yu and Claire Creaser. The aim of this research was to find out whether the public library services for VIPs were up to the standards set out in the Library Association National Guidelines, and to find out if there were any changes since the research done by Craddock (1985) and the survey conducted by the Royal National Institute of the Blind (RNIB) in 1997. (Evans, 2000)

The 1999 LISU survey found that a significant minority of libraries did not have a specific policy statement, most did not have a specific budget allocation for VIPs, one third of staff had no basic visual awareness training, and there was a decline since 1997 in close ongoing relationships with other agencies working with VIPs (Kinnell, Yu, and Creaser, 2000). Some of the findings will be discussed in the relevant sections in this chapter.

In Argentina, a research study was conducted on library services for people with disabilities by Todaro (2005). Her research focused on libraries which provided services for visually impaired and physically handicapped people. It touched on areas such as type of institution, management of resources, personnel, services, book collections, materials processing, statistics of activities, building facilities and budget. Todaro (2005) concluded that the libraries had many things to correct and to improve upon. She
recommended that in order to improve access to information for people with
disabilities, Argentina should have an integrated library approach based on the
UNESCO manifesto for public libraries where the public libraries should be meant for
all (including the disabled).

2.3.1 Library materials for VIPs

There are various library materials in formats used by VIPs that allows them to
independently gain access to information. The formats preferred by individual VIPs
would depend “… on their personal circumstances such as eyesight, onset of vision
impairment, living arrangements, age, level of literacy and nature of the materials or
information to be accessed” (Astbrink, 1996, 5, In, Williamson, Schauder and Bow,
2000).

Sadly, 95% of books available worldwide are never made available in accessible
formats such as Braille, large print, or analogue or digital audio (Right to Read
Alliance, UK, (n.d.), In, International Federation of Library Associations and
Institutions, 2006).

2.3.1.1 Braille Materials

VIPs are unable to read standard print materials. Thus, tactile script to VIPs is the
equivalent to printed materials to the sighted person. Since the development of tactile
script, there had been many different forms of it. The most common form of tactile
script used now is Braille. It is so commonly used as a tactile script that it has been
endorsed by UNESCO as “the only tactile script parallel to print” (International
Federation of Library Associations and Institutions, 1998). Braille can be used as a
tactile form even for music, mathematics and scientific notations (Wintle and Archer,
Braille has not only helped VIPs obtain information with their fingertips, but have also made significant contributions to users’ quality of life. Surveys were conducted in North America and Europe by The Swedish Library of Talking Books and Braille, the Washington State Library for the Blind and Physically Handicapped (WSLBPH) and the CNIB Library for the Blind. The surveys found that “those who learned Braille as their original reading medium and used it extensively were more likely to develop positive reading habits, were employed at higher rates and most likely to acquire graduate degrees” (International Federation of Library Associations and Institutions, 1998).

Since Braille has such a positive impact on the lives of the visually impaired, it is unfortunate to note that in a developed country like the UK, only 3% of the estimated one million VIPs were Braille users (Bruce, McKennell and Walker, 1991, In, Davies, Wisdom and Creaser, 2001). This research is however quite dated and may not reflect the proportion of current Braille users.

Braille was developed by a Frenchman, Louis Braille, in 1834. Paris officially adopted Braille in 1854 (Lovejoy, 1983). The year 1932 marked the year that Standard English Braille became the common system throughout the English-speaking world (Wintle and Archer, 1983).

Braille can also be enjoyed not only in the physical book format but also in electronic format. In 1999, the Library of Congress launched Web-Braille which makes available a collection of electronic Braille books online. It allows users to download or use the electronic Braille books online (LC launches Braille books online, 1999, 26). The International Braille Research Center also provides electronic Braille books which can
be obtained online from its Electronic Braille Book Library (International Braille Research Center, 2005).

2.3.1.2 Talking Books

In the US, Congress established the Talking Book Program in 1931 and it was administered by the National Library Service for the Blind and Physically Handicapped (NLS) at the Library of Congress (Auld, 2005).

Since 1931, the talking book programme has gone through some technological changes. From the original 33 1/3 rpm records, to the 16 2/3 rpm records in the 1960s, and finally to the 8 1/3 rpm records. The slower speed reduced the number of records required to hold a book. Records then gave way to audio cassettes (Taylor, 2004, 49). Audio cassettes are the most common talking books at this moment in time, especially in developing countries like Malaysia.

In the 2001 LISU survey on library services for VIPs from the users’ perspective, it was found that 83% of the 482 respondents used sound recordings or talking books as a reading format. Of these who used sound recordings as a reading format, 75% preferred cassettes, and only 3% preferred CDs. There could be many reasons for the low preference towards CDs such as CDs were a newer format then and preferred by mainly the younger population, whereas, the majority of VIPs are the elderly who would be more comfortable using cassettes. (Davies, Wisdom and Creaser, 2001)

With constant changes in technology, the trend is to move from cassette talking books towards digital talking books. Digital talking books provide better sound quality, the ability to read an entire book without manipulating the equipment, and improved ability
to skim text and insert bookmarks. In the mid-1990s, the NLS started a programme to design a digital talking book suitable for its service. NLS decided on using a flash memory-based device instead of using CD-ROM or magnetic hard drive for its digital talking books as NLS found the flash memory-based device more reliable for its services. The size of a flash memory-based device is larger than a credit card but smaller than a cassette and is capable of holding compressed digital files for one 12-hour book. However, patron use of these new digital talking books is estimated to begin only in 2008. (Taylor, 2004, 49)

Scheppke (2005), In, Auld (2005) was critical of the NLS plan due to the time frame it will take to finally take off in 2008. NLS’s patrons were requesting for digital talking books but were unable to utilise any digital form of talking books and had to still rely on cassette talking books. Countries such as the Netherlands, Canada, Sweden, Great Britain and Japan were ahead of the United States as they have been providing digital talking books to VIPs through CD format. The VIPs in Canada has been benefiting from a CD production and distribution system that was developed by their very own Canadian National Institute for the Blind with the help of on Canada and IBM Canada.

However, Gray (2005), In, Auld (2005) mentioned that rather than to rush towards a solution for the transition to digital talking books, it is better that the transition be well organised and executed for the benefit of the whole visually impaired and physically impaired community.

**DAISY technology**

The Netherlands uses the DAISY technology. DAISY (Digital Accessible Information System) was developed in 1996 by an international consortium of libraries for the blind.
The DAISY formatted CDs can be played on a DAISY compatible player which allows features such as navigation by page or by chapter, the placing of bookmarks, the increase of the reading speed of the text, and the player can also play commercial audio books and music CDs. In the Netherlands, about 1.2 million DAISY formatted CDs are produced and distributed yearly from a production facility. Production is done on demand and thus involves no costly inventory. The CDs are returned to the production centre and are disposed of while the packages of the CDs are reused. (Scheppke, 2005, In, Auld, 2005)

2.3.1.3 Large Print

Some VIPs are able to read print books which have large type sizes. These books are known as large print books. Large print books for adults were first produced in England in 1964 by Ulverscroft. In 1965, Keith Jennison started selling the first commercial American large print books (Lovejoy, 1983, 15).

The NLS reference circular, “Reading Materials in Large Print: A Resource Guide”, provides sources of large-print materials for purchase or loan from the United States. Large print reading materials come in various type sizes. “Type is measured in points from the bottom of the lowest letter (for example, the tail of the letter "y") to the tallest capital; type one-inch high measures 72 points. Most adult books are set in 10- to 12-point type, newspapers are often 8-point, and some editions of the Bible are in 6-point type. The minimum size for large-print materials is 14-point type. Large-print materials are most commonly available in 16- to 18-point type” (National Library Service for the Blind and Physically Handicapped, 2005b).
The minimum type size to be eligible for free postal service to VIPs in the United States is the 14-point type. Titles of large print books vary and even magazines like Reader’s Digest is available in large print (Wintle and Archer, 1983, 241-2).

The survey by LISU on the provision of library services for VIPs from the users’ perspective (Davies, Wisdom and Creaser, 2001) investigated user’s preferred format for four different categories of items: small items (e.g. leaflets); magazines and newspapers; fiction; and non-fiction. The proportion of users who preferred to use large print for small items were 14%; magazines and newspapers – 9%; fiction – 8%; and non-fiction – 10%. In all categories, the proportion of users who preferred large print was higher than those who preferred Braille.

2.3.2 Production of accessible format library materials for VIPs

As mentioned earlier, accessible format library materials for VIPs consists mainly of Braille materials, talking books and large print materials. These materials may be produced commercially. However, due to the lack of commercially produced accessible materials, libraries and organisations serving VIPs have been known to produce their own materials especially Braille materials and talking books.

Craddock (1985), in his study, found only 12 out of the total 152 public libraries surveyed in the UK produced their own talking books or Braille materials. Clark’s (1984, 79) survey on Braille and talking book producers around the world found that there were a larger number of organisations (104) producing talking books and a smaller number of organisations (95) producing Braille books. This could be due to the trend in users’ demand. “Analysis of growth in talking book and Braille book production by the Library of Congress in the United States of America has indicated a
steady growth in talking book use, and a relatively flat or steady demand for Braille books” (Clark, 1984, 87). This, however, does not mean that Braille has declined in importance. The use of Braille materials is very important in the education and employment of VIPs as mentioned in section 2.3.1.1.

In Malaysia, the National Council for the Blind Malaysia (NCBM) set up the Malaysian Braille Press (MBP) on 1st April 1998. Its purpose was “to meet the acute shortage of Braille materials for education, leisure and to complement the efforts of organisations serving the blind and the Department of Special Education in the production of Braille textbooks” (Lau, 1999). The MBP uses computerised Braille production to produce its Braille materials. Lau (1999) states that Braille production through the traditional methods such as manual brailing, thermoforming, zinc plate printing and so on, will not be able to cope with the increasing demand of Braille materials. The 5 basic requirements to running a computerised Braille production unit are:-

(i) computer and word processor
(ii) Optical Character Recognition (OCR) System
(iii) Braille Translation Software
(iv) Braille embosser
(v) Braille display unit

These 5 basic requirements for running a computerised Braille production unit are also equipment that are used by VIPs to assist them in assessing information. Thus, libraries or organisations can use these materials for both Braille production and also as equipment provided for VIPs to use.
According to the Kerscher (1999), computerised Braille can also be produced by using XML files from DAISY Digital Talking Books. The XML files are “imported” into the Braille Translation Software. This eliminates the need to use the OCR to scan print materials. The Braille Translation Software must be written to support the DAISY / NISOXML specification. If producing Braille can be done through DAISY, then there will be a convergence in producing digital talking books and Braille materials.

The role of volunteers in the production of accessible format materials

According to Habsah (1994), volunteers are a valued resource in helping in the production of materials for VIPs. According to her, the most common tasks that were performed by volunteers at the St Nicholas library are reading to blind braillists, reading to be recorded into talking books, data entry, scanning, and editing.

The survey published in 1984 (Clark, 1984, 78) on the current practice of the production of reading materials for VIPs around the world, found that for the production of Braille materials, only 30.4% used volunteers and 23.2% did not use volunteers at all. The balance of 46.7% did not answer the question. The information on the use of volunteers in the production of sound recordings or talking books was, however, not obtained in this survey.

2.3.3 Library Equipment for VIPs

Not many VIPs may have access to all or any of the equipment or products that are able to assist them in accessing information. Thus, the library is able to play an important role in providing some of these relevant equipment to meet the needs of the visually impaired users. Evans (2000) states that “while it was difficult to assess the levels of equipment required for the user population, it was clear that most authorities had
insufficient equipment available …”. The equipment that are provided by libraries to VIPs can be categorized as talking book players, magnifying devices, and computer assistive technology.

In Dorman’s (1995) review on products available in the market that were suitable for library use, he reviews products from two companies, Xerox and Telesensory. Products by Xerox Imaging Systems included Reading AdvantEdge (optical character recognition software package), DECTalk (synthesized speech card) and the Reading Edge (consists of a scanner with a keypad control unit, OCR software, and DECTalk synthetic speech). The Reading Edge allows for the output speed, the inflection of the speech and voice quality to be controlled by the user.

TeleSensory Corporation has a vast range of products. The products mentioned in Dorman (1995) were Aladdin which is a personal reader able to magnify by up to 25X; V Voice which provides synthetic speech for text appearing on a library’s OPAC; ScreenPower which enables VIPs navigate Windows applications by giving voice feedback (if used with a voice synthesizer) or Braille feedback (if used with Braille-output devices); OsCaR is an optical character recognition product that recognises 11 languages and can recognise any two languages simultaneously; and PowerBraille 40 which is a Braille pad which produces refreshable Braille of text from the screen.

Dorman’s review showed that there was a wide variety of equipment or products available in the market to assist VIPs. The advancement in technology is constantly increasing and improving the equipment available.

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2.3.3.1 Talking book players

Talking books are popular among VIPs. The type of talking book players available in a library would usually depend on the format of the talking books available in that library. If the library provides audio cassette talking books, then, they should also provide audio cassette players for loan or for use within the library premises.

Craddock (1985) found that only 17.1% or 26 out of the 152 public libraries had a policy for the provision of cassette players for VIPs. This included the provision of cassette players for use in the library premises, provision to hospitals, on loan, as part of its mobile resource centre, and so on.

2.3.3.2 Magnifying Devices


Magnifiers

17.8% of public libraries in the UK had a policy for the provision of magnifiers for VIPS (Craddock, 1985). Magnifiers can be divided into various types, which vary in weight, styles and functionality. The various types are bar magnifiers, binocular magnifiers, dome or globe magnifiers, fresnel magnifiers, hand-held magnifiers, neck or pendant magnifiers, page magnifiers, pocket magnifiers, and stand magnifiers (National Library Service for the Blind and Physically Handicapped, 2002).
Magnifying lamps

A magnifying lamp is another type of magnifying device. It is used to help reduce glare while reading or viewing. A magnifying lamp can be “attached around the head with Velcro, stands on the floor, or attaches to a desk, table, or chair, usually with an adjustable arm” (National Library Service for the Blind and Physically Handicapped, 2002).

Screen magnifiers

Screen magnifiers are used for computer screens or television screens. Screen magnifiers usually consist of hardware and software. The hardware consists of the screen magnifier themselves. Some screen magnifiers are used by attaching them to the monitors, some others are mounted on a base made of various materials such as oak or rubber. The various software differ in terms of times of magnification and also their compatibility with the various word processing, database and spreadsheet applications (National Library Service for the Blind and Physically Handicapped, 2002).

Closed-circuit television systems (CCTVs)

Closed-circuit television systems (CCTVs) can magnify, and adjust the brightness and contrast of print and graphic materials electronically. This is done by using a mounted or portable camera on the material. The image will then be magnified on the monitor screen (National Library Service for the Blind and Physically Handicapped, 2002). “Magnification has adjustment ranges determined by the size of the television monitor with maximum range from 45 to over 60 times the original” (Alliance for Technology Access, 2000, In, Brodwin, Star and Cardoso, 2004).
2.3.3.3 Computer assistive technology

Advancement in technology, especially in computer assistive technology, has brought about many benefits to the disabled. “Assistive technology (AT) has increased functional abilities, independence, and access to mainstream society, creating a method of equalization between persons with and without disabilities” (Brodwin, Star and Cardoso, 2004).

People with disabilities lack access to computers with assistive technology (Lenhart, 2003, 30, In, Information access for people with disabilities, 2004). This is not due to their lack of interest but more so due to the fact that they are unable to afford computers and assistive technology equipment. As a group, people with disabilities are poorer than other Americans. The situation worldwide would probably be quite the same. A small scale study conducted in Australia on the information seeking of VIPs found that the most frequently mentioned barrier to accessing the Internet was cost (Williamson, Schauder and Bow, 2000).

Libraries can play an important role in the provision of access to computers, the Internet and other computer assistive technology suitable for the use of VIPs. The study by Williamson, Schauder and Bow (2000) concluded that the provision of adaptive software on standard equipment by public libraries can help alleviate the barrier of access to VIPs due to the cost factor.

Computers and Internet access

The United States Census Bureau’s 1999 Survey of Income and Program Participation (SIPP) found that in the United States “almost three-fifths (57%) of people without disabilities, compared to one-fifth (21%) of people with “limitations in seeing”, have
access to the Internet – a major difference … people with no disabilities are also much more likely than people with visual impairments to use a computer “on a regular basis” (51% versus 13%)” (Gerber and Kirchner, 2001).

Even though there is a major difference in the use of computers and in the access to the Internet between people without disabilities and people who are visually impaired, this digital divide cannot be left unsolved. Computers and the Internet have given VIPs the opportunity to obtain vast amounts of information even at its most current release, for example through daily newspapers available online.

The Pew Internet & American Life Project did a study in December 2003 and found that since the year 2000, the number of people using the Internet for information–seeking purposes had increased by 50% (Information access for people with disabilities, 2004). Libraries can assist a larger number of VIPs to use the Internet as an information–seeking tool by providing access to computers and the Internet.

**Scanners and Optical Character Recognition (OCR) System**

Scanners are valued not only by VIPs but they are also very useful to people without disabilities. Scanners are used to scan text/print materials into computers. An OCR system then converts it into a readable file in the computer. The accuracy level of an OCR is about 95% - 98% and would be affected by factors such as “clarity of the page, writing patterns, colour of the words” and the placing of the page that is being scanned (Lau, 1999).

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Screen Readers

Screen readers are the software application that is needed to translate text into speech. The features provided by screen readers “include graphic translation; screen portion selection; compatibility with internal or external speech synthesizers; and rate, pitch, and volume control” (Alliance for Technology Access, 2000, In, Brodwin, Star and Cardoso, 2004). The Job Access With Speech (JAWS) is probably the most popular screen reader in North America (Information access for people with disabilities, 2004).

Screen readers may have no problem reading text but problems arise when it comes to graphics. Web designers do not bother to caption graphical portions on a web page, thus, screen readers are unable to make sense of the graphics (Wade, 2003). Organisations with web pages (and this includes libraries) should take the time to ensure that their web pages are accessible to VIPs. Harvard University created a set of guidelines for web designers in order to rectify problems in web pages such as the lack of description for graphical elements and unlabelled frames (Harvard University, 2001, In, Wade, 2003). The Center of Applied Special Technology (CAST) has created a software named Bobby that can evaluate web pages for accessibility (Center for Applied Special Technology, (n.d.), In, Wade, 2003).

Braille Translation Software

Braille translation software has the capability of converting text into Braille contractions of a certain language (Lau, 1999). Some Braille translation software allows users to input their own Braille contractions into the Braille table which will be incorporated into the software. This feature is very useful for those whose language does not have a Braille translation software. Once the Braille translation software has
converted the text into Braille contractions, it can then either be printed out by a Braille printer or read by the user using a Braille display unit.

For the conversion of Bahasa Melayu text into Bahasa Melayu Braille contractions, the St. Nicholas Home in Penang pioneered and launched the Bahasa Melayu Braille Translation Programme in 1995 (Shellatay and Mariam, 1996).

A well-known example of a Braille translation system in English Braille is the Duxbury Braille Translator (Shellatay and Mariam, 1996). Currently, the “Duxbury Systems supports two different Braille translators: the Duxbury Braille Translator (DBT) and Megadots (DOS application). The DBT, a multiplatform, multilanguage product, is recognized as the most functional commercial translator in the market.” (Information access for people with disabilities, 2004).

**Braille printers / embossers**

Braille printers are able to print / emboss Braille onto paper. Before the Braille printer can print Braille, the text has to be scanned or inputted into the computer and then the relevant language’s Braille Translation Software is used to convert the text into Braille contractions.

Braille printers are able to print on one or both sides of the paper and may vary in printing speed, line width and type, and weight of paper used (National Library Service for the Blind and Physically Handicapped, 2000). Some Braille printers may also have features such as speech output to assist in printing navigation and may also print graphics (Brodwin, Star and Cardoso, 2004). Graphics can be translated into tactile
print by a tactile image-maker. The tactile print can be interpreted by a person with low vision (Wade, 2003).

**Refreshable Braille display**

The refreshable Braille display unit creates Braille characters by raising or lowering an array of pins (LC launches Braille books online, 1999, 26). To describe the workings of this equipment in further detail, the Library Technology Reports states “As the cursor follows the lines of text displayed on the screen, tiny pin actuators raise and lower to translate the print into Braille cells, which the patrons are able to feel with their fingertips. Moving to the next line refreshes the pin alignment to reflect the new text.” (Information access for people with disabilities, 2004). This assistive technology is useful for users who do not wish to print the text in Braille but only wish to read the text. Most refreshable Braille displays are “lightweight, compact and easily portable” and the device reduces the bulk storage that arises with embossed Braille (Brodwin, Star and Cardoso, 2004).

**Reading Devices**

The Optacon Reading Machine was developed by John Linville and James C. Bliss (Clark, 1983, 260). This reading device is used by moving “the lens module across a line of print, and the image under the lens module is transmitted via the connecting cable to the main electronics unit. The tactile array in the main electronics unit contains a matrix of tiny metal rods which are vibrated to form a magnified tactile representation of the image being viewed by the lens module”. In 1996, Telesensory ceased manufacturing the Optacon. Since then, other companies have tried to develop an updated version of the Optacon, however, none has yet to be developed. The Optacon is
still being used by many blind people today as it offers capabilities that no other device offers (Wikipedia The Free Encyclopedia, 2006).

The Kurzweil Reading Machine, a print-to-speech reading device, was invented by Raymond Kurzweil in the mid-1970s (National Library Service for the Blind and Physically Handicapped, 1983, 177). This machine consists of a scanner which will scan the text, an image-analysis system which will recognise the characters of the text and a programme to generate synthetic speech (Clark, 1983, 261). Reading devices have also advanced with technological advances. According to Dorman (1995), Raymond Kurzweil recently estimated that today's state-of-the-art scanner or voice synthesizers have 80 times the performance yet cost 1/30th as much as the originally invented Kurzweil Reading Machine.

2.3.4 Library services for VIPs

Besides the usual library services provided by libraries such as loan services and reference services, other library services that are of importance to VIPs and can greatly enhance library services for VIPs are the postal services, interlibrary loan services, and mobile library services.

Besides library services, library staff play an important role in ensuring that the needs of VIPs are well taken care of. Staff trained in the provision of library services for VIPs can truly enhance the library services provided for VIPs. Thus, the training of staff in the provision of library services for VIPs will be discussed in this section.
2.3.4.1 Training of staff

In the UK, a study by LISU in 2000 found that one third of staff never received any basic visual awareness training (Evans, 2000). In addition, only few non-specialist staff had training in areas such as the use of assistive technologies and equipment (Kinnell, Yu and Creaser, 2000).

Some libraries may not have the expertise to train their staff in the provision of services for VIPs. Organisations such as the Chartered Institute of Library and Information Professionals (CILIP) and the National Library for the Blind (NLB), UK, are there to help in providing training for staff of libraries working with VIPs. CILIP provides “on-site training on understanding disability and visual impairment, and on ways to achieve best practice” (Chartered Institute of Library and Information Professionals, 2005). NLB provides “training packages for libraries on working with visually impaired people, accessible formats, sources of help, using the Internet with access technology, and so on” (Brazier, 2005).

The training of staff is important not only to provide good service for VIPs, but it can also provide positive effects to relationships with other organizations working with VIPs. Kinnell, Yu and Creaser (2000) found “a clear relationship between staff practices and the development of formal working relationships with other relevant organizations working with visually impaired people.”

2.3.4.2 Postal services

In the United States, the postal laws were amended in 1904 to allow for free postage of books to the blind (Lovejoy, 1983, 3). In Malaysia, Section 15(1) of the Postal Services Act 1991 (Act 465) (1991) states “The minister may make rules as to the exemption of
the Government, its agencies or any class of persons for postal charges on letter-post items and from commissions, fees or other charges payable for services rendered.”.

Malaysia, being a developing nation, may not have as many libraries as in other developed countries. Due to the small number of libraries which provide materials for the visually impaired, postal services provided by the library is important. It is probable to say that not every single VIP lives within convenient travelling distance to the nearest library serving them. Thus, it is quite a necessity to provide this service to the VIPs.

The Sabah State Library, one of the state libraries in Malaysia, provides library services for VIPs which includes postal services. In 1999 there were 43 registered users of this postal service who were able to request and receive audio cassettes through the mail. Pos Malaysia (the Malaysian national postal company) provides free postage (Wong, 1999).

In the UK, the study done by Craddock (1985, 28) found that 11% of the total 152 respondent libraries provided postal services for the handicapped. This percentage was very much smaller than he expected, given the importance of this service to those who are handicapped including VIPs.

2.3.4.3 Interlibrary loan services

Interlibrary loan is defined by Evans, Amodeo and Carter (1999) as “the process by which a borrower in one library obtains the use of books, periodical articles, or other library materials from another, sometimes distant, library.” Interlibrary loan is an important service that allows libraries to benefit from each others’ collection. Users may request through their library for documents or materials not available in their
library but available in another library which has an interlibrary loan agreement with their library.

In the UK, the use of legislation, namely the Disability Discrimination Act, can impel the public libraries to provide interlibrary loan services for alternative format materials. The following is stated in Chapter 11 of Library Services for Visually Impaired People: A Manual of Best Practice (National Library for the Blind, 2001, In, Davies, Wisdom and Creaser, 2001):

“Although an inter-library lending (ILL) system has been established for many decades for standard print material, alternative format material has been excluded from this co-operative network. This has resulted in visually impaired people being offered a much reduced service in accessing a range of reading and information material in a format, which meets their needs. Under the terms of the Disability Discrimination Act, it will be unlawful for libraries to refuse a request for alternative format materials, and the inter-lending system must therefore be able to process this requirement.”

The promotion of international interlibrary loan materials for print handicapped readers was one of the goals set up by IFLA’s Section of Libraries for the Blind in its medium-term programme for 1998-2001 (Sköld, 1999). The International Directory of Libraries for the Blind was identified as an important tool to promote international interlibrary loan. This directory is also available online at the URL http://ifla.jsrpd.jp/ (Nomura and Yamada, 2000).

Libraries serving VIPs located outside of the United States, like in Malaysia, can benefit from the Library of Congress’ National Library Service for the Blind and
Physically Handicapped (NLS)’s international interlibrary loan services. Materials available for loan through this service are braille books and specific back issue Braille magazines, and talking books and specific back issue talking magazines. Music materials from the NLS Music Section such as specific instructional recordings, braille and large-print scores, and books about music and musicians are also available for loan. NLS provides these materials to foreign libraries when the materials are needed by specific individual users of that foreign library (National Library Service for the Blind and Physically Handicapped, 1990).

**Cataloguing of accessible format materials**

Accessible format materials need to be catalogued in order for users to know what is available and where it is available. This will greatly encourage the use of interlibrary loan services for accessible format materials.

In the UK, a national based project called Revealweb: the National Database of Accessible Resources has managed to create an online catalogue of accessible format materials covering over 200 libraries and organisations (Brazier, 2005). Users need not search for accessible format materials by accessing each library’s / organisation’s OPAC (Online Public Access Catalogue) but instead they can just access one website which is the Revealweb website at the URL http://www.revealweb.org.uk/ (Revealweb, n.d.). Revealweb also allows users to search for suppliers who are able to produce, loan or sell accessible format materials.
2.3.4.4 Mobile library services

A mobile library service brings the library to those who are unable to, for some reason or other, visit the library. Mobile libraries are especially important to those who are living in rural areas, institutions, hospitals, etc.

Chairat (1999) in his paper on the “Mobile library service for the blind and visually handicapped in Thailand” reports the situation at Caulfield Memorial Library. Caulfield Memorial Library is the first library for the blind in Thailand and is currently the major source of library materials for VIPs. There was no mobile library service at Caulfield and it was suggested that in order to improve the situation, cooperation should arise between Caulfield and other existing mobile library services.

2.3.5 Management of library services for VIPs

This section on the management of library services for VIPs touches on various aspects of management which are important for the management of library services for VIPs.

2.3.5.1 Policy

In a study carried out by LISU in 1999, only 5% of respondents had an explicit policy statement for VIPs. Others had policy statements for other areas which included VIPs. However, 42% of respondents did not have any written policy statement at all for VIPs.

The research also found that libraries with an explicit policy statement had provided the most average number of different special services, followed by libraries with a policy in other areas and incorporated VIPs, and finally the lowest average number of special services provided went to libraries with no policy for VIPs. This showed a relationship between the existence of a policy statement and the meeting of a wider range of special
needs. A clear policy statement has the functions of being “a planning tool, a means of promotion, and a key performance indicator” (Evans, 2000).

2.3.5.2 Budget

The 1999 research by LISU found that less than 30% of libraries had a specific budget allocation for services for VIPs (Brazier, 2005). The research also found that most libraries did not know the number of visually impaired members in their library, or who lived in the authority. This is clearly unsatisfactory and it was recommended that all authorities should have statistics on expenditure per thousand population (Kinnell, Yu and Creaser, 2000).

2.3.5.3 Relationships with agencies working with VIPs

Kinnell, Yu and Creaser (2000) believe that UK public libraries have a considerable scope for improvement in terms of ongoing relationships with other agencies serving VIPs. Their study noted a fall in the percentage of libraries having ongoing relationships as compared with the study conducted by RNIB in 1997.

Brazier (2005) in her paper presented at the 71st IFLA General Conference and Council in Oslo, Norway, discussed the types of partnerships between UK public libraries and libraries specializing in services for VIPs. She felt that the existing level of partnership was not sufficiently good enough due to lack of integration in management and funding. She urged the government to integrate specialist library services for print-disabled people with mainstream public library services, and also, provide funding.
2.3.5.4 Library concessions

According to Kinnell, Yu and Creaser (2000) some library concessions are made for VIPs. However, many services are not provided on a concessionary basis. If there are library concessions given, they are usually for the free loan of audio materials.

2.3.5.5 Library access

The Chartered Institute of Library and Information Professionals (2005) website gives a briefing on “Library and Information Services for Visually Impaired People” and mentions library access. Some of the points mentioned on the provision of easy access are: a bus stop should be located no more than 50 metres from the library; a drop-off point or parking space should be located closest to the entrance; level of ramped access; doors that are clearly marked; lifts with floor numbers in raised characters or Braille; lifts with voice announcement identifying each floor; hazard-free environment with good colour contrast; and good lighting.

The 1999 LISU study found good coverage of basic access to buildings such as allowing guide dogs and the existence of automatic doors (Evans, 2000). The study recommended that libraries should undertake an audit of access for VIPs, informed by surveys from the VIPs’ perspective (Kinnell, Yu and Creaser, 2000).

2.4 Provision of library services for VIPs: Problems and facilitating factors

One of the objectives of this study was to find out the problems or challenges faced by libraries in their provision of services for VIPs, and also the factors that facilitated the provision of this service.
2.4.1 Problems faced by libraries providing library services for VIPs

No previous research was found on the problems faced by libraries providing library services for VIPs. Also not much non-research based literature could be found on this topic.

Ng’ang’a (2003) presented a paper at the 69th IFLA General Conference and Council about Kenya’s experience concerning the provision of services to the print handicapped by public libraries. In this paper, Ng’ang’a (2003) presents a list of 10 challenges faced by the Kenya National Library Service (KNLS). The challenges were:

“(i) The society perception of the Visually Impaired Persons who are viewed as people who require sympathy and alms rather than being empowered.

(ii) Cultural barriers and beliefs that discriminate against the visually impaired persons who in most cases are viewed as social misfits hence most of them are hidden away in the houses from the public.

(iii) Inadequate information materials in Braille, large print and other alternative formats. …

(iv) Inadequate availability of equipment used by Visually Impaired Persons…

(v) The high poverty levels have greatly discouraged the visually impaired persons (especially the unemployed and school drop outs) to seek for knowledge in the library. …

(vi) Lack of proficiency in Braille. …

(vii) Lack of transport for transporting information materials to the visually impaired in their homes, designated service points, etc.

(viii) Inadequate trained manpower to handle the visually impaired library users.
Inadequate storage space for books in Braille which comes in multiple [volumes] per title.

Limited mobility by the visually impaired persons who require to be guided to visit the library.”

The challenges faced by the Kenya National Library could also be similar to those faced by public libraries in other countries especially in developing countries like Malaysia. Besides the challenges listed by Ng’ang’a (2003), there are other problems which seemed quite relevant in the provision of library services for VIPs.

One of the main problems faced by libraries in their provision of library services for VIPs is inadequate funds. For special libraries serving VIPs, the lack of funds can be the biggest challenge faced. According to Habsah (1994) the biggest stumbling block was the source of funds which dictates the continuity and extent of services. These special libraries are wholly dependent on public and private funds. Due to the lack of funds, 70% of budgets are taken up by staff salaries, with only the 30% left for collection development and extending services.

Public libraries in Malaysia are better off as their financial needs are provided for by government funding. The National Library of Malaysia receives its funding from the Federal Government. The state libraries receive both State Government funding and Federal Government funding. However, since public libraries provide a wide range of services, services for VIPs may be given lower priority. Thus, obtaining sufficient funds for services for VIPs could also pose as a problem for public libraries.
The lack of funds has also affected the number of staff working in special libraries (Habsah, 1994). Thus, there is a reliance on volunteers especially in the production of accessible format materials for VIPs. Volunteers are greatly appreciated but the high reliance on volunteers could affect the production process. This is because volunteers may not be available at all times. Thus, the production of materials will have to depend on the availability of volunteers. Another example would be in the recording of talking books, the reader has to have the right quality in terms of pronunciation, intonation and expression (Habsah, 1994). Thus, only volunteers with these qualities can assist in reading for recording, and volunteers with these qualities may not easily be available, causing the slowing down of the production process.

The lack of awareness among VIPs concerning library services can also pose as a problem. Zahra (1994) mentions that VIPs might have poor knowledge concerning library services. This lack of knowledge could result in low levels of usage of library services for VIPs. Wong (1994) also states that there is a great number of VIPs who are unaware or reluctant to use library services, and thus, more promotions should be conducted. Zahra’s (1994) and Wong’s (1994) statements were confirmed in the study conducted by LISU in 2001 which found a “high proportion of people were unaware of the existence of the various services which were available and the agencies that operate them” (Davies, Wisdom and Creaser, 2001). To solve this, the study also suggested sustained promotional campaigns. According to Hovious (1994), creating awareness is critical to develop and promote library services for VIPs. She adds that awareness should not only be created in potential customers but also in those in the library profession in order for the library profession to develop the appropriate services.
In trying to create awareness and promote library services for VIPs, libraries may face the problem of getting in touch with potential visually impaired users. A significant number of VIPs are not registered with the Social Welfare Department. According to Mohamad (1994), the absence of reliable data would hamper the efficient planning and provision of services to the disabled. However, even though the problem in getting in touch with potential visually impaired users exists, the marketing and promotions of library services for VIPs can still be successful. The papers presented by Zahra (1994) and Hovious (1994) may be more than a decade old but still give valuable information on the marketing and promotions of library services for VIPs.

2.4.2 Factors facilitating provision of library services for VIPs

Although the author found no previous literature on the factors facilitating the provision of library services for VIPs, it was felt that finding out about the facilitating factors is also an important part of this study. The findings may help empowered parties to take action in encouraging the provision of library services for VIPs in libraries which have yet to provide this service.

Since the author found no previous literature, it was felt that there could be three facilitating factors relevant to Malaysia, and explanations were provided on why the author felt these factors could facilitate the provision of library services for VIPs.

Directives from the Government

Directives from the Government could be a possible facilitating factor. This may be more relevant to public libraries. Since some public libraries are Government departments, and all public libraries receive their main funding from the government, it is assumed that the Government has a level of governance over these libraries. Thus, the
directive and support from the Government could have been the facilitating factor of some libraries providing services for VIPs.

**Initiative from the library’s Director**

The library’s director holds the highest leadership position and thus could play a very important role in facilitating the provision of library services for VIPs.

**Request from NGOs**

NGOs such as societies, associations and institutions for the visually impaired represent the collective voice of VIPs. Thus, NGOs may have seen the need and demand for library services for VIPs and may have requested for more libraries to provide this service. Where there is demand, there is (hope for) supply.

### 2.5 Non-provision of library services for VIPs: Factors that hindered provision

In finding out the current status of provision of library services for VIPs in Malaysia, it is felt that in order to complete the picture, factors that hindered the provision of this service should be brought to light.

As mentioned in the previous section, the lack of funds posed a problem to libraries serving VIPs. This factor could also have hindered libraries from providing this service altogether.

Besides the lack of funds, another factor which could have hindered the provision of library services for VIPs would be presumptions made by the libraries. According to Shellatay and Mariam (1996), “Libraries erroneously believe that it was not justified to allocate enormous funds just to support the information needs of a mere 1% of the
population.” There is the presumption that services for VIPs would involve high capital costs. Shellatay and Mariam (1996) mention that this presumption is not entirely true as many assistive equipment and software programmes cost around the same as equipment and software for sighted users. Thus, some libraries may end up not providing services for VIPs based on this presumption. Also, the population of VIPs in Malaysia is more than 1% and stands at about 3.4% or 834,020 Malaysians, as mentioned in the first chapter of this study.

It can be seen that these false presumptions towards VIPs and services for VIPs could be caused by the lack of information and ignorance (Shellatay and Mariam, 1996). Lack of information is another barrier that has greatly hindered the development of library services for VIPs.

Another factor that could have hindered the provision of library services for VIPs among public libraries is that the provision of this service in Malaysia has been left to NGOs (Shellatay and Mariam, 1996).

2.6 Summary

This chapter began by providing an idea of the purpose of the literature review. The approach taken to obtain information for this chapter was also given. The main part of this chapter covered the findings of the literature review.

Two previous studies in the UK which were similar, to a certain extent, to this study were reviewed. Craddock (1985) found that few libraries identified the blind as a target group. Kinnell, Yu and Creaser (2000) found that a significant minority of libraries did
not have a specific policy statement, one third of staff had no basic visual awareness training, and most of the libraries lacked having a specific budget allocation for VIPs. Another study in Argentina, which was not only restricted to library services for VIPs but also for the physically disabled, was also reviewed. Todaro (2005) concluded that the libraries surveyed had many things to improve upon and recommended an integrated library approach.

The literature review conducted covered the 3 research questions of this study. The findings of the literature review concerning the first research question covered the following areas on library materials (including Braille books, talking books and large print books), production of library materials (including the role of volunteers), library equipment (including talking book players and magnifying devices), computer assistive technology (including computers and Internet access, scanners and optical character recognition (OCR) systems, screen readers, Braille translation software, Braille printers, refreshable Braille displays, and reading devices), library services (including the training of staff, postal services, interlibrary loan services, and mobile library services), and the management of library services for VIPs (including policy, budget, relationship with other organizations working with VIPs, library concessions, and library access).

Literature on problems in the provision of library services for VIPs was reviewed. The main problems were the lack of funds, lack of staff and the high reliance on volunteers, lack of awareness among VIPs concerning library services, and problems in getting in touch with potential visually impaired users. No previous literature on the facilitating factors in the provision of library services for VIPs were found. However, three factors were listed by the author. They were directives from the Government, initiative from the library’s Director, and request from NGOs. Literature on the factors hindering the
provision of library services for VIPs was also examined. It was found that some of the factors were the lack of funds, and false presumptions towards VIPs and services for VIPs.

The next chapter presents the methodology employed in this study.