

A STUDY OF THE FACTORS INVOLVED  
IN THE DEVELOPMENT OF INFORMATION  
TECHNOLOGY IN HIGHER EDUCATION  
LIBRARIES IN THE ARAB COUNTRIES  
WITH SPECIAL REFERENCE TO KUWAIT

By

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## Abstract

A STUDY OF THE FACTORS INVOLVED IN THE DEVELOPMENT OF INFORMATION TECHNOLOGY IN HIGHER EDUCATION LIBRARIES IN THE ARAB COUNTRIES WITH SPECIAL REFERENCE TO KUWAIT

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Khalid S. Al-Anzi

The developed countries are moving swiftly and steadily towards electronic information handling and exchange. The speed of this progress needs to be matched in Higher Education libraries in the Arab countries to cope with the advancement of research and scientific activity. There are hundreds of academic libraries in Arab countries with an enormous wealth of library collections and a rapid growth of potential library users.

This study aims to investigate the main factors involved in the development of IT, Arabisation, cooperation and telematics, in the AC Higher Education libraries with special reference to Kuwait. Kuwait has suffered severely owing to the Iraqi invasion in August 1990. Most of its Higher Education libraries are in the process of being rebuilt. Therefore, this study comes at a suitable time to analyse the requirements for the implementation of IT at this stage.

A critical literature review has been carried out to examine the three main aspects namely, IT, Arabisation, cooperation and telematics. A questionnaire survey was conducted in

selected university libraries in AC. A field work study and a comprehensive survey including questionnaires, interviews and observations, were conducted in the Higher Education libraries in Kuwait specifically. This included a detailed study of user opinions, regarding IT, Arabised library system and cooperation and telematics

The study shows that university libraries in AC are still at an early stage in the development of IT, Arabisation and cooperation and telematics and most of the progress in this field is to be found in certain GCC countries.

Although KU and PAAET are the only two Higher Educational institutes in Kuwait their libraries lack IT, Arabisation and cooperation and telematics. Library users are dissatisfied with the current traditional library system and services being used and offered in these libraries. Both librarians and library users, although they have limited IT backgrounds, have high expectations and positive attitudes to the importance of the above IT facilities for improving their library services.

The study identifies the main critical issues affecting IT, Arabisation and cooperation and telematics in Kuwait Higher Education libraries and explores possible solutions and practical recommendations. This study also considers whether the results of the Kuwait study could be generalised to apply to other similar Arab countries.

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## List of Abbreviations

ABEGS	:	Arab Bureau of Education for the Gulf States
AC	:	Arab Countries
AGU	:	Arabian Gulf University
AH	:	Anno Hegirea
ALDOC	:	Arab League Documentation Centre
ALESCO	:	Arab League Educational Cultural and Scientific Organisation
ARIS-NET	:	Arab Information System-Network
ASMO	:	Arab Standardisation and Metrology Organisation
AUCASE	:	Amman University College for Applied Engineering
CD-ROM	:	Compact Disk Read Only Memory
ENSTINET	:	Egyptian National Scientific and Technology Information Network
GCC	:	Gulf Cooperation Council
GLCC	:	Gulf Library Cooperation Committee
GULFNET	:	Academic and Research Libraries Network in the Gulf States
IDSC	:	The Cabinet Information Decision Support Centre
INTREX	:	Information Transfer Experiments
IPA	:	Institute of Public Administration
IU	:	Islamic University
IT	:	Information Technology
JLA	:	Jordan Library Association
JUST	:	Jordan University for Science and Technology

KACST	:	King Abdul Aziz City for Science and Technology
KAU	:	King Abdulaziz University
KD	:	Kuwait Dinar
KFNL	:	King Fahd National Library
KFAS	:	Kuwait Foundation for Advancement of Sciences
KFU	:	King Faisal University
KFUPM	:	King Fahd University of Petroleum and Mineral
KISR	:	Kuwait Institute for Scientific Research
KIT	:	Kananzawa Institute of Technology
KSU	:	King Saud University
KU	:	Kuwait University
LAN	:	Local area Network
MARC	:	Machine-Readable Catalogue
NSTIC	:	National Scientific and Technical Information Centre
OPAC	:	Online Public Access Catalogue
PAAET	:	Public Authority for Applied Education and Training
QU	:	Qatar University
RITSEC	:	Regional Information Technology and Support Centre
RLG	:	Research Library Group
RLIN	:	Research Library Information Network
SA	:	Saudi Arabia
SQU	:	Sultan Kaboos University
SR	:	Saudi Rial
UAE	:	United Arab Emirates

UAEU : United Arab Emirates University

UAQU : Umm Al-Qura University

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## CHAPTER ONE

### INTRODUCTION

#### 1.0 Introduction

Information is a major national resource for any country or nation. Such information is essential for strategic plans, decision making and scientific developments. Information Technology (IT) may be defined as the use of modern technology to aid the capture, storage, retrieval, analysis, and communication of information, whether in the form of data, text, image, or voice (Carter, 1993). IT facilities can help in control, access, sharing, exchange and transfer of information in an easy and rapid way. Such facilities could improve the effectiveness of library and information centres.

Rapid progress and falling prices in the computer, network, satellite and electronic communication industries now and early next century are expected to influence the daily process of controlling and exchanging information, which has become our lifeblood. Libraries and information centres will be major beneficiaries of these facilities in order to improve their services and to meet their users' present and future needs. Since we are living in the era of the information explosion, electronic information and IT multimedia, it is very difficult, if not impossible, for a library or information centre to be self-sufficient. Thus, the advantages of IT and cooperative networking and telematics have been fully exploited in the

library and information centres in developed countries. Although such networking is not new, with the advancements of new technology it has become more efficient and is the trend of the information world today.

However, the case appears to be different among libraries and information centres in the Arab world or so called Arab Countries (AC). These countries have a large number of library and information centres, which contain a huge number of library materials, that have a shared interest for the users in these countries. Many of the Arab Countries (AC) are now progressing with technology in their development programmes. Automation in information institutions is needed to accelerate and enhance this progress and to be in touch with the advanced technology in the developed countries. Research work depends on the availability of the latest information and data. At the present time many researchers in AC do their research abroad for easy information access, or may have to wait for weeks, months or even a year for information by post.

Arab Countries (AC), as developing countries, have to examine the level of IT provision in their libraries since this could improve the effectiveness of their services to users. Higher Education libraries above all need such facilities since they serve an academic environment consisting of scholars, researchers and Higher Education students.



The on-line catalogue has revolutionised library work. A multi-lingual computer capability is important to the international information exchange between libraries and information centres. Now advances in computer technology and new methods of dealing with Arabic script provide new possibilities for using these scripts within on-line records. It is very important to understand the role of Arabised library systems and whether they are adequate to be adopted in these libraries. It is understood that there are still some technical difficulties in using such systems, but some improvements have been achieved. Such Arabised systems will be discussed in Chapter Three. Introducing IT in these libraries requires qualified manpower and financial support. However, before money and manpower can be channelled into IT development, the authorities need to be persuaded of the major role of information in national development.

This study aims to investigate the main factors involved in the development of IT, Arabisation, cooperation and telematics, on the AC Higher Education libraries with special reference to Kuwait. Since liberation academic libraries in Kuwait are under-going a rebuilding process. Perhaps, therefore, this study comes at a suitable time to analyse the requirements for implementation of IT at this stage. In addition, Kuwait is a rich and small country. This should be advantageous in introducing IT, Arabisation, cooperation and telematics into its academic libraries.

Kuwait has only two academic institutions, namely Kuwait University (KU) and the Public Authority for Applied Education and Training (PAAET). Their educational programmes, academic staff and students are growing rapidly in number, see Chapter Six. Therefore, their present and future needs must be considered, especially in the light of the coming era of the electronic library and information in the academic environment.

Chapter seven presents survey methodology and administration of Kuwait Higher Education libraries. Chapter eight presents the current status of IT, Arabisation, cooperation and telematics in KU and PAAET libraries. Chapter nine analyses the survey results of Kuwait Higher Education libraries. Chapter ten is the general discussion. It presents the main findings of this study, identifies the main issues affecting the introducing of IT, and suggests practical solutions. It also provides the main conclusions and suggestions for further research.

### **1.1 Statement of the Problem**

The main problems which this study aims to analyse are presented briefly as follows :

1. There are hundreds of university libraries with vast amounts of materials in Arab countries. Therefore, the speed of progress in the world towards electronic information handling, especially in the academic environment, needs to be matched in

the AC university libraries to cope with the advancement of research and scientific activities.

2. The number of users of academic libraries has increased sharply in recent years. This increase in numbers is due to the sharp jump in the economy, education and social conditions of most of the AC and has led to greater demands for new library services and more efficient operations. AC have many university libraries with a large number of users whose demands and interests have become more complicated. Like their counterparts in other parts of the world, today's Arab librarians and their library users, as Aman (1989) stated, wish to have access to the needed library materials in the convenience of their local library.

3. Earlier studies suggest that IT, effective cooperation and telematics, both at national and regional levels, are lacking in the AC libraries in general. Therefore, this study will examine the current situation in the Higher Education libraries in AC in general and in Kuwait in particular.

4. Kuwait is small country and has a strong economy. KU and PAAET are the only two Higher Education institutes in the country. However, the Iraqi invasion caused severe damage to its academic libraries. This is perhaps, a suitable opportunity for the authorities to consider the benefits of the advantages of IT, Arabisation, cooperation and telematics, in the process of rebuilding these libraries.

## **1.2 Aims of the Study**

This study aims to investigate the factors involved in the development of IT, Arabisation, cooperation and telematics in AC university libraries with special reference to Kuwait. The main aims can be summarised as follows :

1. To examine and evaluate the present situation and future plans for IT, Arabisation, cooperation and telematics in university libraries in the AC in general and in Kuwait in particular.
2. To identify the main problems and obstacles which, according to library authorities, librarians and users, are limiting the implementation and introduction of IT, Arabisation, cooperation and telematics in these libraries.
3. To study and analyse the user satisfaction, needs and attitudes to IT, Arabisation, cooperation and telematics in Kuwait Higher Education libraries.
4. To assess and analyse the librarians' and library authorities' opinions and attitudes to IT, Arabisation, cooperation and telematics in Kuwait Higher Education libraries.
5. To identify any mismatch between the perception and aspiration of users and library authorities in Kuwait.

6. To identify main issues affecting the introduction of IT, Arabisation, cooperation and telematics in Kuwait Higher Education libraries and to explore possible solutions.

7. To consider whether results of the Kuwait study could be generalised to apply to other similar Arab Countries.

### **1.3 Research Methodology**

Several research methodologies were used for the purpose of this study. These including the following :

1. A critical literature review has been carried out to examine the three main aspects namely, IT, Arabisation, cooperation and telematics, and covering also other information such as the general background for AC and Kuwait, and librarianship in AC and Kuwait Higher Education libraries.

2. A questionnaire survey was conducted in selected university libraries in AC.

3. A field work study and a comprehensive survey including questionnaires, interviews and observations, were conducted in the Higher Education libraries in Kuwait specifically.

#### **1.4 Research Questions**

This section presents a series of questions which need to be investigated, analysed and answered in this study. These questions are :

1. Is there a lack of IT, Arabised library systems, cooperation and telematics in AC and Kuwait Higher Education libraries?
2. What, according to the authorities and librarians, are the main factors hindering the adoption and implementation of IT, Arabisation, cooperation and telematics in AC in general and in Kuwait in particular?
3. Is lack of these features causing dissatisfaction among the users of the Higher Education libraries in Kuwait?
4. What are the opinions and attitudes of librarians, library authorities and users in Kuwait Higher Education, towards IT, Arabisation, cooperation and telematics?
5. Is there a mismatch between the perceptions and aspirations of users and library authorities in Kuwait?

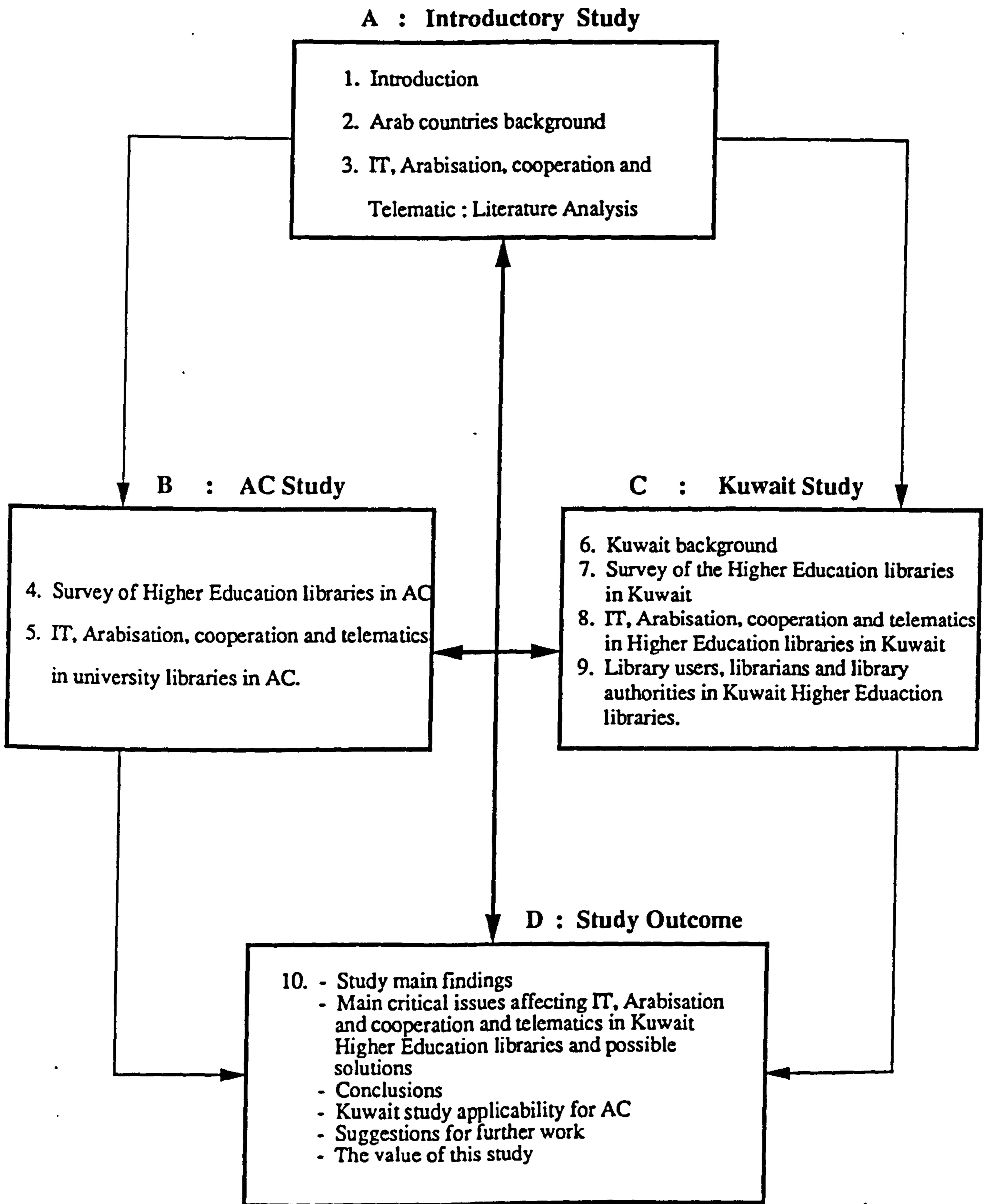
#### **1.5 Scope and Limitations**

The scope of the AC part of this study was limited to selected Higher Education libraries. Twenty university libraries from ten Arab countries were surveyed. The study then gives special

attention and reference to Kuwait libraries. The study focuses in more detail on the libraries in its two academic institutions, namely KU and PAAET.

### **1.6 Significance of the Study**

1. This study covers a selection of Higher Education libraries in Arab countries and provides a general and current library profile for these libraries. It provides an up to date study to identify and investigate the main issues affecting IT, Arabisation, cooperation and telematics in the AC Higher Education libraries as background to the Kuwait study.
2. It is the first comprehensive study as far as is known and certainly following the liberation of Kuwait, to study and analyse the main issues affecting IT including Arabisation, cooperation and telematics.
3. It appears to be the first in depth user-study in Kuwait Academic libraries, certainly since the Gulf War. Its conclusions may influence the awareness of AC authorities as to the importance and viability of IT, Arabisation and telematics in their Higher Education libraries at a time when the rebuilding process is under way.
4. Kuwait libraries are under-going a rebuilding process and therefore, this study comes at a suitable time to help the authorities in their planning and implementing IT.



**Figure 1.1 : Thesis layout**



## CHAPTER TWO

### AC BACKGROUND

This chapter presents brief and general background about Arab countries. Also it presents a general background to the librarianship in these countries.

#### 2.1 General Background

Arab Countries (AC) consist of the 21 members of the League of Arab States (LAS). These are: Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. See Figure 2.1.

The Arab has played a very special role throughout history. There are some major distinguishing aspects of Arab history such as, the ancient civilisations, Islam, the Sykes-Picot agreement (1916), Palestine problem (1948), and Oil. The modern AC zones came as a result of the Sykes-Picot agreement between Britain and France. In 1945, the Arab league was formed. Thereafter, by 1977, all Arab countries gained their full independence.

AC are the majority in the Middle East region. They are situated at the cross roads of Africa, Europe and Asia. There are no geographical barriers between the Arab countries which

occupy about 14 million km<sup>2</sup>, and which are situated in the area of South West Asia and North Africa.

There are two different types of economy in AC, the relatively poor countries and the oil rich countries. The main economic source in AC is oil. There are seven AC from the total thirteen who are members of OPEC. These are: Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia and the United Arab Emirates. However, there are another four AC oil producers who are not members of OPEC.

The present and the future of the Arab region is affected to a large extent by the issues of politics and wars. At the present the political status is unstable inside many AC's which causes a circulation of problems and an unsettled situation. AC's have been involved in several wars since 1948, such as the Arab-Israeli war, the Lebanon civil war, the Iraq-Iran war, the Iraqi Invasion of Kuwait, the Gulf war in 1991, the Yemen civil war and the Sudan civil war.

Generally, there is a lack of democracy in these countries and decisions are usually in the hands of a few persons. Western experts and observers tend to believe that the most important sign of progress for these countries is to gain political stability, by democracy and political awareness (Kennedy, 1993).

The total population of AC is growing rapidly and recently it has reached approximately 212 million. This population figure is next in size behind the USA and the former USSR and somewhat

above the total for the EC countries. According to the UN forecast, the population of AC will be about 500 million in the year 2030 (Boustani, 1990). The population sizes vary among these countries. In Egypt, for example, it reaches almost 60 million, while the population in Qatar is only half a Million. Table 2.1 shows the population in each individual country.

Arab Countries, in general, share the same culture, religion (Islam), language, history, and customs. The Arabic Language is the official one and English is very common and considered to be the second language, except in Morocco, Algeria and Tunisia, in which French is considered the second language. Press freedom is very limited in general. Kuwait, Lebanon, Egypt and Jordan have the highest press freedom in the area.

In general, state education in AC was developed at the beginning of this century. However, educational ethos and methods are still traditional in most of these countries. Therefore many students have been sent abroad for higher education. Egypt has the oldest and largest education system. Tables 2.2 shows the illiteracy rate in these countries for males and females. It shows that Lebanon, Bahrain, Jordan and Kuwait have the lowest rate, while Yemen, Somalia and Djibouti have the highest rate. Table 2.3 shows the education rates respectively in the AC. It shows that nine countries have the highest percentage (over 10%) in the university education level, namely Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Qatar and Syria.

In general, Arab countries exhibit a number of characteristics shared by developing countries, such as a lack of trained personnel and higher education programmes, limited resources, unstable governments, centralised decision-making, constant change of priorities, and poor communication systems.

## **2.2 Librarianship in AC**

The known ancient civilisations arose in the Middle East area i.e. Egypt, Iraq and Syria. Within these civilisations there were what we can call libraries. The famous one, of course, was the Alexandria library, founded in 285 BC.

With the spread of the Islamic civilisation in the Middle Ages, throughout the Middle East, libraries were spread and developed. Since Islam asks Muslims to learn and take care of the Holy Quran book and the Hadiths, or traditions about the prophet Muhammad, a library was a part of the mosque buildings in those days. In more recent history, the recognition of the library in AC only started with the second half of this century. In the last thirty years much progress has been made.

There are tens of thousands of libraries including more than 1,000 academic libraries distributed throughout the Arab countries (Salem, 1986). There are at least ten library associations in AC. The Arabian Gulf Chapter of the Special Libraries Association (AGC/SLA), established in 1992, appears to be the latest of them. However, apart, to some extent, from the Jordanian Library Association, these associations in generally have limited roles in the library development.

There are more than twenty-three institutions for librarianship education in AC. The first one was established at Cairo University in 1951. However, the number of graduates still falls far short of meeting the AC requirements for qualified manpower. (Sherif, 1980). Aman (1994) criticises library education in AC since traditional concepts are still common in most library education programmes. However, some library schools in AC have recently begun to include few IT courses in their curricula, this includes database, library automation, and computer lab as part of their B.A. programmes. This can be noticed, for instance, in the Department of Librarianship in Cairo University (Tedd, 1994) and in the Jordanian University (Younis, 1992).

Librarianship problems in AC are typical of those in the developing countries. These problems, as Anderson (1983) summarised, are: the lack of library standards, of library legislation, of library planning at the national level, of professional education within the countries, with a shortage of librarians and lack of an active professional library association.

Aman (1994) confirmed this view and added some other problems such as underdeveloped publishing industries, an inadequate supply of well-educated professional librarians and library-support staff, low self-esteem among librarians, and a stifling bureaucracy. However, he stated that political stability, economic prosperity and the introduction of democracy in the AC will, in the near future, place more emphasis on free and unrestricted access to information.

Library and information centres in AC such as: Yemen, Lebanon, Syria, Sudan, Egypt, and Jordan are handicapped by a poor economic structure and shortage of funds. However, even in the rich oil countries such as Saudi Arabia, the Gulf States, Iraq and Libya library problems have still not been solved (Alqudsi,1988).

Obviously, the wars in which AC have been involved have had a negative impact on library development. This can be clearly seen in Kuwait after the Iraqi invasion in 1990. These wars destroyed and hindered the development of library and information centres. However, Aman (1992) reports that the War in the Gulf attracted special attention to the impact of technology and how it was decisive in bringing about a solution to the crisis.

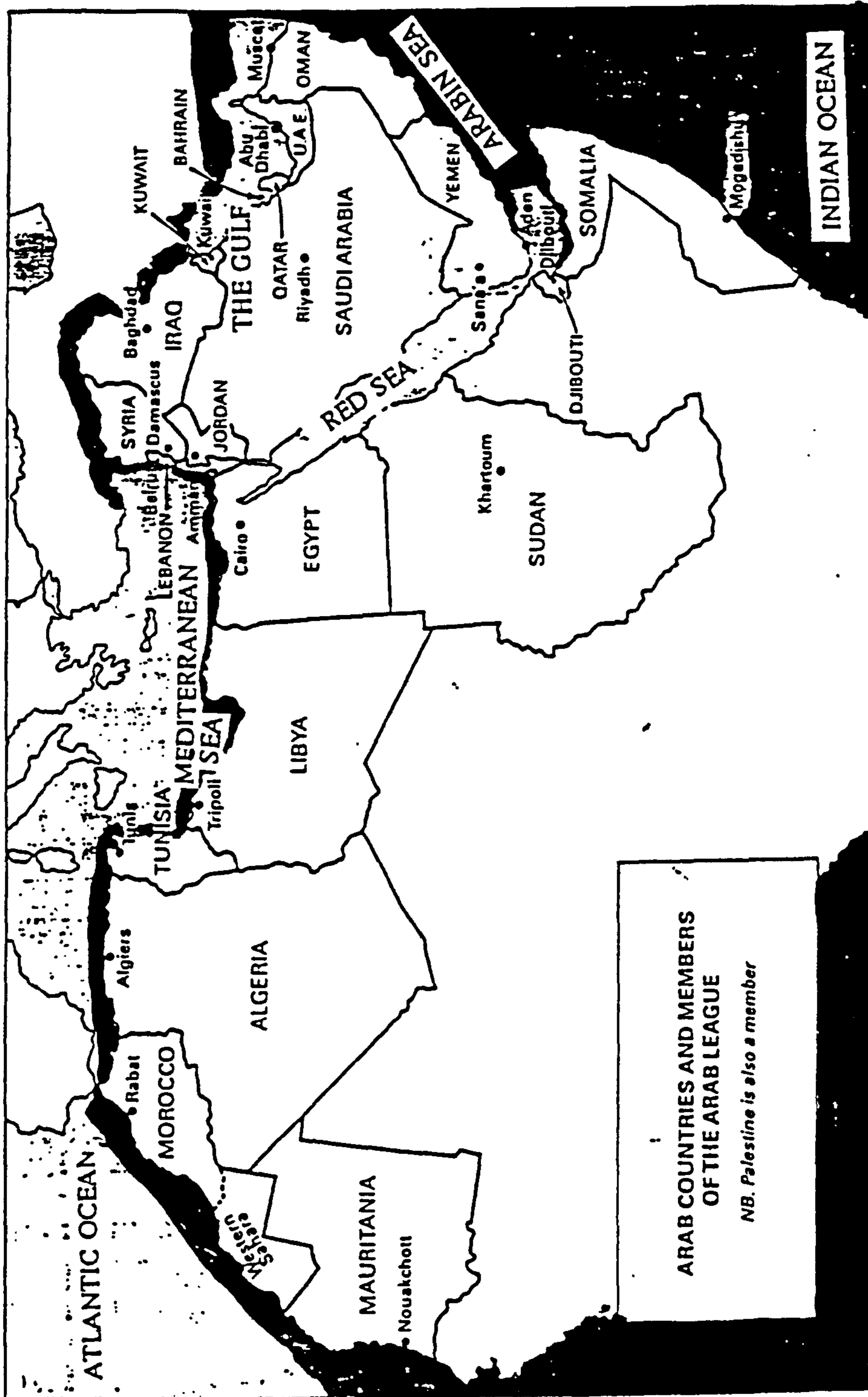


Figure 2.1 : Arab countries map

Country	Population (millions)	Country	Population (milions)
Egypt	58.9	Libya	4.7
Algeria	26.5	Jordan	4.1
Sudan	24.9	Lebanon	2.8
Morocco	26.0	Mauritania	2.2
Iraq	18.7	Kuwait	1.6
Saudi Arabia	13.9	UAE	2.0
Syria	13.3	Oman	2.0
Yemen	12.3	Bahrain	0.5
Tunisia	8.2	Qatar	0.5
Somalia	7.6	Djibouti	0.4

**Table 2.1 : AC population (in millions)**  
(from The Middle East and North Africa, 1995)



Less than 25%	25-50%	50-75%	75-90%	more than 90%
<b>Male</b>				
Bahrain Iraq Jordan Kuwait Lebanon	Algeria Egypt Libya Qatar Saudia Arabia Syria	Oman Sudan Mauritania Morocco UAE	Djibouti Somalia	Yemen
<b>Female</b>				
Lebanon	Bahrain Jordan Kuwait	Algeria Egypt Iraq Qatar Saudi Arabia Syria Tunisia UAE	Libya Morocco Oman Sudan Algeria	Mauritania Somalia Yemen Djibouti

**Table 2.2 : Illiteracy rate in AC (from Boustani, 1990)**

Country	Primary School 6-11 years	Secondary School 12-17 years	University 18-23 years
Algeria	85 - 95	40 - 60	5 - 10
Bahrain	more than 95	more than 60	10 - 20
Djibouti		Less than 20	less than 5
Egypt	60 - 85	40 - 60	more than 20
Iraq	more than 95	40 - 60	10 - 20
Jordan	more than 95	more than 60	more than 20
Kuwait	more than 95	more than 60	10 - 20
Lebanon	more than 95	more than 60	more than 20
Libya		more than 60	10 - 20
Mauritania	Less than 60	Less than 20	Less than 5
Morocco	60 - 85	20 - 40	5 - 10
Oman	85 - 95	20 - 40	less than 5
Qatar	more than 95	more than 60	10 - 20
Saudi Arabia	60 - 85	20 - 40	5 - 10
Somalia	Less than 60	Less than 20	less than 5
Sudan	Less than 60	Less than 20	less than 5
Syria	more than 95	40 - 60	10 - 20
Tunisia	more than 95	20 - 40	5 - 10
UAE	more than 95	40 - 60	5 - 10
Yemen	60 - 85	Less than 20	less than 5

Table 2.3 : Education rate in AC. (from Boustani, 1990)

## **CHAPTER THREE**

### **IT, ARABISATION and COOPERATION AND TELEMATICS: LITERATURE REVIEW ANALYSIS**

This chapter presents a summary of a critical analysis of the literature review of the three main aspects relating to this study in the AC libraries. These are library automation, Arabisation of library systems, and cooperation and telematics.

#### **3.1 Library Automation in AC**

This section discusses automation needs for AC libraries and the main automated institutions in these countries.

##### **3.1.1 IT Needs for Libraries and Information Centres in AC**

Many experts, as Anderson (1983) described, have agreed that Third World countries should include, as part of their overall plan for national development, a strategy for the introduction of information technology. He further explains :

If they do not, they will fall further behind in the search for information which can be used to develop national resources, assist in the building of national infrastructures, and establish national administrative efficiency. If they do not, there is the danger that, already part of the "information poor", they will become further drained because their sources of national information will be recorded by outside organisations which will then be in a position to sell that information (P285).

It has been recognised that there are formidable obstacles to the introduction of high technology in developing countries; and that in some countries the introduction of even low technology can be difficult (Anderson, 1983).

Libraries in AC contain many valuable heritage collections and also libraries and information centres in the Gulf have modern materials but there are difficulties of easy and immediate access. Automation in libraries and information centres in the AC are still at an early stage (Al Dosary and Ekrish, 1991; Sliney, 1990). Therefore, it is necessary to assess whether the large cost required for implementation, running, effort and the time can be justified. The following presents briefly the reasons why IT might be needed in libraries and information centres in AC.

### **1. Users Needs**

Library and information services have to meet the present and future needs of their users. Indeed, this is the aim of any library and information centre. IT offers the possibility of saving the time and effort of the user, keeping the user in touch with the current literature, and better matching his needs. Direct access to information databases can keep researchers and academic users up to date in their fields and have a positive effect on national planning. Collier (1989) stated that the role of IT in development of services over the next five to ten years must be to produce an extremely flexible and responsive environment for satisfying information needs.

Therefore, the issue of user needs and attitudes will be investigated in depth in this study.

## **2. Cooperation**

Modern IT and telecommunications facilities, could help and encourage more cooperation within the library and information centres in AC. Effective cooperation and telematics will allow resource sharing, active interlibrary loan and electronic wide information access between libraries.

## **3. Technology Transfer**

The transfer of technology involves the transfer of scientific knowledge and information, which needs to be absorbed by the recipient. The AC, as other developing countries, have a great need for technology transfer to enable them to carry out their development programmes. IT may help to support the process of research as it allows access to information from developed countries, which may support technology transfer.

## **4. Routine Repetitive Tasks**

Professional librarians in AC, in spite of their short supply, spend most of their time involved in routine repetitive tasks, under-using their professional skill which the library could better use in conducting studies to improve its services. Apart from being ineffective, this could cause professionals to leave their jobs. With IT facilities, the amount of such routine repetitive work would be reduced. IT should also increase the speed and accuracy of library operations.

## **5. Manpower and Workload**

There is a severe shortage in qualified manpower in AC in general and in the Gulf states in particular. Nevertheless, the traditional systems used require more manpower compared with automated systems, which promise to reduce the manpower and workload. Most of the AC suffer from a shortage of technically-skilled persons in science and technology. The majority of library and information centre staff are paraprofessionals. Tashkandy (1992) found that most of the library professionals in Gulf states universities are expatriate manpower. Al-Ansari (1992), for example, reports that the current supply of library and information workers in Kuwait is deficient in number and necessary skills.

## **6. Library Management**

Automation facilities can provide library management with immediate access to the data and information needed about such items as personnel, budget, and collections. The provision of these tools should increase management efficiency. Various IT facilities have offered libraries more efficient ways. These have proved most useful in such traditional operations as the acquisition of materials, the performance of bookkeeping, preparing catalogues, recording circulation, and updating serials work.

## **7. Create New Services**

Introducing IT to library and information centres would create new services for the librarians and users as well.

These include quick, easy control and checking of library functions, and wide, quick and easy access to information, using such features as FAX, E-mail, CD-ROM, OPAC, Multimedia systems and Telematics systems. New IT services will allow greater access to wide areas of information through external channels and through a large number of databases. Access to information will be along the network path into individual work areas. Information in electronic form is not susceptible to the problems of time and place (Adam, 1995).

With the advent of full text in electronic form, electronic journals and multi-media products, the concept of the electronic library is within sight but it requires an effective IT infrastructure to support it. New technologies are wanted in libraries for many reasons as Baker (1994) reported to improve the quality of the services, to overcome some of library problems and to provide new types of services.

### **3.1.2 Main Automated Institutions in AC**

This section describes briefly the present state of automation in library and information centres in AC.

#### **1. Saudi Arabia**

At the present at least, four of the seven Saudi Arabian academic libraries have been automated in one or a number of their library functions, as have some other special libraries. Recently, almost all university libraries and information centres in Saudi Arabia have installed CD-ROM. King Fahd

University for Petroleum and Minerals (KFUPM) Library is the most developed automated library in Saudi Arabia, and apparently in all the AC. KFUPM Library started automation services in 1979, with online search of international databases. KFUPM Library has installed an integrated automated system of DOBIS/LIBIS, and it completed computerisation of major activities during the 1980s. The online computer catalogue (DOBIS/LIBIS), became fully operational in December 1981. In 1985, the library obtained access to search nine national, King Abdul-Aziz City of Scientific Technology (KACST), bibliographic databases through GULFNET. In 1990, the library installed five CD-ROM stations (Siddiqui, 1992 b).

In addition to the KFUPM Library, the KACST Centre is one of the most automated institutes in the country and in AC as a whole. KACST was established in 1977 and the database retrieval system was installed in 1982. KACST databases are accessed through the GULFNET, the academic research network for Gulf Arab Countries (see section 3.3.6).

However, library automation in Saudi Arabia, as Al Dosary and Ekrish (1991) stated, is still in the early stage. They added that coordination and cooperation, followed by the standardisation of Arabic records, have emerged as the dominant issues of library automation problems in the country.



## 2. Kuwait

Prior to the Iraqi invasion in August 1990, the National Scientific and Technical Information Centre (NSTIC) of the Kuwait Institute for Scientific Research (KISR) was the most automated information centre in Kuwait, and one of the most modern information centres in the AC. It was founded in 1976. Before the Iraqi invasion, the centre had a collection of 55,000 book titles, 1500 periodicals and 300,000 technical reports. The centre provided online search services for 600 databases. It was linked with DIALOG, BRS, SDC, IPADOC, the New York Times Database, and GULFNET, in addition to its own database under IBM STAIRS with an Arabised version. The OPAC system is bilingual, and can handle both Roman and Arabic script. Before Kuwait was invaded, the OPAC had around 400,000 records, most of which were in full-MARC records (Khalid, 1989).

## 3. Egypt

Egypt has the longest history of library education among the AC. Therefore, many librarians who work in AC are Egyptians or have graduated from Egyptian Universities, which offer the widest library education in the area, including Ph. D level. However, this education is mostly based on traditional library subjects and a traditional education system (Al-Hasan, 1992). Some IT facilities such as microfilm, CD-ROM and online are in use in certain Egyptian library and information centres for example, IDSC, RITSEC and ENSTINET (Tedd, 1994).

In Ain Shams University library all dissertations are being reproduced on microfilm, it is also hoped to produce CD-ROM of Arab theses (Tedd, 1994).

One of the biggest projects currently taking place in the country is the rebuilding of the Alexandria Library. This international project, which is predicted for completion in the mid-nineties will provide the new library with modern library automation facilities. The new Bibliotheca Alexandria will be the centre stage for the cultural enrichment and preservation of the heritage of the Mediterranean Region and the Arab world. The main objective of the Bibliotheca Alexandria project is to establish a seat of learning that will enable the new library to resume its past reputation as a centre for scholarship and knowledge (Aman et al. 1990).

#### **4. Jordan**

Younis (1990) investigated the use of computers in 255 libraries in Jordan. The study shows that the use of computers in these libraries is limited. The majority, 235 libraries (92%), do not use computers and in those where computers are used they are still restricted to a few functions in the library. The main obstacles to automation in these libraries are the lack of technical staff and funding difficulties. However, some automated services have been achieved recently, i.e. the introduction of online searching and CD-ROM. This can be found in academic and some special libraries.

## 5. Other ACs

Abdo's study (1986) shows that out of thirteen university libraries in the Gulf, five libraries were not automated, five libraries were either fully or partially automated and three were planning for automation either for a small number of functions or for most functions. CD-ROM usage is developing rapidly in these libraries, for instance in Sultan Qaboos University Library in Oman (Johnston, 1994). Other than these countries noted above, limited automation could be found, to different degrees, in Algeria, Tunisia, Libya and Morocco. No information has been found in the literature regarding the level of automation in the remaining countries: Djibouti, Iraq, Lebanon, Mauritania, Palestine, Qatar, Somalia, Sudan, Syria, United Arab Emirates and Yemen.

In summary, automation is very limited in libraries and information centres in the AC, and still in the early stage, despite the justifications for the need for IT which have been noted above. This has been confirmed by Aman (1994) when he stated that few major libraries have used computer in a productive manner. He also reported that no local libraries are connected electronically, and staff expertise in library automation and information technology is still rare. Nevertheless, a few library and information centres in AC appear to be more advanced than the rest. These are KFUPM library and KACST of Saudi Arabia, and NSTIC of Kuwait (before the invasion).

## **3.2 Arabisation of Library Systems**

Increasingly there is a demand for libraries of non-Roman material to be served by appropriate computer systems, particularly with reference to OPAC. Multi-script capability is seen as essential for international information exchange between libraries and information centers. One language which provides a challenge to the library suppliers is Arabic. Now advances in computer technology and new methods of dealing with Arabic script have provided new possibilities for using these scripts within the online record. This section examines current research in Arabisation of automated library systems including problems of Arabic language handling and limitations of romanisation, practical outcomes, and possibilities for the future.

### **3.2.1 Arabisation**

Arabisation in this context is the development of library systems which fully utilise Arabic script for input and presentation of data and for systems operation and management. Arabisation is well established in computer applications outside libraries so the most basic requirements are in place. As early as 1981 character encoding was in use, Arabic script terminals were available and print and photocomposition could produce copy in mixed script (Moran,1981). Standards for character encoding are being improved and progress is being made towards an Arabisation implementation of MARC.

Although there are a few notable examples, Arabisation of automated library systems is not yet widespread. However, presentation of information in the people's native language should without doubt have a positive effect on speeding up the national development process. It is arguable that the lack of automated library systems in the Arab world can be attributed to the language barrier which limits access to international information systems (Ibrahim, 1988).

### 3.2.2 Romanisation

Because automated library systems have hitherto been dominated by the needs of libraries with holdings mostly in Roman script, those libraries with holdings in Arabic script have solved their bibliographic records problems by Romanisation. In Romanisation, the vernacular script is transliterated into the Roman alphabet whilst attempting to preserve the sound (or an approximation of it) of the original. Romanization is used to represent non-Roman script in MARC avoiding difficulties with the original scripts in languages known by the collective acronym JACKPHY: Japanese, Arabic, Chinese, Korean, Persian (Farsi), Hebrew and Yiddish (Al-Anzi and Collier, 1994).

It has long been recognised that romanisation is an unsatisfactory method of handling bibliographic records, being at best an approximation of an original which is itself open to various interpretations. Spalding (1977) opposed preoccupation with the idea of a universal catalogue by means of romanisation and he proposed vernacular script catalogues. Moran (1981),

stated that it was much more important to introduce the practice of vernacular cataloguing to western librarianship than to achieve automation as quickly as possible. Given that romanisation is found to be unsatisfactory for western libraries it is even more natural that librarians in Arab countries should require their automated library systems to cater fully for the Arabic script.

### **3.2.3 Arabic Language**

Arabic is a language spoken in twenty-one countries, known as the Arab world. It is the fifth official language of the United Nations. Its influence has been spread throughout the whole Islamic world since it is the language of the Holy Quran. Thus, there are many different languages using Arabic characters throughout the world.

Arabic belongs to the Semitic language group. It is cursive and written from right to left. The Arabic alphabet is composed of twenty-eight letters. All the letters are considered to be consonants, though three of them are also used as vowels. However, there are thirteen diacritical marks, called "tashkiil", written above or below the consonants. The shape of each letter can have between two and four forms, depending on its position within the word. These forms are: initial, medial, final, and isolated, see Table 3.1. Letters have curves, dots, and serifs for differentiation purposes and some of the letters merge to produce a single letter. In

Arabic there are many types of script represented by calligraphic styles.

The Arabic language has many characters requiring specific treatment when processed by the computer. Moreover, it presents difficulties for the efficient retrieval of information because it is an agglutinative language, therefore methods used for English texts are not convenient. Agglutinative means that a string of characters without spaces in Arabic can be a word or a multiple of words and the latter characteristic could be a complete sentence. For example:

- a. ( نام : naama), will be translated in English into two words (he slept), and ( نامت : naamat), into (she slept).
- b. ( ويتجدد : Wabitajdiidihi) will be translated in English into four words (and by renewing it).

[Note: In the above transliterations a double vowel in English is used to represent long vowel phonemes in Arabic.]

#### 3.2.4 Character Encoding

Considerable progress has now been made in standards for character encoding. The Arab Organisation for Standardisation and Metrology (ASMO), which belongs to the Arab league, developed the Standard Coding System for the Arabic Language ASMO 449 (7 bit). ASMO 449 is based on the 7-bit coding table in ISO 646, adopted for the specific requirement of Arabisation. It contains 128 characters, inclusive of

controls, graphic symbols and alphanumerics with their coded representation (Casey,1983). The ISO 9036 International Standard for encoding Arabic characters derives from the Arab standard ASMO 449.

When the Research Library Information Network (RLIN) was developing the capability for bibliographic information in Arabic scripts it found ISO not precise enough in all areas for the presentation of bibliographic information and lacking in bibliographic requirements. Thus the Research Library Group (RLG) made minor modifications to the ISO standard for internal use (Eilts,1989).

Furthermore, when the Kananzawa Institute of Technology (KIT), in Japan, developed a prototype system for computerised catalogue records of Arabic materials, it used a 16-bit character encoding scheme rather than the traditional 8-bit encoding scheme, finding it more convenient for Arabic characters (Sakai, et al.,1986). The 16-bit scheme provides a large capacity for the possible number of distinct characters or symbols (as many as 65,536) offering great flexibility when handling various character sets. The 8-bit scheme can accommodate only up to 256 different characters.

Although modifications have been made to the ASMO standard coding system by RLIN and KIT, the proposed standards are not accepted by all Arab countries and there is still a lack of uniformity (King and Morfeq,1990).



### 3.2.5 Language Processing

Perhaps the most interesting and challenging field for the development of Arabic library systems relates to natural language processing and information retrieval. This is of course particularly important for the development of OPAC's. Work in this field appears to be relatively recent. In 1988 Ibrahim (1988) described and discussed an experimental document retrieval system for Arabic texts, using linguistic methods of analysis. King and Morfeq (1990) designed a text database management system called "Bayan". Bayan's data model is based on an object-oriented approach. The representation of the different forms of "tashkiil" was given high priority. Further work will concentrate on development of a morphological analyser and search engine.

It is interesting that although computational linguists have carried out substantial amounts of research in lexical analysis in European languages, Arabic has received little attention. This gap is now being addressed. For example, Feddag and Foxley (1993) have described a lexical analyser for Arabic. The application of lexical analysis to Arabic OPAC's merits research because Arabic morphology is fundamentally different from that of the European languages. For instance the English verb "teach" forms its agent as "teacher" and both words will be readily retrieved in a stem search. But the Arabic verb "'allama" (teach) forms its agent as "mu'allim" (teacher) and clearly both words would not be retrieved in an English style stem search. The Arabic words however conform to a well

recognised paradigm and would be retrieved by lexical analysis. Neural network technology may well be of relevance here. This issue is important for the development of OPAC's and information retrieval in Arabic but whether it will be taken up by vendors is an open question.

### **3.2.6 Arabisation of Library Systems**

Perhaps the best known and documented Arabisation programme is at the King Fahd University of Petroleum and Minerals (KFUPM) Library, at Dhahran in Saudi Arabia. The KFUPM Library installed a DOBIS/LIBIS system in 1981 and as its collection is mainly English the priority in automation was given to the implementation of the English version of DOBIS/LIBIS, which was completed in 1986. However, a year later, in 1987, the Library started on the preparation of the Arabised version of DOBIS, initially by adopting ASMO 449. Programmes in PL/1 and Assembly Languages have been modified; maps and code tables have been translated into Arabic; Arabic bibliographic information files have been prepared. An IBM 3192 terminal has been chosen which allows a number of special functions such as the ability to switch between Arabic and Roman script. By 1989 the programme was substantially finished and IBM was making the system available to other libraries (Khurshid,1992). See Figure 3.2.

MINISIS is a general purpose information management programme being used by many libraries for major library functions. In 1990 there were 18 libraries in the Arab world using MINISIS including the Arab Language Documentation Centre (ALDOC) at Tunis and King Faisal Centre for Islamic Studies and Research

Saudi in Arabia. ALDOC has undertaken responsibility for development and support of Arabic language tools. It has also developed an Arabic version of Micro CDS/ISIS along with an Arabic manual. Chaudhry and Ashoor (1990) developed a methodology for comparing the ability of the two systems (DOBIS and MINISIS) in Arabic language processing. A 1-4 ranking scale was used; 1 being unsatisfactory and 4 excellent. Neither of the systems was awarded 1 for any aspect. This study has now been developed further by Chaudhry and Ashoor (1994), the authors concluding that both the systems have great potential for bi-lingual bibliographic applications.

As noted above, Sakai, Terashita and Takemoto (1986) explained in detail their work to develop an experimental system for Arabic bibliographic information processing resulting in an Arabic input/editing system for an IBM PC-5550 equipped with 16-bit Kanji options. With minor modifications, it can be transferred to other machines with similar configurations. The editor can accommodate both Arabic and non-Arabic texts. This system is therefore a contribution to Arabisation bibliographic database design and not a library system in itself.

The Research Libraries Information Network (1991) developed an Arabic script cataloguing system. With this new capability, RLIN, became the first on-line bibliographic network in the world to support the Arabic script. This catalogue eliminates the problems of transliteration and fosters the sharing of Arabic language bibliographic data world-wide. The Library of Congress (LC) was the first institution to use the new RLIN Arabic script cataloguing system. With an IBM PC/AT or compatible computer and RLIN terminal emulation software, RLIN

users can now enter, search, display and retrieve records written in Arabic script.

The system supports a Pan Arabic character set, including characters necessary for Arabic and other Arabic script languages such as Farsi, Urdu, and Ottoman Turkish. The system addresses to some extent the problem of retrieving keywords in agglutinated strings. This facility represents a major development in the bibliographic control of Arabic records. It is an extension to the utilities available to libraries and not a library system in itself. Vendors of library systems will be encouraged to produce Arabised versions of their systems which can plug into the facility.

Before the invasion of August 1990, the Kuwait Foundation for Advancement of Sciences (1990) had a plan for an on-line database for Arabic materials called ARAB WORLD ON-LINE. The project proposal suggested a bibliographic database of about 100,000 references including abstracts of various publications and full text of about 20,000 such publications, available on-line and accessible internationally. The other 80,000 publications would be available off-line, deliverable by fax or mail on request or from the delivery source identified in the database through an order processing facility, see Figure 3.3. Information was to be held in text or image form. It was intended that for all references available in the Arab World Online there should be another set of original full MARC records available in a central cataloguing utility. This was

to facilitate sharing of catalogues by various Arab libraries in the Arab world. With this intent KFAS supported the Arabisation of the RLIN cataloguing utility of the Research Library Group. The suggested name for the format was ARABMARC. All the libraries would use this facility to create original MARC records in Arabic script, which could subsequently be converted by any library to form their local on-line catalogue. See Figure 3.4.

The scheme was severely affected by the Iraqi invasion of Kuwait and the Gulf war. This scheme has now been abandoned which is unfortunate as it would have represented a great leap forward in Arabic library system development and in its use of document image processing had some conceptual similarities with advanced electronic library concepts such as ELINOR at De Montfort University (Arnold, et al., 1993).

The term ARABMARC has however achieved some currency and there is evidence of more concerted effort towards achieving the goal of international standardisation (Al-Muhtaseb, Ashoor and Khurshid, 1994).

### **3.2.7 Current Position**

Arabisation of automated library systems in the Middle East has gained a foothold mainly through local initiative in converting the two western products, DOBIS/LIBIS and MINISIS. The Arab market is however receiving considerable attention from other commercial suppliers who claim that their products are readily

convertible into Arabic. Within the last year there have been significant steps towards broadening competition in the market. There is the availability of a bibliographic utility in the form of RLIN to support local library systems, but it would be preferable if indigenous bibliographic utilities would also be developed. The few implementations of vernacular script again have been through local initiative. Although many modern library systems vendors claim multi-lingual and multi-script capability it is not clear that there is an understanding of the problems of information retrieval in Arabic (Al-Anzi and Collier, 1994).

### **3.3 Cooperation and Telematics among Libraries and Information Centres in AC**

This section presents definition, importance, values and current status of cooperation and telematics in AC. The section also presents some example of telematics attempts in AC.

#### **3.3.1 Definitions**

Cooperation and networking are two terms both used to refer to two or more libraries involved in working together for some common benefits or purposes.

#### **Cooperation:**

Cooperation, usually refers to human behaviour or management decisions, and indicates that there is agreement between two or a group of library or information centres to conduct some kind

of work together to accomplish specified goals. The ALA Glossary of library and information science definition for the "cooperating library" is:

A library that joins with another library or group of libraries in some common plan, such as coordinated development of collections and services or coordination of entries to a union catalogue (P 59).

**Network:**

On other hand, the term "network" in the past was used to refer to a human network not necessarily using IT. Later on, it was used to indicate that organisations were interconnected in computer and communication systems. Clearly, networking can only be possible through cooperation.

The ALA Glossary of library and information science definition for the "library network" is:

A specialised type of library cooperation for centralised development of cooperative programmes and services, including use of computers and telecommunications, and requiring the establishment of a central office and a staff to accomplish network programmes rather than merely to coordinate them (P 131).

**Telematics:**

The new term "telematics" means the use of IT with telecommunications for the development of user services.

Telematics as Watters (1992) explains is:

The International Telegraph and Telephone Consultative Committee term referring to user-oriented information services, including teletex, videotex, and facsimile (P224).

### **3.3.2 Telematics and Cooperation**

Recent technology developments, especially in computing and telecommunications, and their potential application in library and information centres, have improved the concept of automated networking. Stimulus provided by automation encourages information centres to move forward to networking. Modern IT facilities make networks among libraries more effective and easy to use, and of great benefit.

However, the existence of IT alone cannot achieve cooperation. There must also be a willingness among the librarians and information workers to cooperate. This human factor is an essential and a critical one. All barriers to cooperation must be identified in order to establish successful library cooperation in a country. Therefore, this topic will be discussed in more detail in the further work of this study.

### **3.3.3 The Value of Cooperation and Telematics in AC**

Many recent studies explore the need for and value of automated cooperative networking in AC library and information centres. However, this is a long way from being achieved among these libraries inspite of this need and this value. Alghamidi (1988) stated the need of today's libraries for effective network cooperation:



The advancements in technologies and communication systems, the increasing rate of information production and published materials, and greater sophistication in users' needs and demands, and increasing costs of library operations and services have created a necessity for many libraries to join together in a cooperative mode. as a result, a well-organised system is needed to support and facilitate cooperation and coordinating (P.200-201).

Among other benefits, Hafez (1989) stated that establishing a cooperative system would help Saudi University libraries to coordinate their efforts, eliminate duplication, share technical expertise, solve common problems, and upgrade library services.

The absence of such cooperation in Arabisation among AC has resulted not only in wastage of human and technical expertise but also in the lack of compatibility and standardisation needed for future resource sharing and networking (Ashoor,1989).

Wesley (1990 a) said that the most positive aspect of networking systems is that they build up national capacity for information provision and utilisation in place of the isolated, even competing and duplicated, stores of documents.

Library cooperation helps to overcome the inadequacies of collections and services and to bridge the information gap among the libraries involved. A network system should provide wide, quick and easy access to information, self-sufficiency, and minimisation of duplication of efforts. Thus, a network providing an effective service and the efficient use of an

automated system would allow the library to reduce its costs.

Schumann (1987) stated :

By joining together, by using networks . . we can insure that libraries have enough resources to share, and that they are effectively delivered to our users. . By working together we can become not only merely efficient and competent, but technologically and philosophically fluent, and powerful enough to transform our libraries (P.37).

### **3.3.4 Current Status of Library Cooperation and Telematics**

Many studies relevant to this topic have been made for the developing countries, of which AC are a part. In the last decade a number of studies have been conducted in relation to library cooperation in AC, some general, some regional, for example, in GCC, and some for individual AC. However, the following current literature review confirms that cooperation and telematics in the real sense of the term are lacking in AC, at regional or even the national level.

Bouazza (1986) emphasised that Library cooperation in the bulk of developing countries is non-existent. When established, it also often lacks planning, efficiency and organisation.

Apart from GULFNET (see section 2.3.4), Aman (1989) stated that no formal agreement has been approved on a region-wide basis, and that cooperative agreements, even when they exist, are often limited in value by serious gaps in library holdings. "The process of document delivery as commonly used in the

parlance of today's librarianship is relatively new to the Arab world".

Indeed, Tashkandy (1992) concluded that the current cooperative activities among the GCC university libraries are negligible and unsuccessful, and that library cooperation in the real sense of the term does not exist among university libraries in any Arab countries. Rehman (1991) reported that none of the ACs has established a cooperative consortium at the national level to pool its resources for lending, shared cataloguing, or cooperative acquisition purposes. Ashoor (1989) pointed out that a major feature of Arabisation projects in the Arab World is the lack of cooperation among the institutions involved, which work independently and without any cooperative plans in the development and implementation of their Arabisation programmes. Alghamidi (1988) found that the level of existing cooperation and coordination among university libraries in Saudi Arabia was unsatisfactory. In another study on the same topic, Hafez (1989) concluded that Saudi University libraries operated with several shortcomings including a lack of cooperation, a lack of sufficient numbers of professionals, and a shrinkage of library budgets in recent years. Also for the same country, which is seen now as the leading one in AC in library and information centre development, Al-Dosary and Ekrish (1991) stated that cooperation and coordination, followed by the standardisation of Arabic records, have appeared as dominant issues among the problems of library automation in Saudi Arabia.

There is no written code for cooperation and coordination among academic libraries in Bahrain according to Majid (1990). Among libraries in the rest of the Gulf states the situation is the same. Wesley (1990 b) stated that a network has not yet been developed in the Sudan and no institution is officially taking responsibility for any sector. In Algeria, there is no professional organisation that can coordinate the various activities of the information bodies (Takfi,1990).

### 3.3.5 Access to International Online Databases

Since the mid-1970s many AC library and information centres, in Saudi Arabia, Kuwait, Morocco, Jordan, Iraq, Qatar, etc., have been gradually connected to commercial international databases. A large amount of online searching activity of international databases is carried out in many academic and research libraries and information centres, such as KFUPM Library, KACST, NSTIC. The most used of these databases are, DIALOG, ORBIT (SDC), BRS, INFOLINE, ESA (Siddiqui,1992 a).

MEDLARS, also, can be found in the Arab Medical Documentation Centre in Kuwait. The Ministry of Finance and Economic Affairs Information Centre in Riyadh, Saudi Arabia, subscribes to OCLC, and KFAS Library, in Kuwait, subscribes to RLIN. It appears that these are the only two institutions in AC which have subscriptions with OCLC and RLIN.

### 3.3.6 Examples of Telematics Attempts

Some organisations have made attempts to rectify the above situation. However, a limited success has been achieved so far. The following projects are the most well known :

#### 1. GulfNet

Gulf Network (GULFNET) is a computer network launched in 1985 with the assistance of IBM. This system is intended for universities and research institutions throughout Gulf countries. Currently, these are twelve nodes in three countries namely, Saudi Arabia, Kuwait and Bahrain.

Although Saudi University Libraries are the majority of the GULFNET system members, Alghamidi (1988) found that the librarians had no awareness of the real value of the GULFNET, or its clear contributions to libraries. He comments:

This passive attitude, which results in Gulfnet's not being used fully and effectively, may derive from a lack of publicity about the network's services and programmes, or perhaps it does not have sufficient information and data to share (P.214).

Moreover, Rehman (1991) criticises this networking system when he comments :

In its present form this agreement does not present much prospect of founding a formal and legal structure for interlibrary lending. It can thus be concluded that the interlending code has thus far not facilitated interlibrary cooperation (P.23).

## 2. Aris-Net

Arab Information System-Network (ARIS-NET) was proposed in the 1987 Conference of the Arab League Documentation Centre (ALDOC) held in Tunisia. ALDOC, in collaboration with organisations such as UNESCO and UNDP, was to spearhead the project of establishing ARIS-NET. After the establishing of network systems at the national, semi regional and regional levels, the plans of this project include connecting these systems in a cooperative system, but not a fully centralised one (Itayem, 1988). The main aim of this proposed system is to improve the pooling of information and its exchange among the users and institutions in AC, to support the development programmes in these countries. However, nothing can be seen, so far, regarding this project.

More recently, ALDOC has a project, which is to run from January 1993 to December 1997, called The Arab Regional Information System Network (also ARIS-NET). This project is financially supported by the Egyptian government, UNESCO and ALDOC. The aims of this project are to develop a network of information sources, information, and data support for problem solving, planning, decision making and research in priority areas of development.

## 3. Alexandria library project

This international project has been moving forward since 1985, to revive the ancient library of Alexandria in Egypt, with modern tools, facilities and services.

The design of the information network for this project will be at three levels, national, regional and international (Salem, 1991).

#### 4. Arab World Online

Before the invasion, August 1990, the Kuwait Foundation for Advancement of Sciences (KFAS) had a plan for an online database for Arabic materials called ARAB WORLD ONLINE. However, this project has now been abandoned (see section 3.2.6).

### 3.4 Summary

It can be seen that most of AC libraries are running by traditional library systems, which are very limited in IT, Arabisation, cooperation and telematics. Therefore, there may be a gap between the user needs and library services among these libraries.

Library and information centres in AC have considerable resources of information but these are difficult to access under the traditional systems. At present, for instance, it is difficult for librarians in those libraries to know the location of particular materials. It would be very valuable for these libraries to share their resources. Direct access to information databases can keep researchers and academic users up to date in their fields and have a positive effect on national planning.

The above literature review reveals the following issues or questions :

1. The literature review shows that, Library and information centres in AC have considerable resources of information and most of them are oil rich countries. Why are most of them not using OPAC, online database, CD-ROM?
2. Most of the AC Higher Education institutes teach and research in Arabic language. Why are they not yet using Arabised library system, despite the progress in developing these systems, as revealed in this literature review?
3. It is clear that the rapid technical progress in developing library hardware and software in the developed countries is not reflected in AC. Why are the AC libraries still using card catalogues? Is it a technical, political, financial or other sort of problem?
4. Although all AC's are members of the Arab League and there is a special committee in the League concerned with libraries why is there an absence of official cooperation among them?
5. There are some Arabic countries which are poor economically. Is finance an obstacle for introducing IT in these countries?



There is a lack in of information on the current literature about the state of the art of IT, Arabisation cooperation and telematics in AC academic libraries in general, even in recent publications, such as "Information and Libraries in the Arab World" (1994).

The literature available for AC libraries in this rapidly changing area is dated. Therefore, it was decided to design a survey questionnaire to discover the current situation in the AC Higher Education libraries and their plans for IT, Arabisation, cooperation and telematics. This would give preparatory and background information prior to carrying out a full survey in Higher Education libraries Kuwait.

It appears that there are no currently published user studies for the AC in this area and the need for such a study to Kuwait libraries is supported by the recent research of Al-Hasan (1992), which shows that library services promotion and feedback from users is lacking in Kuwait libraries, and that emphasis should be placed on users' needs and users' satisfaction with the library services.

Since the Higher Education libraries infrastructure in Kuwait is in the process of reconstruction following the Gulf war it was particularly relevant to focus on user needs relating to telematics. It was expected that the user study would reveal important information relating to user experience and

expectations of telematics in libraries which could be fed into the national library planning process.

Letter name	Initial form	Medial form	Final form	Isolated form
alif	ا	ا	ا	ا
ba'	ب	ب	ب	ب
ta'	ت	ت	ت	ت
tha'	ث	ث	ث	ث
jim	ج	ج	ج	ج
ha'	ح	ح	ح	ح
kha'	خ	خ	خ	خ
dal	د	د	د	د
dhal	ذ	ذ	ذ	ذ
ra'	ر	ر	ر	ر
zay	ز	ز	ز	ز
sin	س	س	س	س
shin	ش	ش	ش	ش
sad	ص	ص	ص	ص
dhad	ض	ض	ض	ض
ta'	ط	ط	ط	ط
za'	ظ	ظ	ظ	ظ
'ain	ع	ع	ع	ع
ghain	غ	غ	غ	غ
fa'	ف	ف	ف	ف
qaf	ق	ق	ق	ق
kaf	ك	ك	ك	ك
lam	ل	ل	ل	ل
mim	م	م	م	م
nun	ن	ن	ن	ن
ha'	ه	ه	ه	ه
waw	و	و	و	و
ya'	ي	ي	ي	ي

Table 3.1 : Arabic language alphabet

بحث اللغوي  
 مؤلف : منور . الخ .  
 معلومات كاملة مستند ١٠٥٠٨٦٧  
 لسماء : صديقي، عبد القويم / آدم، أحمد البدوي (مؤلف م)  
 مؤرشفين : دراسة بيئة المنتج المائي و قناة الصرف الرئيسية بالهول  
 لغوية امكانية استخدام الماء في زراعة الاسماك  
 ناشرين : الرياض : مدينة الملك عبد العزيز للعلوم و التقنية . ١٩٩٠  
 مواضيع : الزراعة / الاسماك  
 ارقام تصنيف : SH117.S3 S5 1990  
 يحتوي : ١٠ ، ١٠٨ ص : ١٤٥ .

نسخ : SH117.S3 S5 1990  
 امثل ن (العرض النسخ) او رمز اخر  
 د مفضل جديد  
 ف ملك جديد  
 ظ اظهر الملف

ن نسخ م موجز  
 ع معلومات الامارة  
 ح احفظ

Figure 3.1 : Arabic OPAC screen in DOBIS/LIBIS

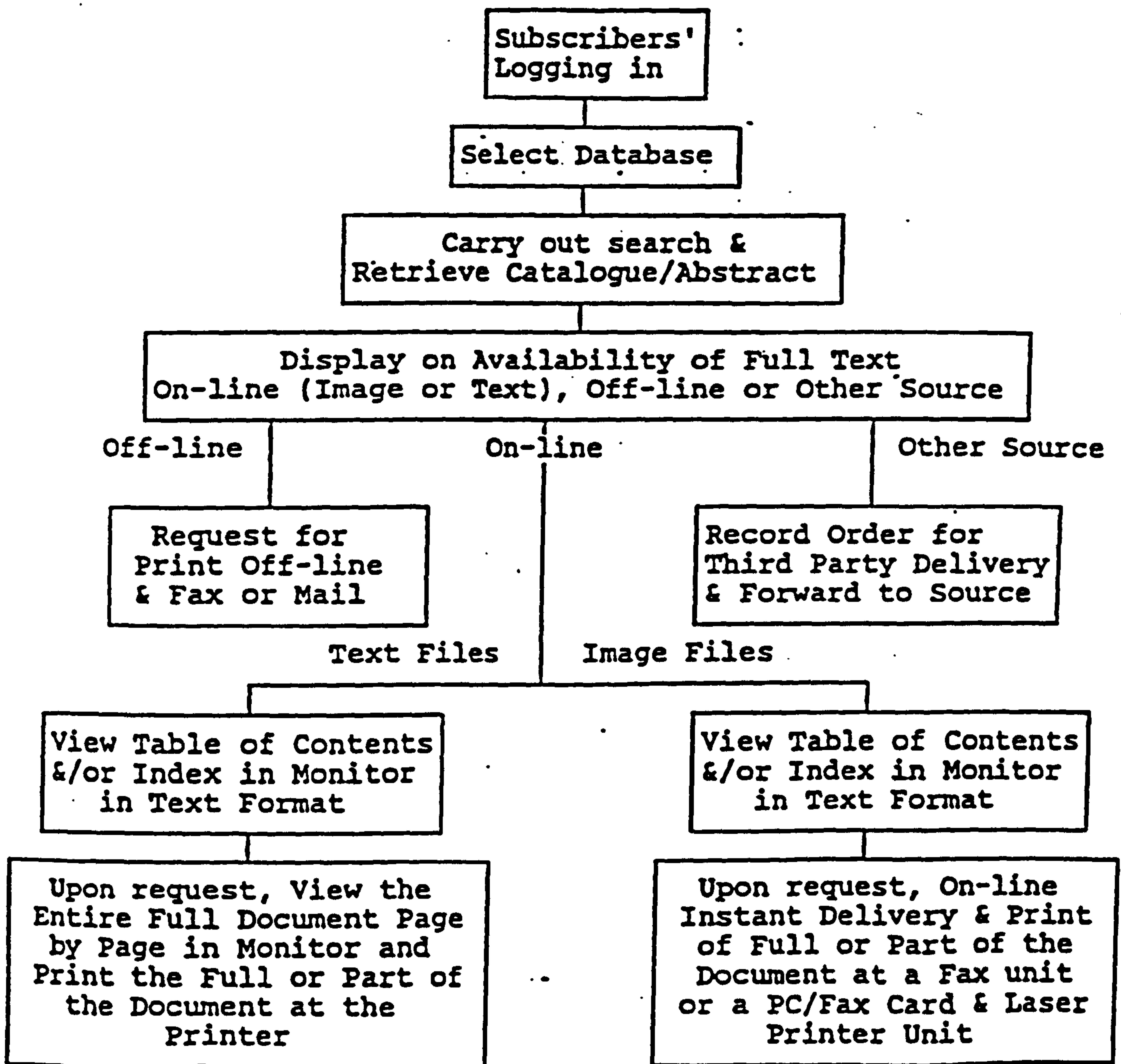


Figure 3.2 : Flow diagram for the database operation for Arab World Online

# Arab World On-Line System Configuration.

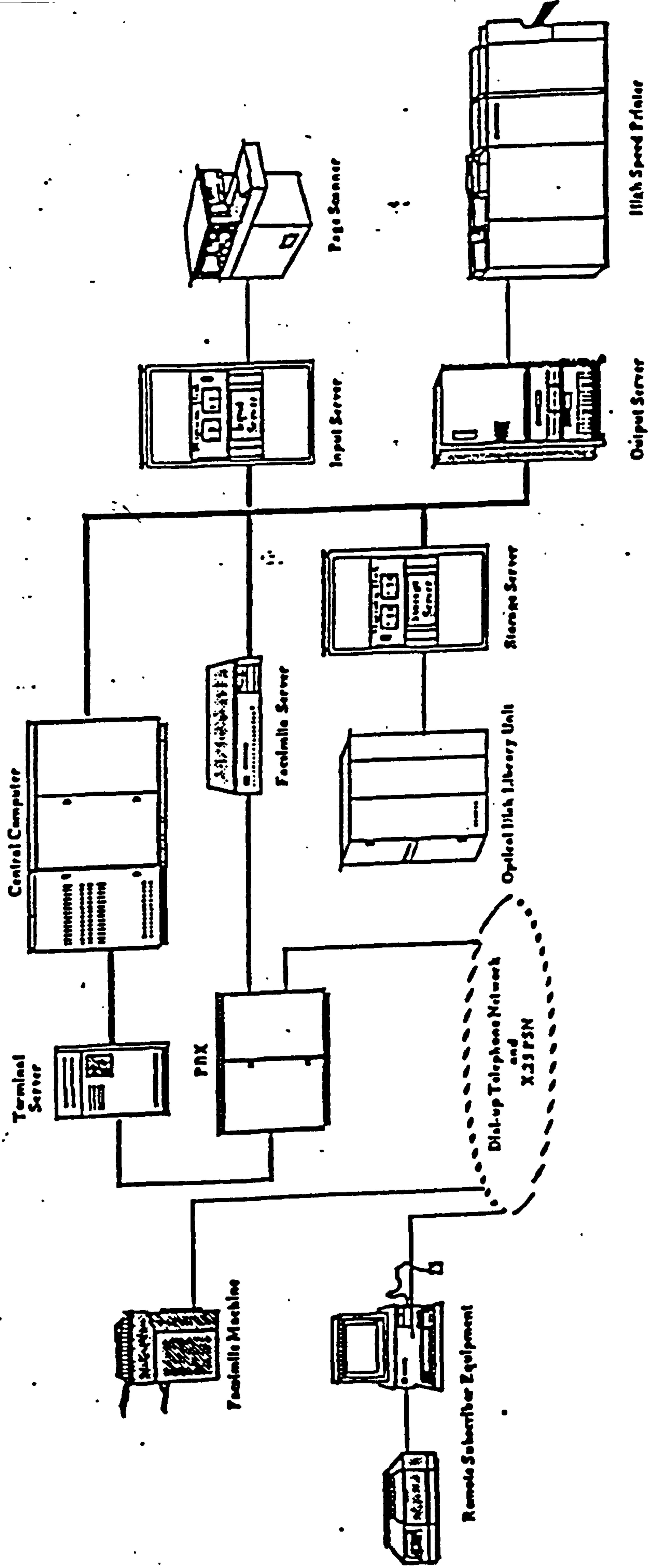


Figure 3.3 : Arab World Online system configuration

## CHAPTER FOUR

### SURVEY OF UNIVERSITY LIBRARIES IN THE ARAB COUNTRIES

#### 4.1 Introduction

A questionnaire survey was conducted in selected university libraries in the AC to obtain current information regarding the uptake of IT and Arabised library systems, the status of library, librarians and users, and to obtain general information to create a library profile of the university libraries in AC. This chapter explains the aims of the survey, its scope and limitations, survey methodology used and the survey targets. A library profile including, library management, cataloguing and classification schemes, library collections, constituent libraries and library budget is also presented. In addition the status of both library staff and users is discussed.

##### 4.1.1 Aims of the Survey

The main aims of the survey were:

1. To determine the state of the art in IT in a sample of university libraries in AC.
2. To assess the main factors hindering the implementation of IT in these libraries.
3. To determine the state of the art in Arabised library systems in these libraries.

4. To assess the main problems in adopting and using an Arabised library system.
5. To discover future library policies towards IT and Arabised systems.
6. To identify the main reasons cause dissatisfaction among library users
7. To provide a current library profile for these libraries.
8. To learn lessons for the more detailed survey about Higher Education libraries in Kuwait, which will be presented later.

#### **4.1.2 Scope and Limitations**

The scope of this survey was limited to selected university libraries in the Arab Countries (AC). Since this survey covers a wide geographical area, 21 countries, which contains a large number of university libraries, time limitations were a concern. Indeed, some of these countries, in addition to the Palestine issue, are undergoing periods of political violence, and have economic sanction problems. Such countries include Iraq, Libya, Somalia, Lebanon and Algeria. Therefore, these countries were excluded from the survey. Also, Djibouti and Mauritania were excluded since they were not mentioned in the international reference book "The World of Learning" (1993) from which information on target libraries was obtained. Kuwait was, also, not included in this survey since a comprehensive survey was conducted into its Higher Education libraries separately, see Chapter Seven.



Thus, the survey scope was limited to the remaining twelve Arab countries. However, two of them did not reply, namely Morocco and Syria. All university libraries in the GCC countries were surveyed (three libraries did not reply), while only the main university libraries were selected in other countries. Thus, the scope of this study is limited to twenty university libraries in ten Arab countries: Saudi Arabia, Bahrain, Qatar, Oman, United Arab Emirates, Egypt, Jordan, Tunisia, Yemen and Sudan. In this study, alphabetical codes from A to T have been used to refer to these twenty university libraries, due to the confidentiality promised by the author to the heads of these libraries. Libraries A to I inclusive are in the GCC and K to T are in other Arab countries.

The British Council and some individuals who had experience in the AC libraries, were contacted to help in identifying the most automated libraries in the chosen countries, see Appendix 1. However, the ten countries in the survey provide a representative picture of AC for the following reasons:

1. Together these countries represents a large portion of the Arab countries.
2. Geography and culture have been considered, with Egypt, Tunisia and Sudan from the African side and the GCC countries, Jordan and Yemen from the Asian side of the AC.
3. These countries reflect the three economic levels into which ACs could be categorised. These categories are:

- Oil-rich countries. i. e. the GCC countries
  - Middle group i. e. Egypt, Jordan and Tunisia
  - Less favoured countries i. e. Sudan and Yemen.
4. Three of these countries have the largest number of Higher Education libraries, librarians and library users in the AC, namely Egypt, Jordan and Saudi Arabia.
  5. Most of these universities offer library education.
  6. It is expected, from the previous literature review, that the university libraries in these countries represent the level of IT in AC.

#### **4.1.3 Survey Methodology**

With respect to the nature of the study as well as its objectives, the questionnaire survey method was chosen to collect current and factual data and information needed about those university libraries involved in AC. The questionnaires contain 30 questions, organised and grouped under the following five categories (See Appendix 2):

1. Library profile
2. Technical services
3. Current use of IT
4. Arabised library systems
5. Future library policy towards IT, Arabised systems and cooperation and telematics

#### **4.1.4 Survey Targets**

Library heads in all university libraries involved in these countries were the survey targets. Thus, a total of 32 questionnaires were sent directly to those people. Each single questionnaire was accompanied by the following:

1. A covering letter explaining the survey's aims and the purpose of the study. In this letter, the author also assured the respondents of the confidentiality of their responses.
2. A self-addressed envelope for mailing back the completed questionnaire.

These questionnaires were sent out on 26th of October 1993. A month later, on 26th of November, another copy of the questionnaire was sent to those libraries which did not respond. This copy was also accompanied with a self-addressed envelope and a reminder letter, which again assured the confidentiality of their responses. In addition personal contacts by telephone calls, Fax, E-mail and letters were used for quick response. Twenty university libraries from the total of thirty two responded to the questionnaires, i.e. 62%.

#### **4.2 Library Profile for University Libraries in AC**

This section presents the current information and data as a library profile for university libraries in AC. This information and data were collected from the respondent libraries. They reflect a broad range of institutions and

provide a satisfactory geographical spread. This includes library management, cataloguing and classification schemes used, library collections, books and periodicals, constituent libraries, library budget, library staff, and library users.

#### **4.2.1 Library Management**

The responsibility for library affairs varies in AC university libraries, even sometimes for those libraries in the same country. Some library heads report directly to the university president. However, others report to a less prestigious authority.

Table 4.1 shows that the heads of most university libraries in AC report to the vice-president or the vice-rector/vice-chancellor. Only four libraries report directly to the university president or the rector/chancellor. This means that these libraries are in a privileged position in the university management structure as a whole. Here the library head has direct access to the top authority.

It is noticeable that the libraries surveyed, as part of the public sector, have also suffered from problems of management bureaucracy as mentioned previously in the literature. Decisions on purchasing for example, take a very long time to be approved because of the many hands through which they have to pass. The designations of library heads in the AC university libraries are various; in twelve cases they are known as Directors, in six cases Deans (mainly for Saudi libraries), and a further two have the title Chief Librarian.

See Table 4.2 and Figure 4-1. Moreover, most of these libraries have a library committee (13 out of 20). The committee has representatives from academic staff, and the library head is usually the chairman of the committee.

Only eight management structures were received from the respondent university libraries. These structures were translated into English and redrawn to achieve greater clarity, see Figures 4.2 - 4.9. Library management structures in these libraries are varied, and it should be noted that automation is a factor in most of these library structures (six out of eight). It is questionable whether there is a serious commitment or not to automation.

#### **4.2.2 Cataloguing and Classification**

Almost all the university libraries in AC use the Anglo-American Cataloguing Rules II (AACR2) scheme, see table 4.3. The Dewey Decimal Classification (DDC) scheme is used in most of these libraries. However, the Library of Congress (LC) scheme is used most commonly in the GCC university libraries, see Tables 4.4. Thus university libraries in AC are using the most common cataloguing and classification schemes in the world and therefore there would be no problem from that point view in adopting computerised library systems, especially for the non-Arabic collections which mostly are in English.

### 4.2.3 Library Collections

Table 4.5 shows the collection size of books and periodicals in each university library in the AC. The biggest collection of books can be seen mostly in Saudi libraries e.g., Library D, 1,072,900; Library A has 513,000; Library O has 500,000; and Library E has 399,053 volumes. The majority of these books are written in non-Arabic languages, mainly English, and this reflect the importance of English materials in these libraries, see Figure 4.10. The biggest collection of periodicals can be seen in Library A with 2,538 titles. Library C has 2,338 and Library F has 2,200 periodical titles. Most of them are non-Arabic, again mainly English.

Table 4.6 shows the planned percentage growth of library collections of books and periodicals for the years 1994,95 and 96. For book collections, it was found that the lowest growth for Arabic books was 4%, while the highest was 13.5%, i.e. in Library H. For non-Arabic books it was found that the lowest growth was 3%, while the highest was 25%, i.e. in Library N. For periodical collections, it was found that the lowest growth for Arabic periodicals was 2%, while the highest was 30%, i.e. in Library I. For non-Arabic periodicals it was found that the lowest growth was 2%, while the highest was 10%, in both E and R libraries. It is quite clear that university libraries in AC in general have steadily growing collections. For example, five of them have an average of more than 10% growth for their collections, books and periodicals in Arabic and in non-Arabic.

The literature review showed that there is a lack of standards for AC libraries in general. Isa (1982) proposed standards for the university libraries in Saudi Arabia. When Al-Otaibi (1993) applied this standard formula to the collections of three Saudi universities namely KAU, KFUPM and KSU, he found all these libraries had fallen short of the proposed standard, although these libraries, as mentioned above, have the biggest collections in both books and periodicals among the university libraries in AC.

Six out of the 20 university libraries in AC have no formal selection policy for their collections. Both library and academic staff are involved in the selection procedures in all libraries surveyed. However, only six libraries indicated that postgraduate students are also involved in these procedures, while the involvement of undergraduates is demonstrated in just two libraries, see Table 4.7.

#### **4.2.4 Constituent Libraries**

Table 4.8 shows that most university libraries in AC consist of one central and many constituent libraries in the different colleges. The largest number of branch libraries can be seen in the Egyptian university libraries. Library K, for example, has 21 branch libraries. However, Library H has no branches and Library C has two central libraries.

#### **4.2.5 Library Budget**

Library heads in AC were asked to indicate the percentage of their library budget from the total university budget. 11

libraries did not answer that question. Six libraries out of nine, indicated that their library budget equalled less than 6% of the total university budget, see Table 4.9.

University libraries in the GCC countries, in general, have the largest budget among other Arab countries. Libraries H and I have the largest budgets of all. However, University Library S explained that the annual allocation for acquisition until 1990 was £200,000, financed by Kuwait funding. This funding has been stopped since the Iraqi invasion of Kuwait in that year.

Library heads were also asked to state their library budget for four years from 1991 to 1994. This includes annual allocations for library activities, such as acquisition, automation, online search and interlibrary loans. Seven libraries did not answer that question at all and some other answers were not complete. However, the answers shows that most of the library budget in many AC university libraries is spent on acquisition activities and only a small amount is allocated towards library automation. A few libraries (only five) stated their annual allocations for automation. The majority of libraries (15 out of 20) did not answer this question. Again, a few libraries, only four, stated their annual allocation amount for online search.

#### **4.2.6 Library Staff**

The number of library employees differs from one university library to another in AC. There are, for example, only eight employees in one of the Jordanian universities, while it



reaches 262 in one of the Egyptian universities. The number of qualified librarians in these libraries is usually less than other employees. The largest number of qualified staff reaches 38, while the smallest number is only six librarians. Both these numbers are in two of the GCC countries.

Table 4.2 shows that only eight out of the 20 library heads have a Ph.D degree, mainly in Saudi Arabia. Moreover, only four of them have degrees in the library science field. Only 6 out of the 20 university library heads have an M.A/M.Sc, four of them in library science majors. Six library heads have a B.A., four of them in library science majors. It can be seen also that two university library directors have only first degrees, B.A., in other majors.

It can be seen from Table 4.10 that university libraries in AC could be divided into two groups. The first group is those libraries in the GCC countries. Libraries in this group are suffering from shortage of national qualified librarians. This can be seen clearly, for example, in one of the university library, where there are only four nationals out of 30 qualified librarians. Therefore, the majority of qualified librarians who are working in most of these libraries, six out of nine, are foreigners. Only in university libraries A and E is the situation different, with more nationals than non-nationals as librarians. In the University Library F they are equal, 3 to 3.

This means that most university libraries in the GCC countries depend on non-national librarians who they employ on contract. This dependence on imported professionals leads to instability because of the contract system, and because only a limited number of foreign librarians may be allowed to work in certain countries.

The second group is those libraries other than in the GCC. The situation is totally different among this group. Libraries in this group generally have no foreign librarians working for them. Minor exceptions are one foreign national in Q, and two in university library S.

Once again when Al-Otaibi (1993) applied librarians standards proposed by Isa, mentioned earlier, to those three Saudi libraries, KAU, KFUPM and KSU, he found that no library meets the standard. This is despite the fact that the number of qualified librarians in Saudi University libraries in general is more than in other AC university libraries, as this survey shows. Therefore, it can be said that almost all AC university libraries are staffed below this standard required in respect of qualified librarians.

#### **4.2.7 Library Users**

Table 4.11 shows the total numbers of potential users in each university library in AC. This includes university students, both undergraduate and postgraduate, academic staff, and other users such as other members of the university community and external users. A large number of potential users can be seen,

of course, in all three Egyptian university libraries. The total number in university J Library, for example, is 54,003. Following that in other countries, university A Library and D in Saudi Arabia and University O Library in Jordan, see Figure 4.11

The biggest number of potential library users of students (undergraduate and postgraduate) can be seen in all the three Egyptian university libraries. These are, university J with 49,300 students, K and L. Following that, are two Saudi university libraries namely, university D and university A. Then, comes the university O in Jordan with 20,000 students, see Table 4.11.

Most AC universities offer postgraduate programmes at different levels, such as Higher Diploma, Master and Ph.D. The biggest number of postgraduate students can be found, again in the three Egyptian universities. These are, university J with 15,800 postgraduate students, university K, and university L. Following that is the university of R in Tunisia, and then come three of the Saudi universities namely, D, E and A with 1,000 postgraduate students, see Table 4-11.

The biggest number of academic staff can be seen in university J, which has 4,703 staff members. Following that are university D, L, K and university A with 1,900 academic staff members, see Table 4.11. These large numbers of postgraduate students and academic staff in the AC universities reflect a

major requirement for adequate library services to meet the present and future demands and needs of those users.

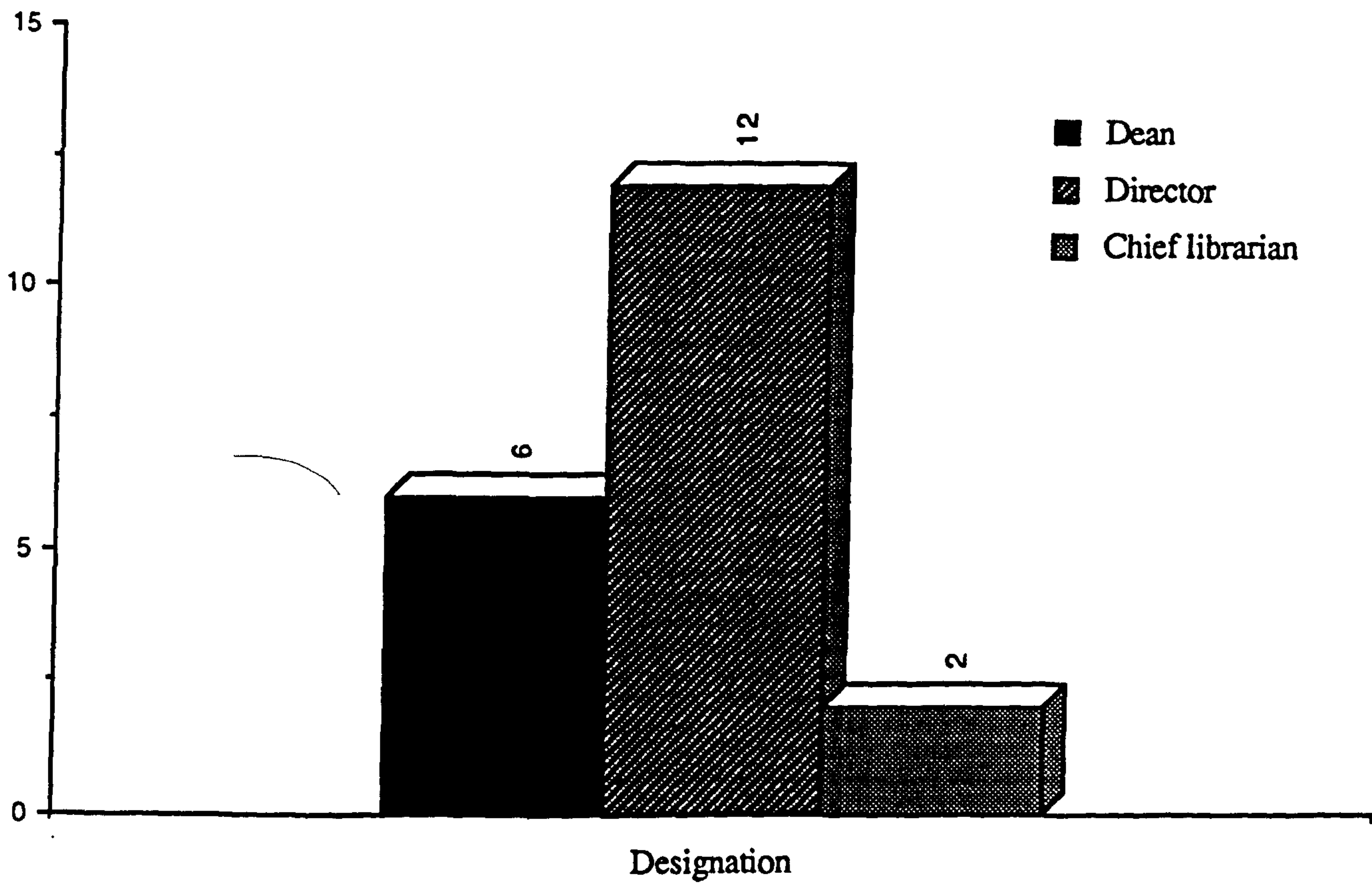


Figure 4.1 : Library heads' designations in AC university libraries

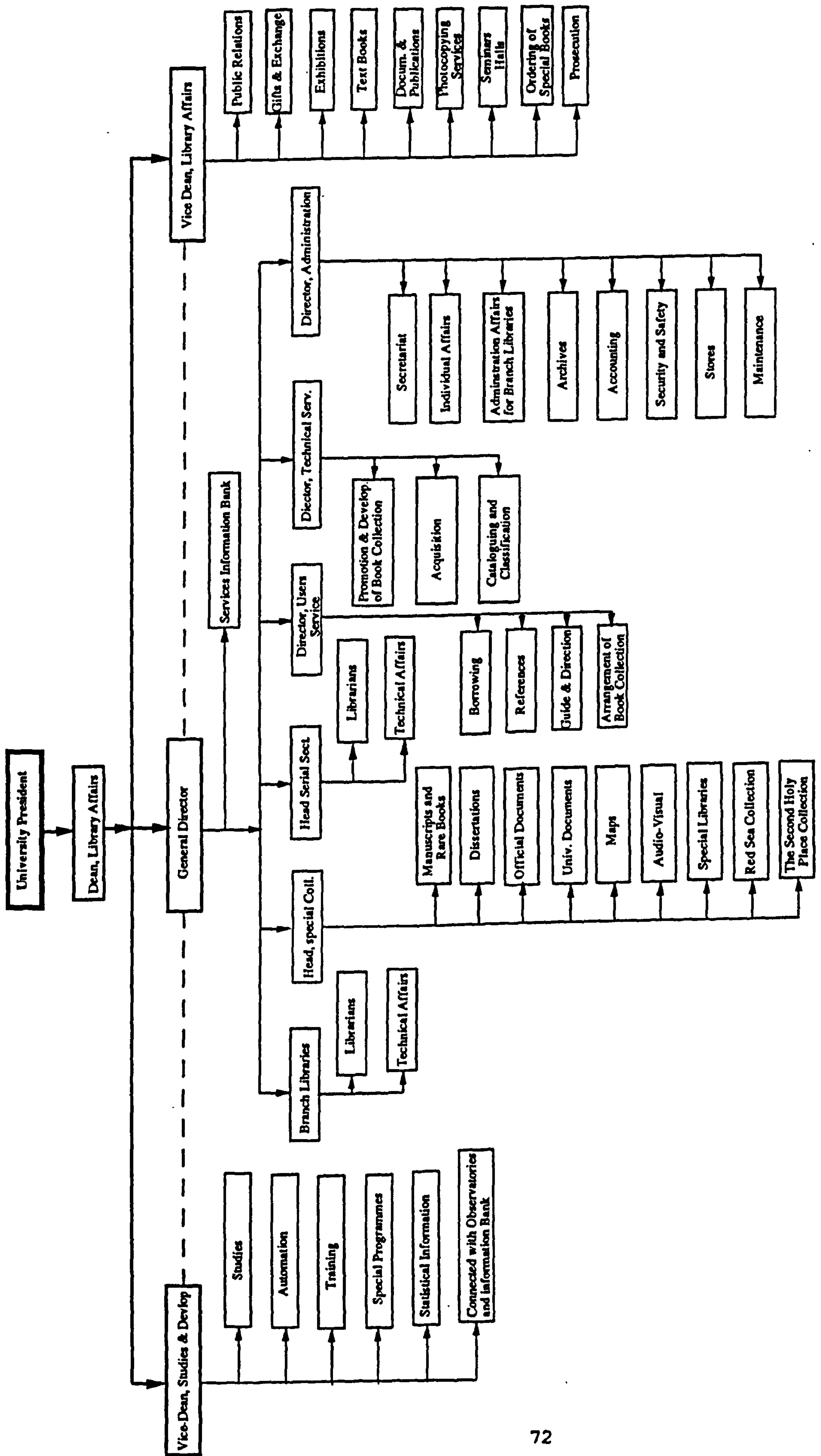


Figure 4.2 : Management structure of University Library A

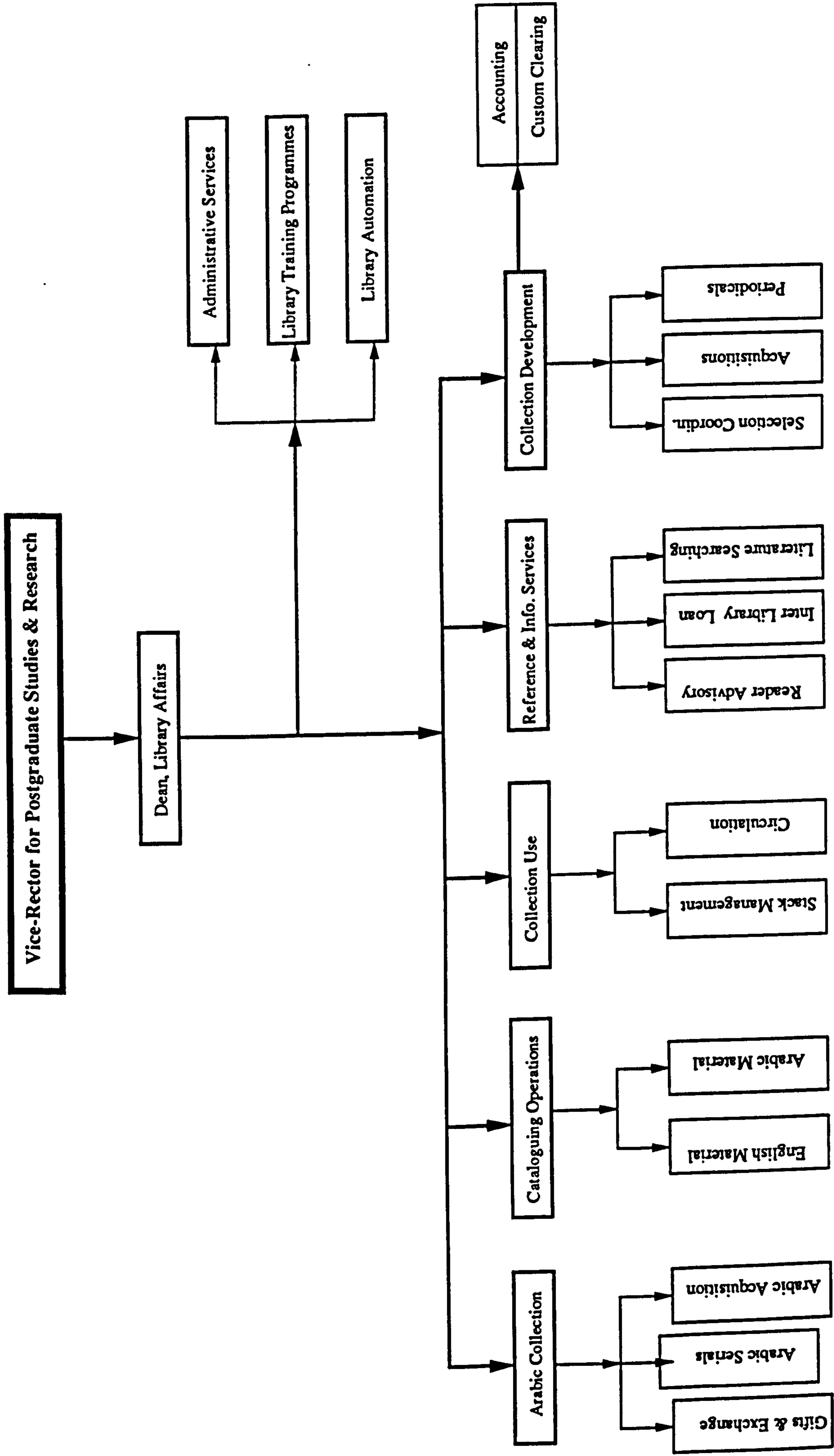


Figure 4.3 : Management structure of University Library B

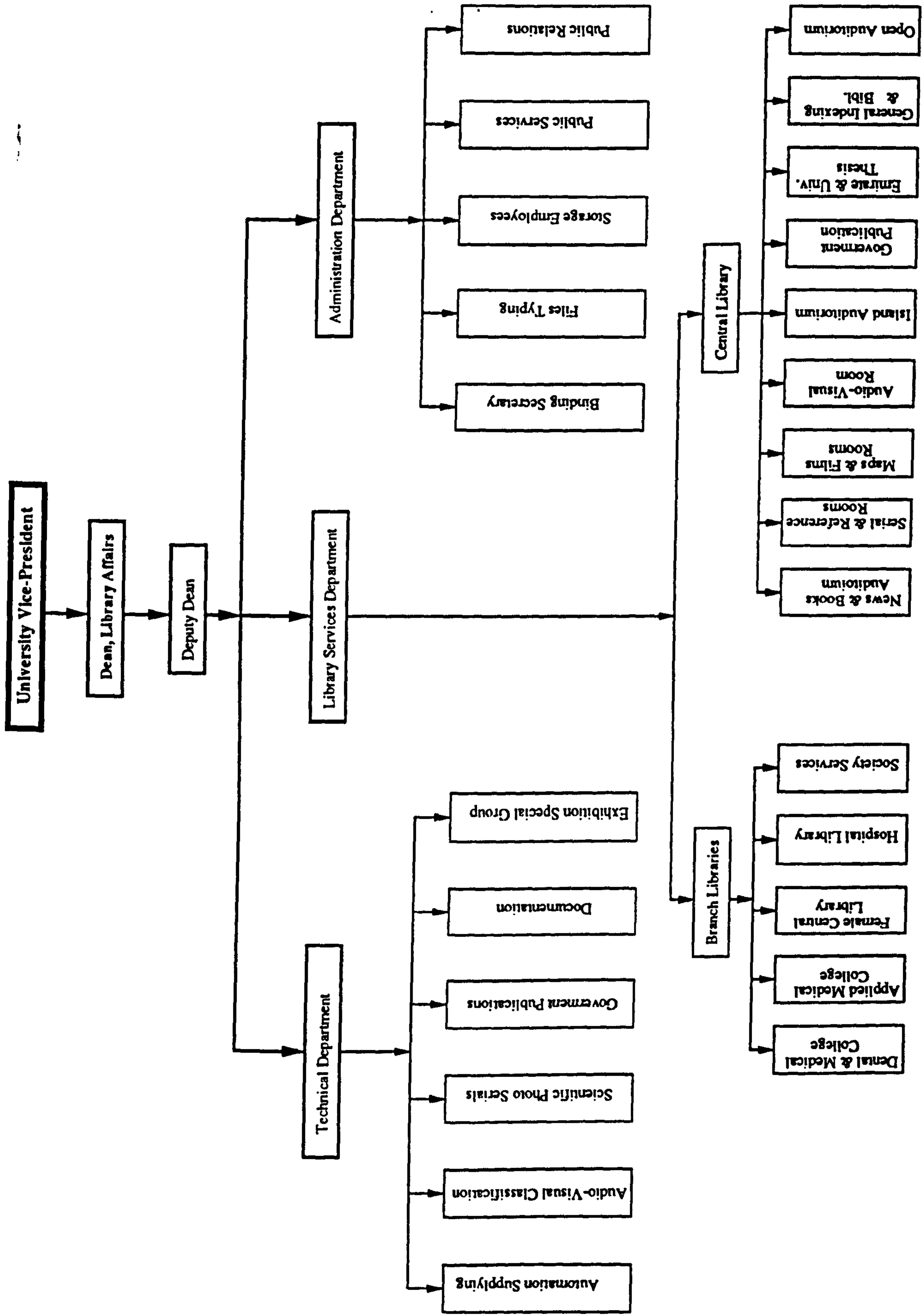


Figure 4.4 : Management structure of University Library D



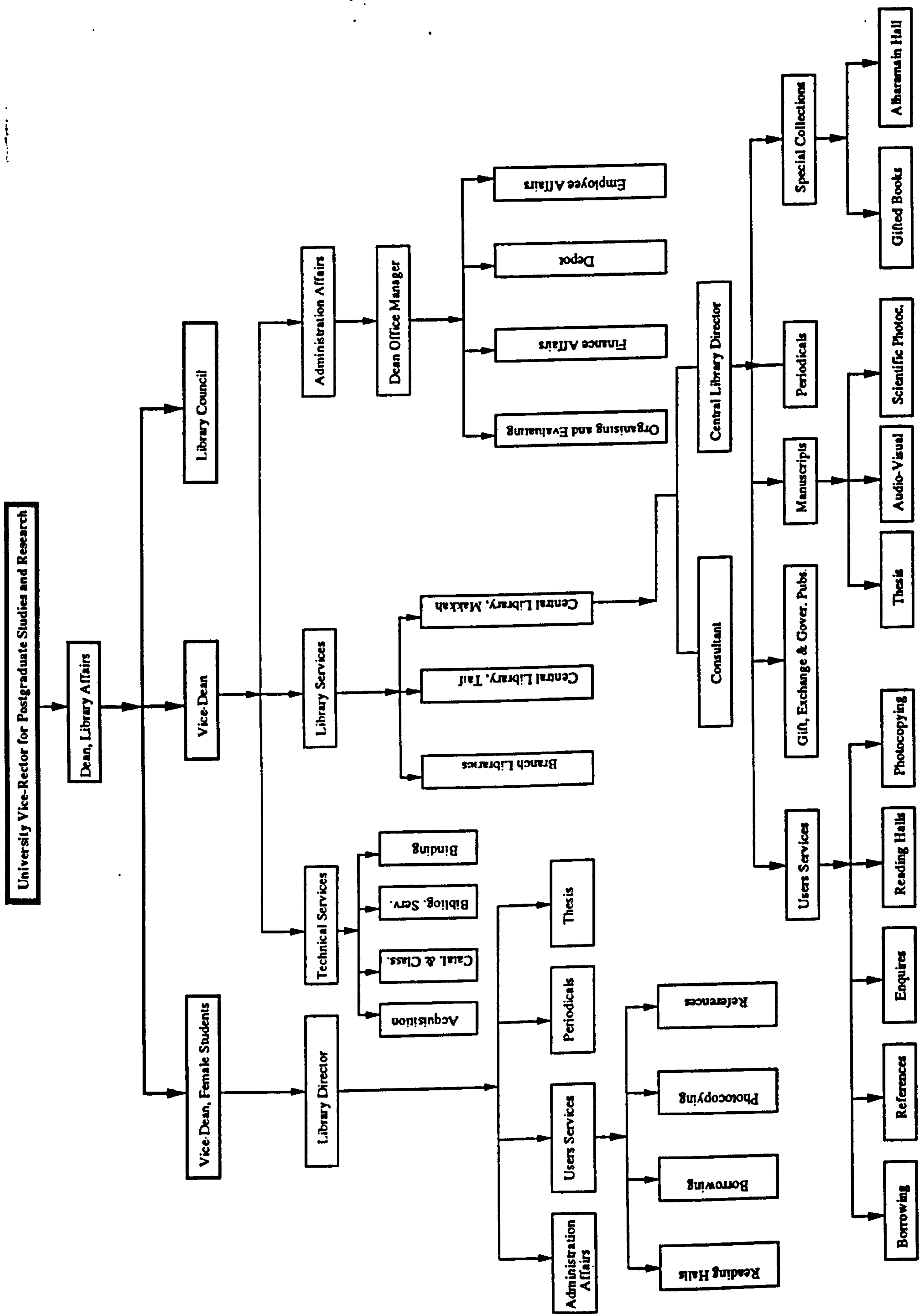
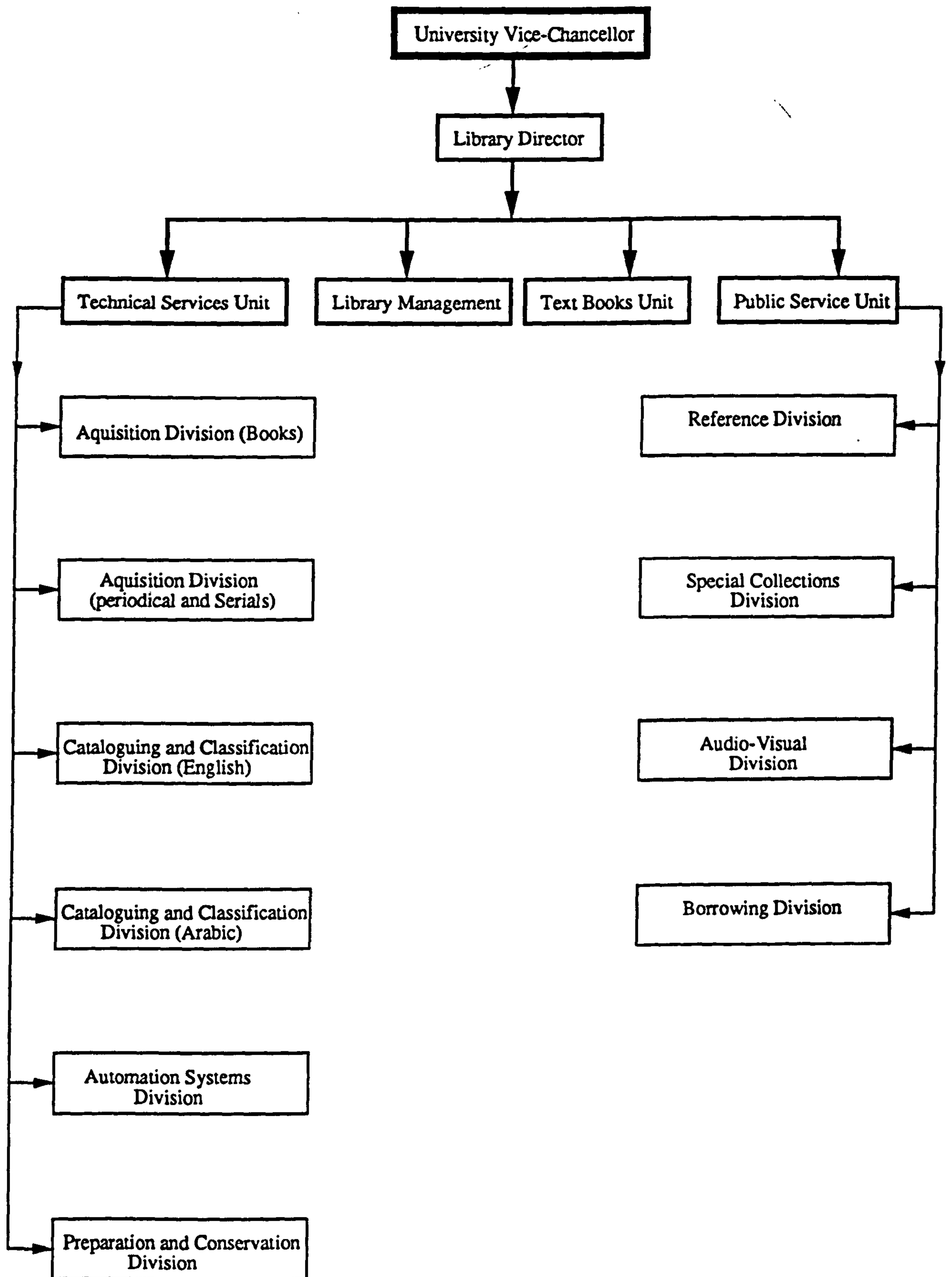


Figure 4.5 : Management structure of University Library E



**Figure 4.6 : Management structure of University Library H**

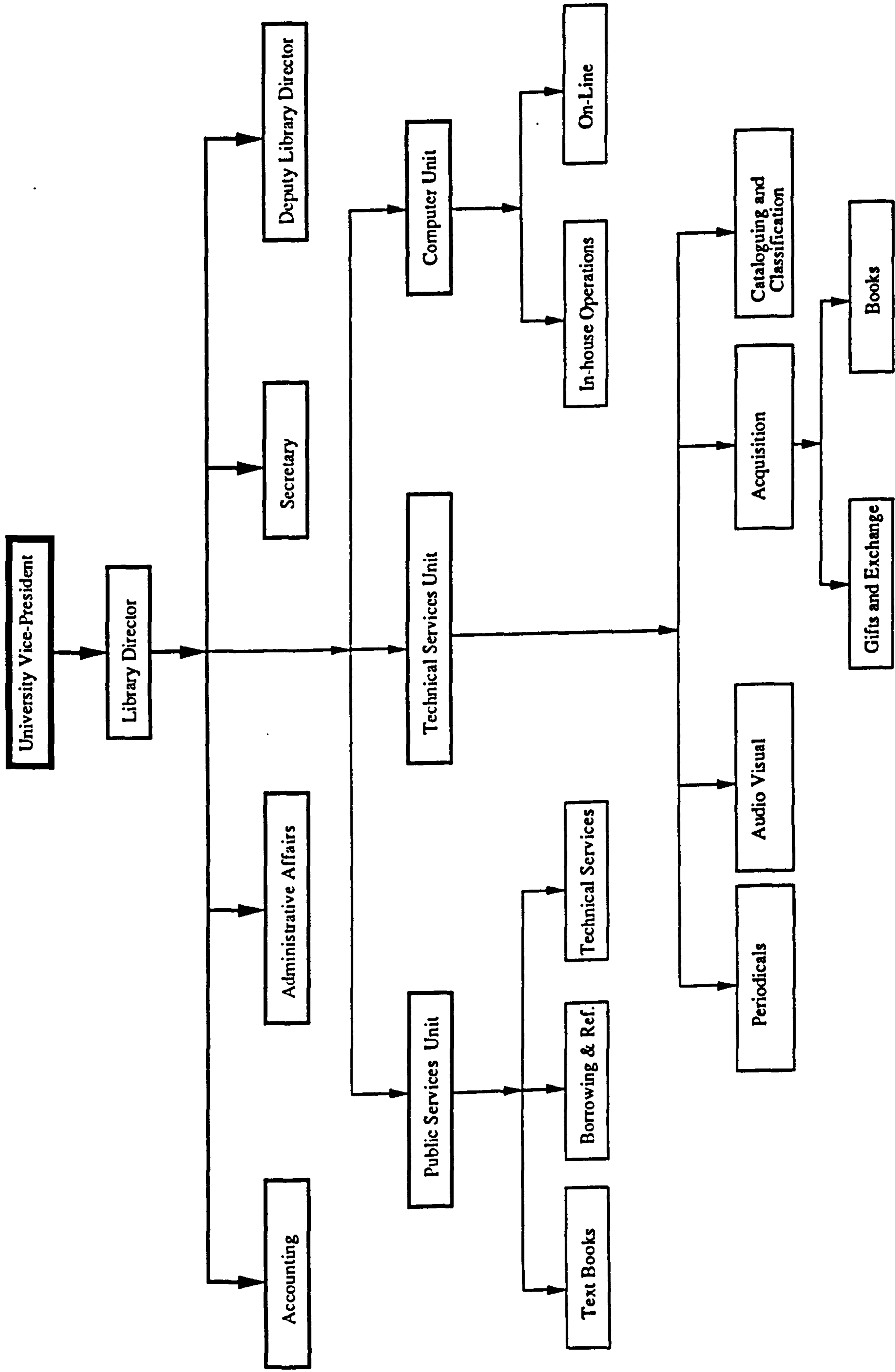


Figure 4.7 : Management structure of University Library O

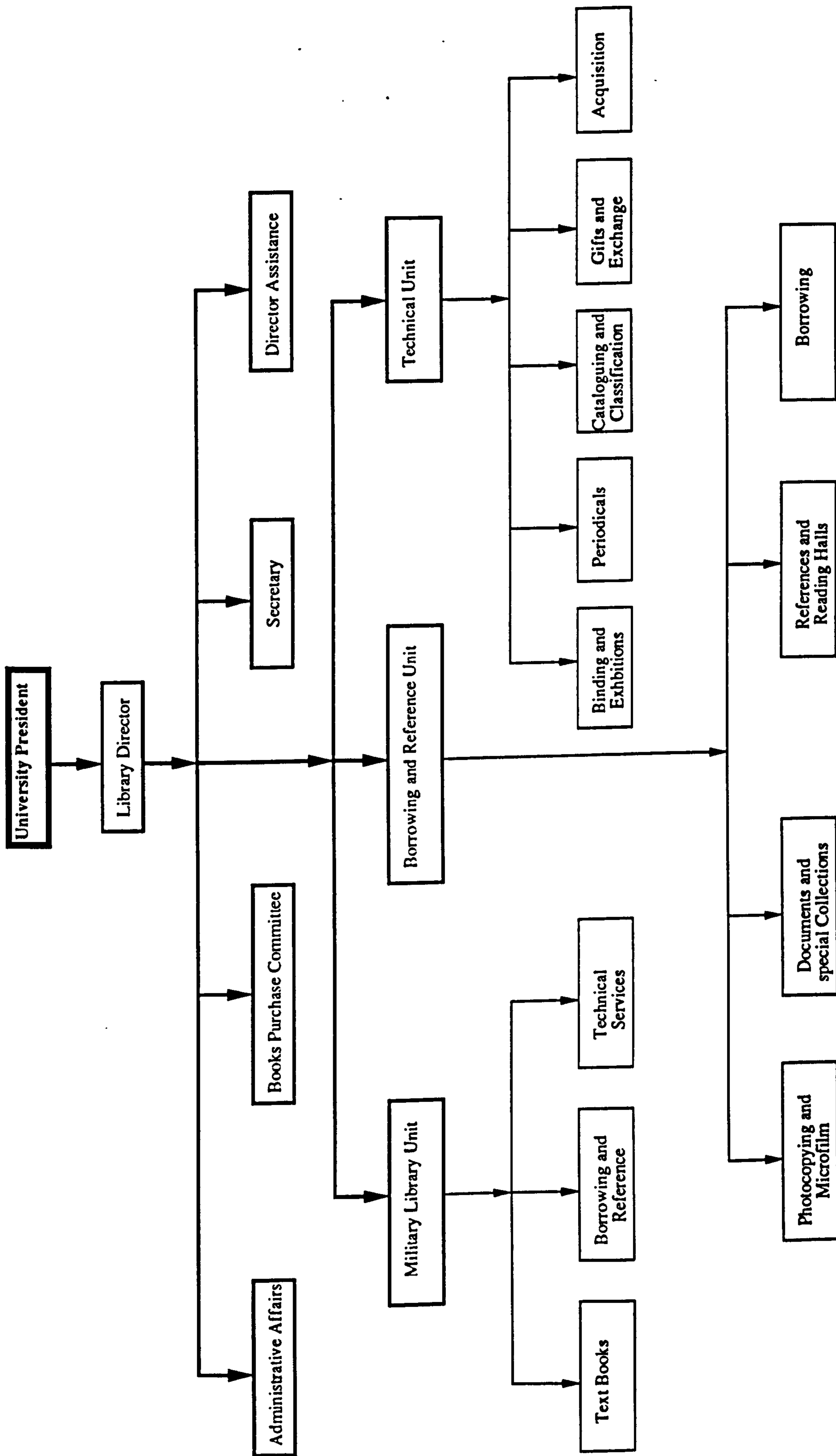


Figure 4.8 : Management structure of University Library P

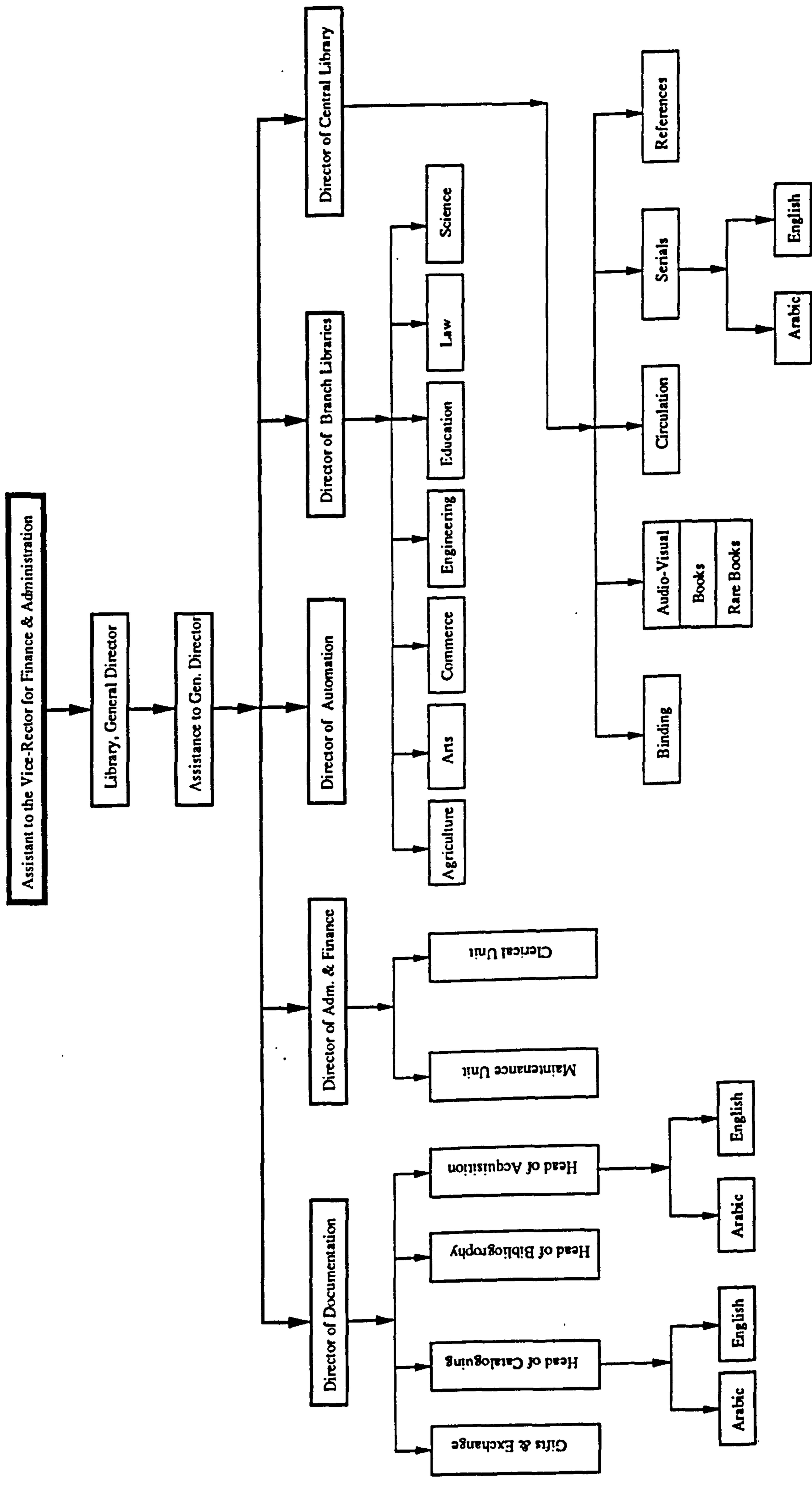


Figure 4.9 : Management structure of University Library S

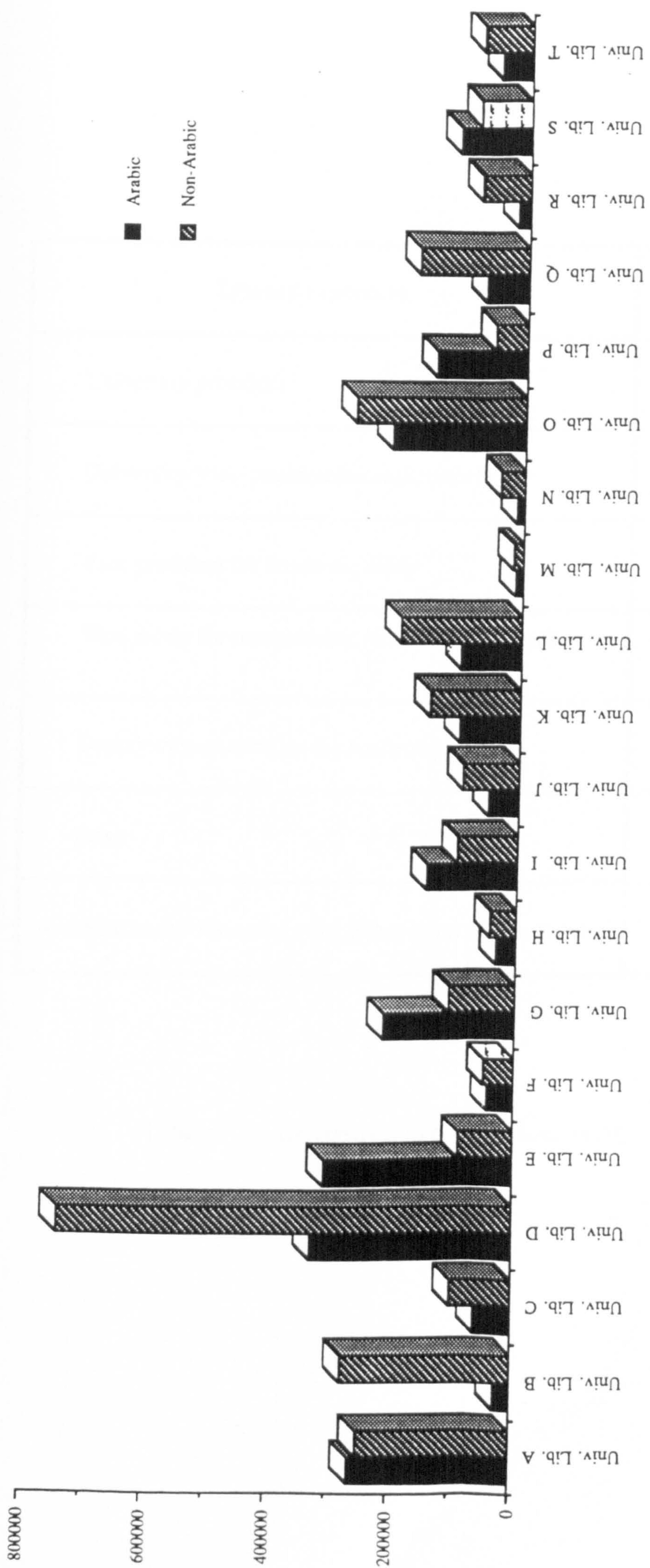


Figure 4.10 : Collection size of books in AC university libraries

<b>Library reports to</b>	
University president	4
University Vice-president/rector/chancellor	7
Vice-president for academic affair	1
Vice-rector for postgraduate studies and research	5
Deputy vice-chancellor for academic affairs	1
Dean	1
Assistant to the vice-rector for finance and administration	1

**Table 4.1 : University library authorities in AC**

Post Designations	Qualification in Library Science					Qualification in Others				Total
	Ph.D in Lib. Sci.	MA/Msc in Lib. Sci.	BA/Bsc in Lib. Sci.	High Dipl in Lib. Sci.	Ph.D in other	MA/MSc in other	BA/BSc in other			
Dean	3		1		2				6	
Director	1	4	1	1	2	1	2		12	
Chief librarian		1	1						2	

Table 4.2 : Head of the libraries : post designation and qualifications in AC university libraries



Cataloguing scheme	Arabic Materials	Non-Arabic Materials
AACR2	10	17
Arabic AACR2	8	2
NUC	1	0
Others	1	1

**Table 4.3 : Cataloguing scheme used in AC university libraries**

Classification scheme	Arabic Materials	Non-Arabic Materials
DDC	4	10
Modified DDC	9	2
LC	6	7
Others	1	1

**Table 4.4 : Classification scheme used in AC university libraries**

University Library	Books (Volumes)		Periodicals (Titles)	
	Arabic	Non-Arabic	Arabic	Non-Arabic
A	263 000	250 000	524	2014
B	25 000	278 000	69	2111
C	60 000	100 000	*	466
D	329 584	743 316	250	2088
E	310 000	89 053	95	496
F	42 909	49 767	500	1700
G	218 299	110 174	206	1301
H	32 188	42 860	153	1193
I	150 000	100 000	500	1500
J	51 500	91 800	*	*
K	100 000	150 000	20	1200
L	100 500	200 000	30	1600
M	12 000	18 000	50	50
N	15 000	39 000	30	450
O	220 000	280 000	200	850
P	150 300	55 000	150	500
Q	69 000	180 000	100	950
R	20 000	80 000	180	1200
S	117 751	84 738	300	535
T	50 000	80 000	*	40

\* Not answered

Table 4.5 : Collection size of books and periodicals

University Library	Books (Volumes)						Periodicals (Titles)					
	Arabic			Non-Arabic			Arabic			Non-Arabic		
	94	95	96	94	95	96	94	95	96	94	95	96
A	4	5	5	3	4	5	2	2	2	2	2	3
B	5	5	5	5	5	5	5	5	5	5	5	5
C	*	*	*	*	*	*	*	*	*	*	*	*
D	*	*	*	*	*	*	*	*	*	*	*	*
E	5	5	5	5	5	5	10	10	10	10	10	10
F	6	7	7	3	3	3	10	5	5	10	2	3
G	*	*	*	*	*	*	*	*	*	*	*	*
H	13	13.5	13.5	13	13.5	13.5	8	8	9	10	12	15
I	10	10	10	10	12	15	30	30	30	5	5	5
J	5	6	7	8	7	8	5	5	5	6	6	6
K	6	6	7	6	5	5	3	4	4	4	4	5
L	*	*	*	*	*	*	*	*	*	*	*	*
M	4	4	4	6	6	6	5	5	5	5	5	5
N	1.2	3	4	15	20	25	2	2	2	6	6	6
O	*	*	*	*	*	*	*	*	*	*	*	*
P	*	*	*	*	*	*	*	*	*	*	*	*
Q	6	6	6	3	3	4	3	4	5	3	3	3
R	10	10	10	10	10	10	10	10	10	10	10	10
S	3	4	5	4	5	6	2	2	2	3	3	3
T	5	5	5	6	6	6	2	2	2	3	3	3

\* Not answered

Table 4.6 : Library collection planned percentage growth for 1994, 95 and 96

<b>Selection Policy</b>	<b>Yes</b>	14
	<b>No</b>	6
<b>Involved in collection selection policy</b>	<b>Library staff</b>	20
	<b>Academic staff</b>	20
	<b>Postgraduate students</b>	6
	<b>Undergraduate students</b>	2

**Table 4.7 : Library collections selection policy and those who are involved in the selection, in AC university libraries**

University Library	Central	Branches
A	1	14
B	1	4
C	2	6
D	1	3
E	1	3
F	1	1
G	1	2
H	1	0
I	1	5
J	1	18
K	1	21
L	*	*
M	1	2
N	1	1
O	1	9
P	1	1
Q	1	5
R	*	*
S	1	8
T	1	6

\* Not answered

**Table 4.8 : Number of constituent libraries**

Less than 6.0%	6
From 6.0% - 10.0%	1
From 11.0% - 15.0%	1
From 16.0% - 20.0%	1
Not answered	11

**Table 4.9 : Percentage of library budget from the total university budget (1994 ) in AC**

University Library	Professionally qualified		Others		Total		Total
	National	Non-National	National	Non-National	National	Non-National	
A	22	15	20	10	42	25	67
B	4	26	7	13	11	39	50
C	8	9	17	5	25	14	39
D	11	18	45	66	56	84	140
E	15	3	33	2	48	5	53
F	3	3	37	2	40	5	45
G	7	13	71	41	78	54	132
H	14	24	24	6	38	30	68
I	3	10	6	60	9	70	79
J	12		87		99		99
K	17		245		262		262
L	15		125		140		140
M	3		5		8		8
N	6		24		30		30
O	20		90		110		110
P	18		42		60		60
Q	16	1	60		76	1	77
R	10		28		38		38
S	15	2	88	1	103	3	106
T	3		35		38		38

Table 4.10: Number of library employees in AC university libraries.

University Library	Students		Academic Staff	Others	Total
	Undergraduate	Postgraduate			
A	27 000	1 000	1 900	8 700	38 000
B	5 500	280	230	1 600	8 610
C	4 800	400	720		5 920
D	28 000	1 400	2 800		32 200
E	13 000	1 050	550		14 600
F	6 400	300	872		7 572
G	5 500		240		5 740
H	3 973	30	560		4 563
I	9 500	100	600	500	10 700
J	33 500	15 800	4 703		54 003
K	45 000	4 000	2 500		51 500
L	36 000	2 050	2 800		40 850
M	3 000		200		3 200
N	3 015		350		3 365
O	20 000	500	1 400		21 900
P	7 144	359	230	7 503	15 236
Q	16 000	200	1000		17 200
R	6 100	1 800	200		8 100
S	2 050	500	180	200	2 930
T	8 000	80	260	80	8 420

Table 4.11 : Number of potential library users in AC university libraries



## CHAPTER FIVE

### IT, ARABISATION, COOPERATION AND TELEMATICS IN AC HIGHER EDUCATION LIBRARIES

#### 5.1 Introduction

In Chapter Four, a questionnaire survey in the AC university libraries was described. In addition, a general library profile for these libraries has been presented. This Chapter provides an analysis for that survey regarding the following :

- The current status of IT, Arabised library systems and cooperation and telematics in the AC university libraries.
- The main problems and obstacles in using and adopting these facilities, according to the library heads opinions.
- The main reasons causing dissatisfaction among library users in these libraries, according to the library heads opinions.
- Library policy towards IT, Arabisation, cooperation and telematics.
- Finally, the chapter closes with the main findings from this survey.

## **5.2 Current Status of IT, Arabised Library Systems and Cooperation and Telematics in the AC University Libraries.**

This section presents the current status of IT, Arabisation and cooperation and telematics in AC university libraries.

### **5.2.1 Information Technology (IT)**

This section examines the current availability of IT in library functions among university libraries in AC. These include the technical services, methods of catalogue searching, online access to databases and other IT facilities.

#### **1. Technical services**

Technical services cover the main library functions, including library acquisition, cataloguing and circulation. Hardly any surveyed libraries have fully automated technical services. Only two libraries out of 20 have claimed that their technical services are fully automated, and this involves mainly non-Arabic materials. Of the remaining 18 libraries the technical services were not automated at all in 14 of them, and only four were partly automated, see Table 5.1.

#### **2. Methods of catalogue searching**

Table 5.2 shows that the vast majority of university libraries in AC are still providing the card catalogue as a catalogue searching method for their users. Only six out of 20 libraries indicate that they provide an OPAC service for their users, for searching library materials. Five of these libraries are in the GCC, three in Saudi Arabia alone. However, OPAC, especially

for Arabic materials is as yet only partly automated, therefore, some of these library have backed-up with other methods. Only 3 libraries provide a COM book catalogue. Some of these libraries provide a book catalogue in addition, see Figure 5.2.

### **3. Online access to external databases**

The survey shows that more than half the university libraries in AC (12 out of 20) have no online access for international databases. Most of other libraries are using the DIALOG database, see Figure 5.1. In addition many of them, mostly in the GCC countries also use CD-ROMs. Although no specific question was included regarding CD-ROMs several respondents from GCC voluntarily indicated CD-ROMs were used.

### **4. Other IT facilities**

Table 5.3 shows that no university library in AC provides microcomputer facilities for their users' work, word-processing for example. The same table also shows that no library provides videotext facilities for the users. Table 5.4 shows that only eight out of 20 receive documents in machine readable forms. All of them are non-Arabic materials except one University Library which also mentioned it receives Arabic materials.

#### **5.2.2 Arabised Library Systems**

This section is an analysis of the state of the art on Arabised library systems used in AC university libraries. This includes to what extent these systems are used and what these systems are.

The Arabic language is the mother tongue for the vast majority of library users and staff. A large number of book collections are in Arabic. In addition Arabic language is used for teaching and research, in most of AC university colleges. The survey shows that almost all libraries agreed that installing an Arabised library system would improve their library services. Only one library said no and two said they had not decided, see Table 5.4.

However, in spite of these facts, only a very limited number of university libraries are using an Arabised library system in AC. Only five out of 20 of these libraries have installed an Arabised library system, see Figure 5.3. There are three libraries in Saudi Arabia namely, KAU, KFUPM and KSU libraries, which all have DOBIS/LIBIS system. Qaboos University Library of Oman has also installed the same system while Yarmuk University Library of Jordan has installed the MINISIS system. UAE University Library has recently installed the VTLS system and Arabisation now is under development.

### **5.2.3 Cooperation and Telematics**

Most of the libraries have telex and fax communication facilities. However, six university libraries do not have these facilities. Table 5.3 shows that only four libraries have telex, fax and E mail together. All these four libraries are in the GCC countries.

The survey shows that the majority of AC libraries have no local area network. Only four libraries out of twenty have such networking, see Table 5.3. Three of these are from the GCC countries. The survey shows that AC university libraries, in general, are lacking effective cooperation and telematics systems both at the regional and even at the national levels. There is no formal agreements for such cooperation and telematics among AC university libraries in this regard. Although university libraries in the GCC countries are linked through the GulfNet system, it appears, as mentioned earlier in Chapter Three, that this networking still has limited capabilities and is ineffective as yet.

Effective cooperation and telematics was recognised a long time ago in the Western Higher Education libraries, and it has become more effective and wide spread with the advantages of the new IT facilities. However, the situation in Arab countries is clearly different. It has been found, according to library heads opinions as this survey reveals below, that the main reason which caused dissatisfaction among users of these libraries was that "the required document was not in stock".

### **5.3 Difficulties and Obstacles**

This section examines the main problems and obstacles in introducing or adopting IT, Arabised systems and cooperation and telematics, according to the library heads in the AC university libraries.

### **5.3.1 Difficulties and Obstacles in IT**

This section describes, according to library heads, the most serious difficulties hindering the implementation of IT in university libraries in AC. This includes the following :

#### **1. Lack of qualified librarians**

Nine libraries heads have agreed and strongly agreed, that there is a lack of qualified librarians in their libraries. However, seven libraries do not see the lack of qualified librarians as a problem. The three remaining libraries were neutral, see Table 5.5.

In general, these libraries are lacking in qualified librarians, especially those with relevant skills in IT and modern developments in the field of information and library science. This problem can be clearly noticed in the GCC who depends largely on importing qualified manpower as mentioned in Chapter four.

#### **2. Financial difficulties**

This is another possible problem hindering the implementation of IT in AC university libraries, especially for the non GCC countries, that is, those without oil. Nine libraries have agreed or strongly agreed, that this problem hinders the implementation of IT. All of these libraries are non-GCC except one. However, this problem does not exist in all the other eight university libraries in the GCC countries, which disagreed or strongly disagreed. The other three remaining libraries, which again are non-GCC, were neutral, see Table 5.5.

### 3. Technical difficulties

Library heads opinions were split regarding the technical difficulties. Five libraries agreed or strongly agreed, that technical difficulties is another main problem in implementing IT in their libraries. Only four libraries disagreed or strongly disagreed on that. However, most of the libraries, 11 out of 20, were neutral. This may due to limited experience in library automation, see Table 5.5.

#### 5.3.2 Obstacles in Adopting Arabised Systems

The majority of university libraries, 15 out of 20, have not adopted an Arabised system so far. Table 5.6 shows their library heads' opinions on the main obstacles to adopting such systems. These can be classified as follows (See also Figure 5.4) :

1. Financial difficulties, especially among those libraries not belonging to the GCC countries.
2. Technical problems, such as limited capabilities and maintenance difficulties.
3. Lack of qualified librarians, especially those who have some skill with the new IT equipment.
4. Some libraries mentioned other technical problems, as follows:
  - Language problems, such as computer difficulties in recognising some Arabic scripts and terms.
  - lack of Arabic MARC standards
  - No common Arabic subject headings list

None of the libraries envisage any lack of user readiness to accept the Arabised library system, or see this as an obstacle in adopting such a system. However, university libraries in AC indicated that the lack of user education is one of the main problems causing dissatisfaction among their users (See section 5.4).

### 5.3.3 Problems in Using an Arabised Systems

Those five libraries that are using Arabised systems explained the main problems with these systems. Table 5.7 and Figure 5.5 show these problems, which can be classified as follows:

1. Lack of qualified librarians
2. Maintenance problems
3. Language problems
4. Limited capabilities

Three of the five libraries that use Arabised library systems indicate that lack of qualified librarians and maintenance problems are the main difficulties with these systems. Two libraries indicate the language problem and the limited capabilities of these systems. One library indicates the problem of user readiness to accept the system. KFUPM Library indicates that it has no problems with its Arabised library system. However, this library mentioned that DOBIS/LIBIS is only partly Arabised, for cataloguing and OPAC only.



#### **5.4 Library Users Satisfaction**

Library heads in AC were questioned to state their views and opinions in the main reasons for their users' dissatisfaction. A list of nine selected reasons was provided. From the results in Table 5.8 it can be seen that the four main reasons for user dissatisfaction in AC university libraries are as follows (See also Figure 5.6) :

**1. The required document is not in stock.**

The majority of libraries, 12 out of 20, believed that the required document not being in stock, is the most frequent reason for dissatisfaction among their users. This is perhaps due to financial difficulties, a lack of automation systems for controlling and easy access to library materials, or, of course, to the lack of cooperation and an effective interlibrary loan system.

**2. Lack of user education.**

Again the majority of libraries, 12 out of 20, believed that lack of user education is a main reason for dissatisfaction among their users. This indicates that library users in AC, in general, have limited experience in how to use their libraries in the proper way. Sometimes, they may need a great deal of help in order to find the document they need. Others may not return to the library if they find their search is unsuccessful.

### 3. Lack of library automation.

Half of the libraries out of 20 believed that the lack of automation is another main reason for dissatisfaction among their users. This related to the above reason that "the required document is not in stock". It also related to the reason below "difficulties in using the library card catalogue".

### 4. Difficulties in using the library card catalogue.

Half of the libraries out of 20 cited this reason. Card catalogues caused the library user many difficulties, such as, for example, the need to understand the alphabetical order or problems with missing cards. These difficulties will be explored in the Kuwait study, in the next chapters.

A few libraries, less than three, identified other reasons such as :

- The documents users were interested in were on restricted access
- Signing and guiding were not effective
- Library opening hours
- Lack of photocopy machines
- Lack of interlibrary loans

## **5.5 Library Policy Towards IT and Arabised Systems**

Most University libraries in AC intend to introduce more IT facilities, for example, computerised cataloguing, and OPAC, more communication facilities, local and wide area networks. Most libraries are planning to cooperate with other libraries within their countries. Many intend to cooperate with other libraries in the AC, to cooperate internationally, and to join co-operative computerised systems. Moreover, KFUPM plans to introduce other developments in IT such as image processing.

Most libraries that had not already installed Arabised systems (12 out of 15) indicated that they intended to install an Arabised library system in the near future. However, three libraries indicated that they had not yet decided, while one library indicated that it did not intend to install such a system. Another University Library indicated that it would do so when RLIN Arabic was implemented. Qatar University Library plans to install MINISIS, while UAE University Library plans to adopt VTLIS Arabised library systems.

## **5.6 The Main Findings**

This survey provides a current profile of AC Higher Education libraries. This shows that these countries have a large number of libraries, which contain a large volume of library materials and have a large and rapid growth of users. However, the survey shows that the automation in these libraries, in general, is very limited and traditional systems are still used

in the vast majority of them. Computerised library systems with Arabisation are used in few libraries, mostly in the GCC countries. These systems including DOBIS/LIBIS, MINISIS and VTLS.

Lack of cooperation and telematics is still widespread in academic libraries in AC in general. Effective cooperation and telematics based on formal agreements between these libraries, which is common in the West, are lacking at both regional and even national levels. The lack of qualified librarians with relevant skills, technical problems and financial difficulties, especially among non oil-rich countries, are the most important factors identified by library heads as causing such limitation in these IT facilities.

The main reasons thought to cause dissatisfaction among library users, based on library heads opinions, are: the document is not in stock; a lack of user education; a lack of library automation; and difficulties in using the library card catalogue.

These problems may be related to the lack of IT, Arabisation and cooperation and telematics. Libraries in the GCC countries, especially those in Saudi Arabia such as KFUPM Library, are in a more advanced position when compared to others. The extent to which these observations are reflected in Higher Education libraries in Kuwait will be examined in the following chapters.

Library functions	Not automated	Partly automated	Fully automated
Library Catalogue	6	6	8
Library Circulation	13	2	5
Acquisition Books	11	2	7
Acquisition Periodicals	11	2	7
All Functions	14	4	2

Table 5.1 : Library functions and their automation extent, in twenty AC university libraries

Catalogue searching	Arabic materials	Non-Arabic materials
Card Catalogue	17	14
COM Book catalogue	1	3
OPAC	6	6
Others	3	1

Table 5.2 : Methods of catalogue searching

	<b>Libraries</b>
<b>Telex</b>	<b>13</b>
<b>FAX</b>	<b>16</b>
<b>E-mail</b>	<b>5</b>
<b>Network</b>	<b>4</b>
<b>Microcomputer</b>	<b>0</b>
<b>Videotext</b>	<b>0</b>
<b>Telex, FAX, and E-mail</b>	<b>4</b>

**Table 5.3 : IT Communication facilities**

	Yes	No
Does your library receive any Arabic document in machine readable forms?	1	0
Does your library receive any non-Arabic document in machine readable forms?	7	0
Do you think an Arabised library system will improve your library services?	17	1
Has your library installed any Arabised library system?	5	15

**Table 5.4 : Library heads response for selected questions**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Financial Difficulties	5	3	3	4	5
Personnel Difficulties	3	4	3	6	3
	4	6	7	1	1
Technical Difficulties	2	2	11	3	2

**Table 5.5 : Opinions of Library Heads as to the main problems hindering the implementation of automation**



Problem		No. of Library
Financial problem		8
Technical problems	Limited capabilities	7
	Maintenance	6
Lack of qualified librarians		6
Language problems		4
Others		2

**Table 5.6 : Opinions of library heads as to the main obstacles in adopting Arabised library systems**

<b>Problem</b>	<b>No. of Library</b>
Lack of qualified librarians	3
Maintenance	3
Language problems	2
Limited capabilities	2
User readiness to accept the system	1

**Table 5.7 : Main problems in using an Arabised library system in five AC university libraries**

Reasons for the library users' dissatisfaction	No of libraries agreed
The required document is not in stock	12
Lack of users education	12
Lack of automation	10
Difficulties in using the catalogue	10
The documents they are interested in are on restricted access	6
Signing and guiding are not effective	5
Lack of photocopying facilities	5
The library opening hours	4
Other reasons	2

**Table 5.8 :** Library heads' opinions, as to the main reasons for the their library users' dissatisfaction

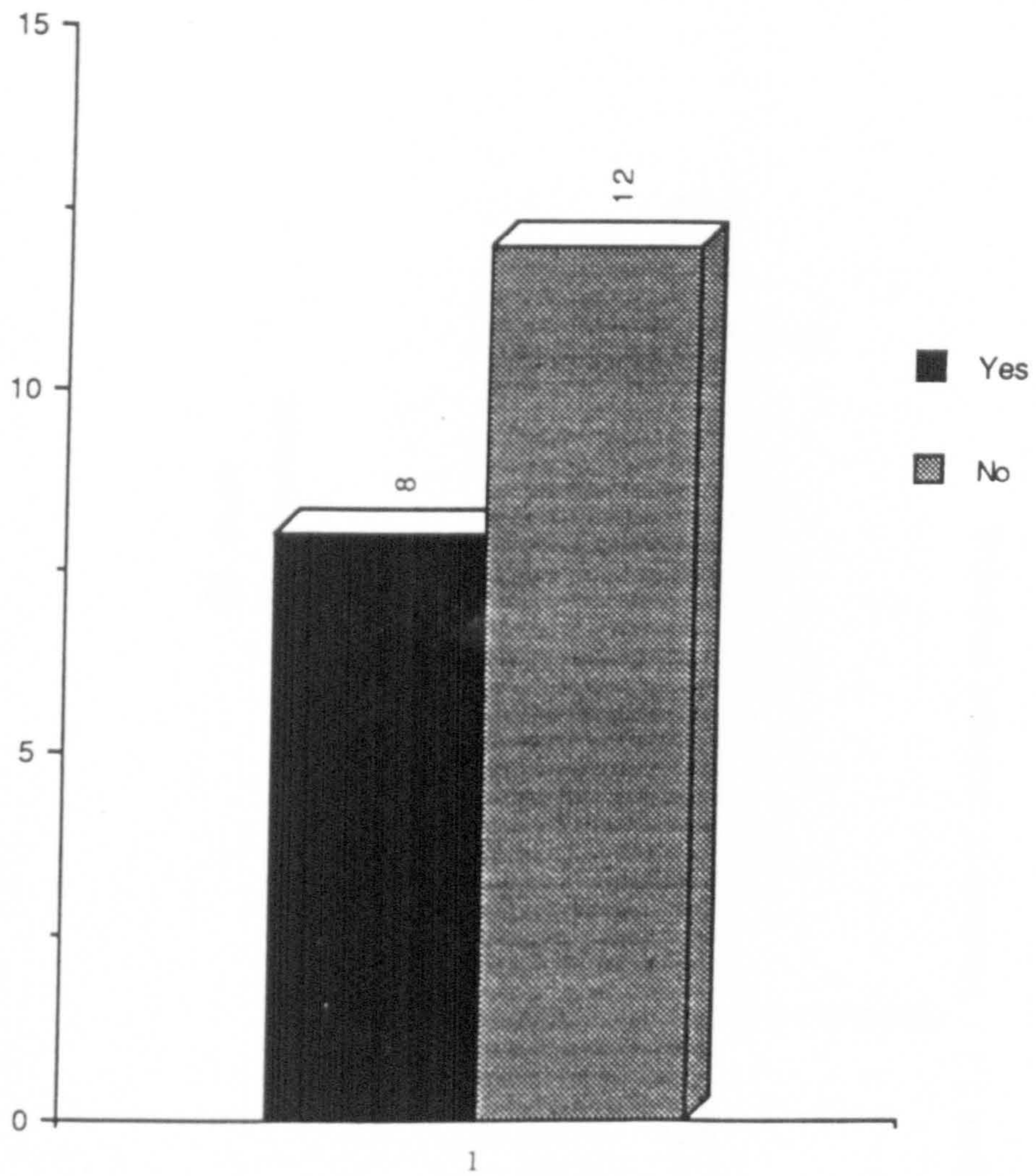


Figure 5.1 : Acces to external databases in AC university libraries

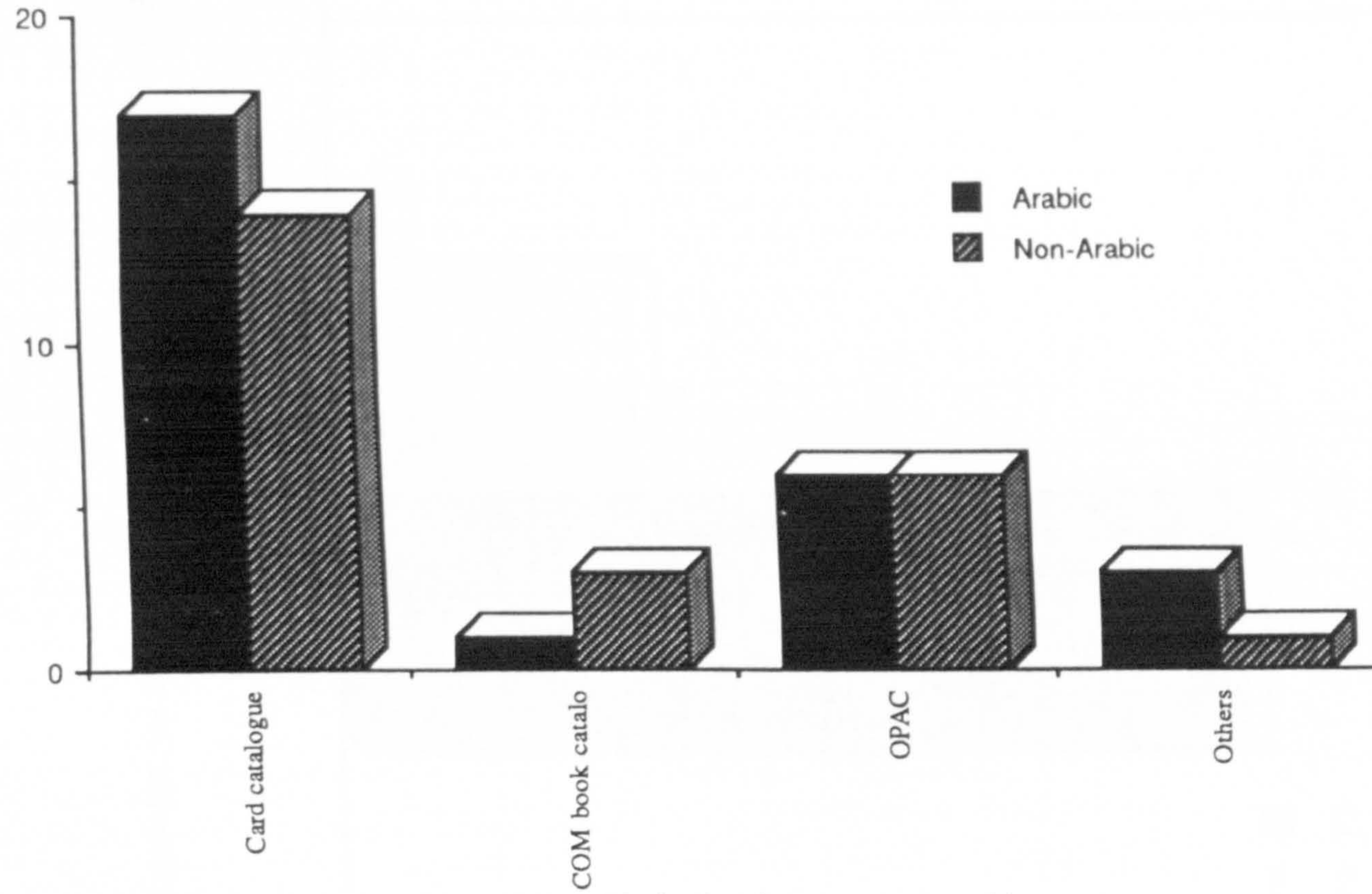


Figure 5.2 : Methods of catalogue searching

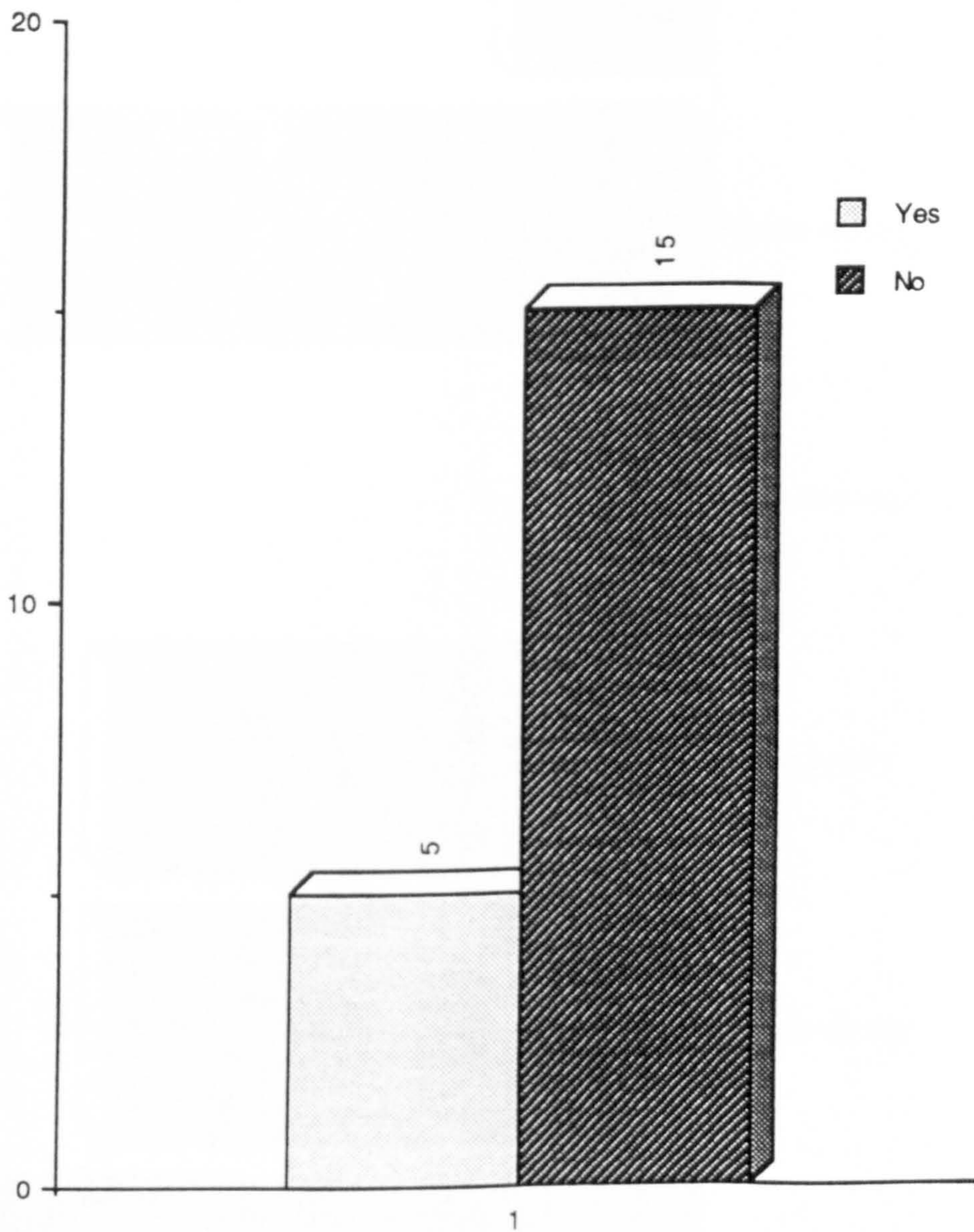


Figure 5.3 : Arabised library system installed in AC university libraries

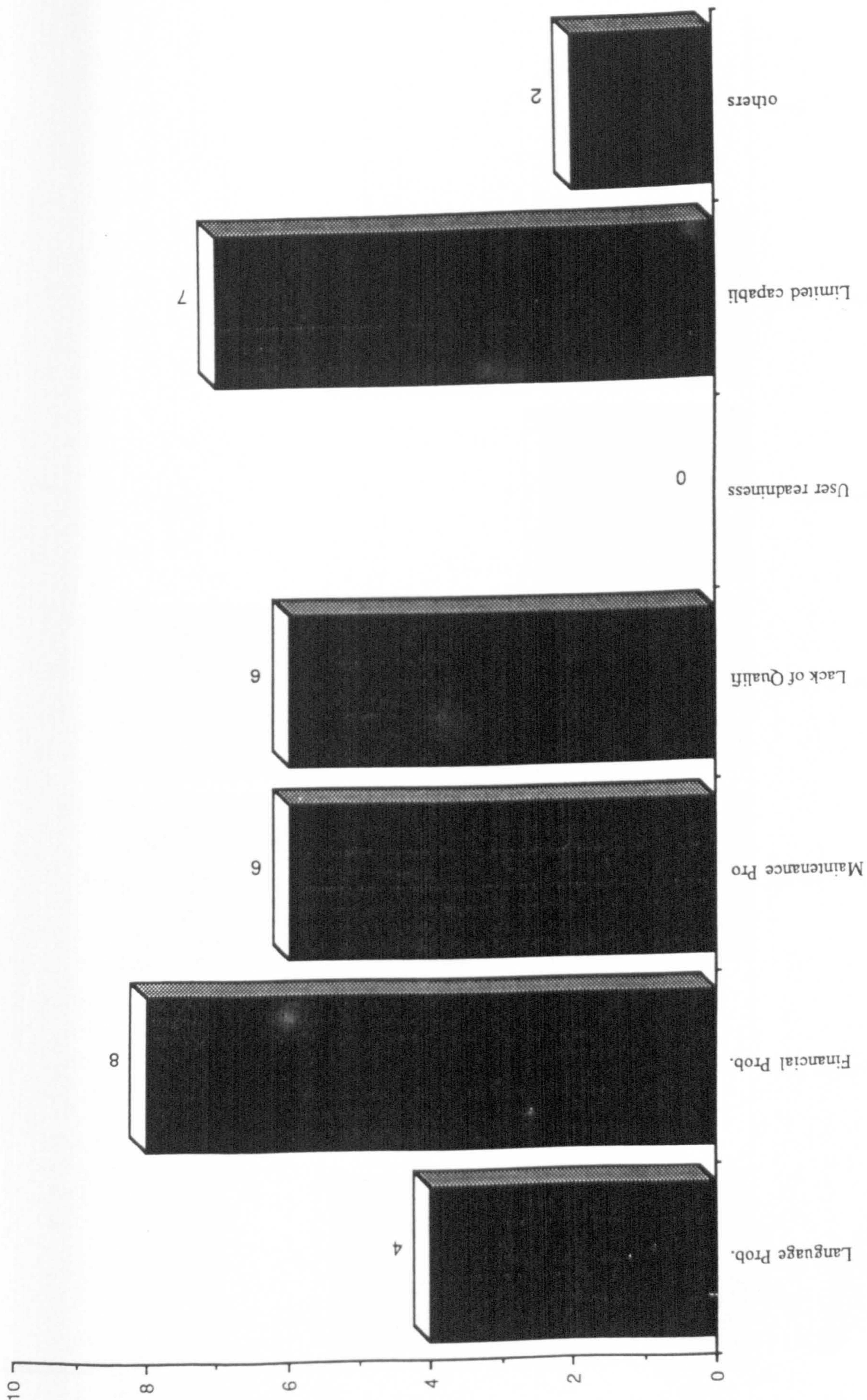


Figure 5.4 : Obstacles in adopting an Arabised library system

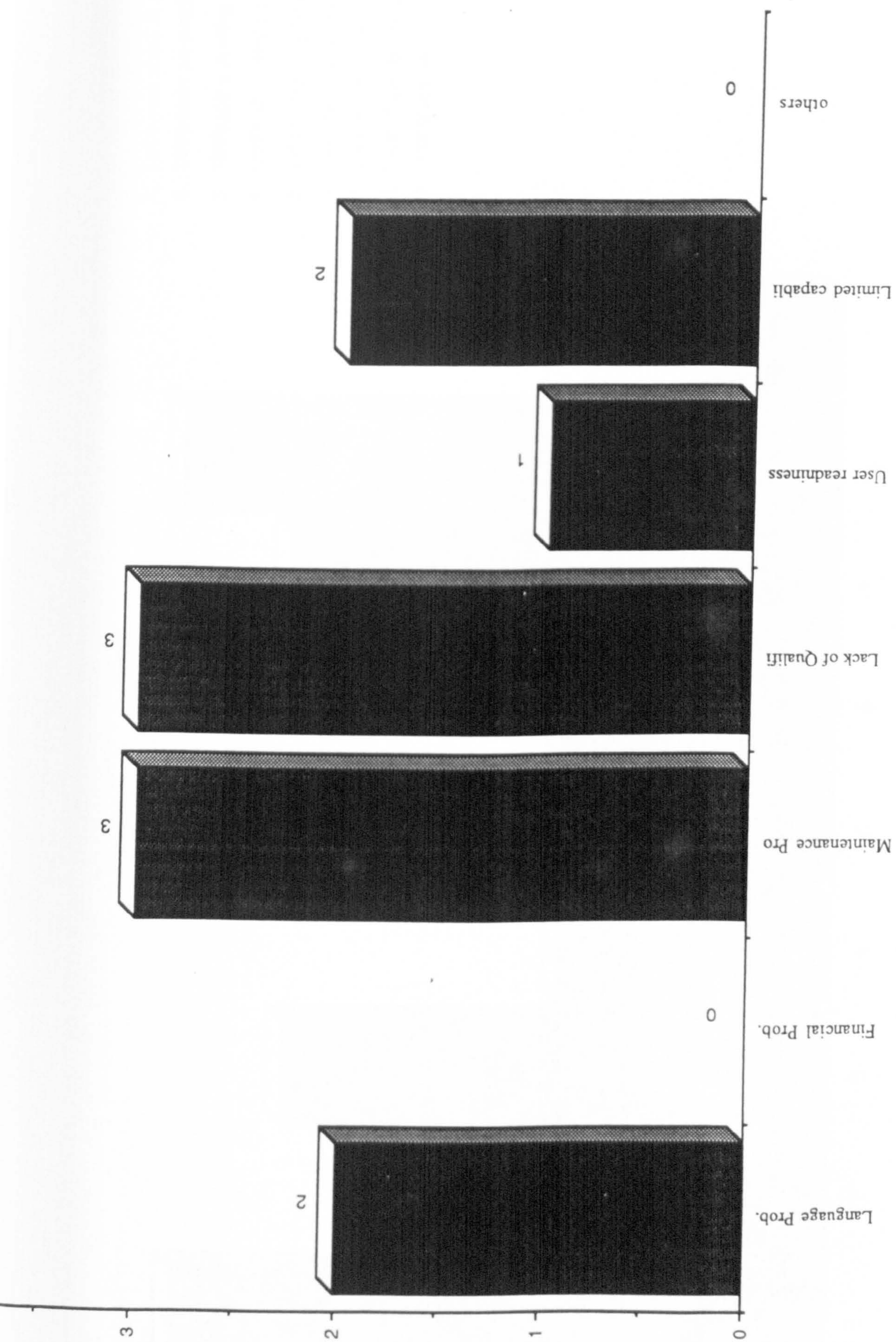


Figure 5.5 : Problems in Using Arabised library systems



1. Document is not in stock
2. Documents are restricted access
3. Difficulties in using catalogue
4. Ineffective signing and guiding
5. Library opening hours
6. Lack of photocopying facilities
7. Lack of automation
8. Lack of user education
9. Other reasons

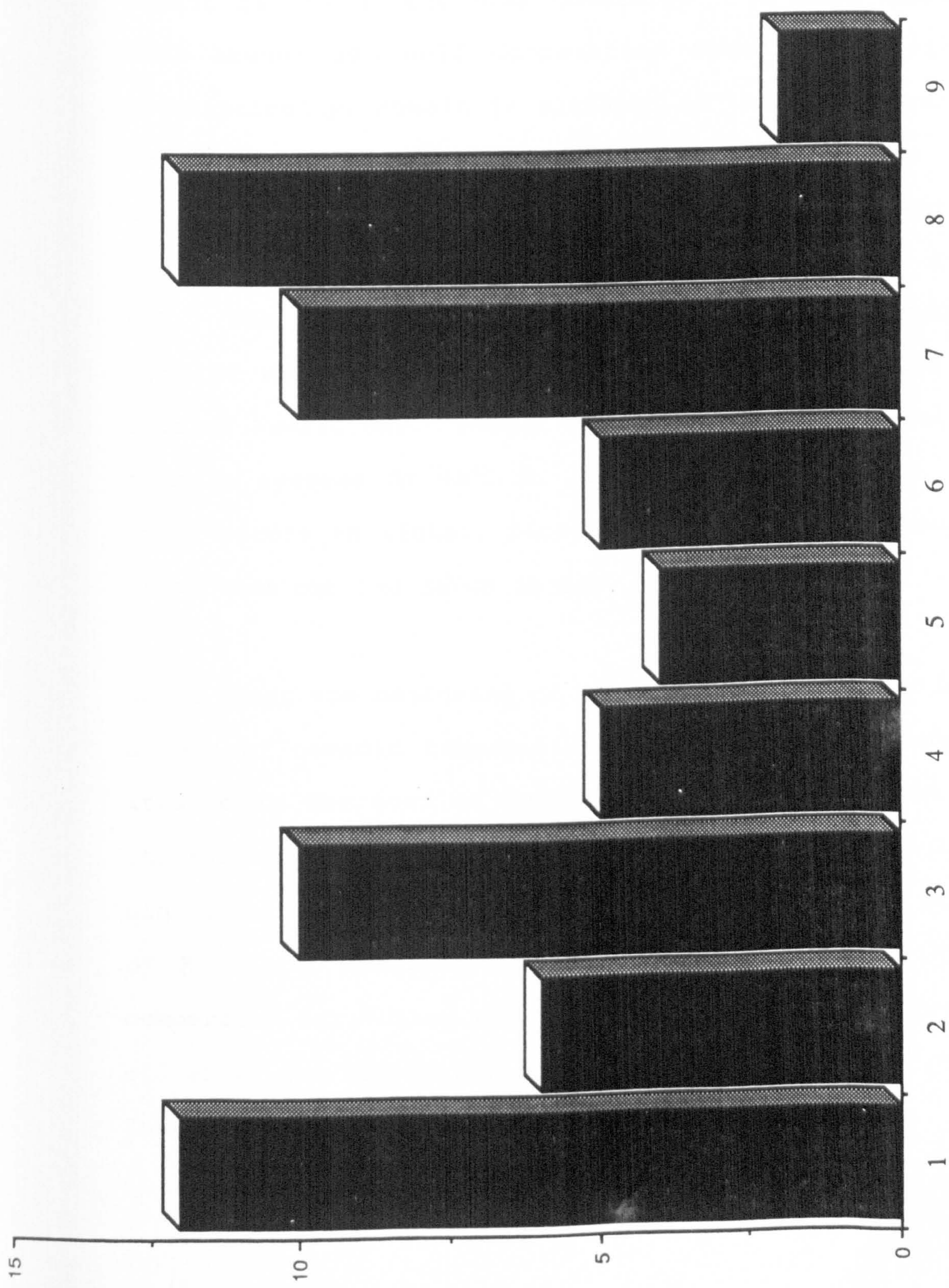


Figure 5.6 : Reasons for the library users' dissatisfaction

## CHAPTER SIX

### KUWAIT BACKGROUND

#### 6.1 General Background

Kuwait is one of the Arab countries. It is a member of the Arab League and Gulf Cooperation Council Countries (GCC). Geographically, Kuwait is situated on the north western coast of the Arabian Gulf between latitudes  $28^{\circ}$  and  $30^{\circ}$ N and longitudes  $46^{\circ}$  and  $48^{\circ}$ E. To the north and northwest is Iraq and to the south and south west is Saudi Arabia, see Figure 6.1. The area of Kuwait is  $17,818 \text{ km}^2$  (6960 square miles) much of which is desert. Kuwait City lies at the southern side of Kuwait Bay. Kuwait has a desert climate which varies from an average of  $45^{\circ}\text{C}$  in July to  $8^{\circ}\text{C}$  in January. Rainfall which occurs in winter, fluctuates greatly. The annual figure is between one and seven inches.

Until about the beginning of the eighteenth century Kuwait was a land of nomadic communities. In 1711 the Al-Sabah family arrived in the town of Kuwait which had been established by the Bani Khalid tribe about forty years earlier. In 1752 Sabah bin Jaber (of the Al-Sabah family) was elected the first ruler of Kuwait. Pearling, fishing and trade became the major commercial activities and these continued until the advent of oil after the Second World War. In 1946 the first shipment of Kuwaiti crude oil was made.

In 1961 Kuwait became fully independent from Britain and in July of that year Kuwait became a member of the Arab league. In 1963 the country became a member of the United Nations Organisation. In 1990, before the Iraqi invasion, the population of Kuwait was 2,142,600. In 1995 the total population was estimated at 1,505,158. Before the Iraqi invasion on the second of August 1990 Kuwait had become one of the largest oil producing countries of the world and one of the richest. In 1989/90, for instance, the oil revenues were estimated at 1,941,969 thousand Kuwaiti Dinars (K.D 1 = approx. £ 2), (Annual Statistical Abstract, 1993).

## **6.2 Education System in Kuwait**

Education is one of the top budget priorities of the Kuwaiti Government which has maintained very large spending programmes. The foundations of the present education system were laid in the 1950's, when schools at all stages were established, although the first school had been opened as early as 1912.

The two government bodies responsible for providing education services in Kuwait are the Ministry of Education and the Ministry of Higher Education. The Ministry of Education is responsible for the supervision of public and private education up to the twelfth grade. Education services in Kuwait are free. School attendance is compulsory for all children between the ages of six and fourteen i.e. the primary and intermediate schools.

At present the public school system in Kuwait is divided into three stages of four years each, primary, intermediate and secondary. The starting age at the primary school is six, but the Ministry of Education provides a free pre-school service through its kindergartens for Kuwaiti children between the age of four and six.

Another important aspect of education is that of adults who have missed schooling at an earlier age. Connected with this is the programme for the eradication of illiteracy. The needs of the handicapped, blind and deaf are met in special education schools, primary, intermediate and vocational.

The Ministry of Higher Education is responsible for the supervision of two educational institutes namely, Kuwait University (KU) which is responsible for higher academic education and the Public Authority for Applied Education and Training (PAAET) which is responsible for vocational tuition at applied education colleges and training centres. In addition there are Kuwaiti scholarship students who were sent abroad to study, mainly in USA and UK.

#### **6.2.1 Kuwait University**

Kuwait University was founded in 1966, five years after the state of Kuwait achieved full sovereignty. As one of the first universities in the Gulf it became a centre of Higher Education for students from neighbouring countries. The Kuwait University Colleges are located in five separate campuses throughout Kuwait City. However, there is a plan to

locate all the Colleges on one campus, at the Shidadiya area outside Kuwait City. The credit hours course system, is used in both KU and PAAET. This is similar to the American system.

At present, Kuwait University consists of eleven colleges with 15471 students, 673 academic staff, and a budget of K.D. 56,450,000. These colleges are: College of Arts, College of Commerce, Economics and Political Science, College of Engineering and Petroleum, College of Law, College of Sharia and Islamic Studies, College of Medicine, Faculty of Allied Health Sciences and Nursing, College of Science, College of Education, Girls College and College of Graduate Studies. Table 6.1 shows the number of academic staff in each college in the KU, while Table 6.2 shows the number of students in each of these colleges.

The College of Graduate Studies was established on 1977. After two years of preparation, the first group of postgraduate studies students was accepted in September 1979. The College now offers Master degree programmes in the following specialisations: Chemistry, Mathematics, Physics, Biochemistry, Geology, Zoology and Botany. The College of Medicine offers Masters degrees in Anatomy and Physiology, and Philosophy in the College of Arts.

### **6.2.2 The Public Authority for Applied Education and Training**

This Authority was established in 1982 to develop national manpower and to provide teachers and technicians. It consists of two sectors, Applied Education (formerly Technical and Vocational Education) and Training.

In addition to Vocational education, the Public Authority consists of the following Colleges : the College of Basic Education, the College of Commerce Studies, the College of Health Sciences, and the College of Technical Studies. The Public Authority Colleges offer two year programmes and admit students with secondary diplomas. However, in 1986 the College of Basic Education extended its programme to four years. At present, there are 12968 students studying in these colleges, with 708 teaching staff. Table 6.3 shows the number of academic staff in each college in the PAAET, while Table 6.4 shows the number of students in each of these colleges.

### **6.3 Higher Education Libraries in Kuwait**

Higher Education libraries in Kuwait are organised under two separate institutions: Kuwait University and the Public Authority for Applied Education and Training. These libraries are distributed in their colleges and each college has its own library.

### 6.3.1 Goals and Objectives

The objectives of these Higher Education libraries may be summarised as follows:

1. To provide an adequate library service for students and academic staff to meet study and research requirements.
2. To serve the Kuwait community by providing library and cultural services to meet local needs and by collecting materials concerning the national heritage and disseminating information about it.
3. To acquire the maximum amount of selected scientific and cultural literature and to exchange the University's publications for those of foreign scientific institutions and Universities, particularly in the Arab world.
4. To collaborate with other libraries in Kuwait by training their staff in modern library methods as required.

### **6.3.2 Administration and Organisation**

Higher Education libraries both in KU and PAAET are organised under the supervision of the Libraries Department in each of these institutions. The Department is headed by a Director. The library Director reports to one of the University Rector-Assistant, in KU or one of the Deputy-General Directors in PAAET who is also responsible for libraries affairs, see Figures 6.2 and 6.3.

The Libraries' Department acts as a headquarters for the college libraries and it has responsibility for the administration of technical services, personnel, and the college libraries.

In addition, each College library is supervised by a chief librarian. In KU there is also a library committee composed of a cademic staff including the College Chief Librarian. The Committee's function is to advise on library policies and service.

### **6.3.3 Technical Services**

Technical services are centrally organised under the Library Department in the following major divisions:

- Acquisitions
- Cataloguing and classification
- Gift and Exchange
- Audio-Visual
- Periodicals



The selection of books and periodicals is made by the academic staff through the college libraries. Acquisition of foreign books, which are the greater part of the University library's collections, is mainly made through purchase from foreign publishers, particularly from Europe and the USA.

Books arrive with their LC catalogue cards included. Arabic books are obtained through local publishers and from other Arab countries. However, some publications come through gift and exchange programmes. Each college library is provided with one or two volumes of each title required.

The Dewey Decimal Classification System is used for foreign books and the Modified Dewey Decimal Classification for Arabic books. However in recent years, the LC classification system has been adopted for the new foreign books collection. Books are catalogued according to Anglo-American Cataloguing Rule, and the Library of Congress printed card catalogues.

#### **6.3.4. User Services**

These libraries provide basic traditional library services during their opening times which are every day except holidays, from 8.00 am to 9.00 pm in KU and only until 2.00 pm in PAAET. These services include reference services, borrowing services, and circulation services which allow students to borrow up to five books for two weeks, subject to renewal. Academic staff may borrow up to fifteen books for the duration of the semester.

The libraries offer photocopying services free of charge for staff and with a discount for students. They offer microfilm reading, microcopying facilities, and bibliographical services.

#### 6.3.5 Iraqi Invasion Impact

The Iraqi invasion in 1990 caused severe damage to the libraries and information centres in Kuwait and hindered their development in general and the academic libraries in particular. These academic libraries lost almost all their stock which was either looted or destroyed, for more details see Abdel-Motey and Al-hmood (1992) and Salem (1992). Rebuilding is still taking place in these libraries, see Chapter 8.

**TEXT BOUND INTO  
THE SPINE**

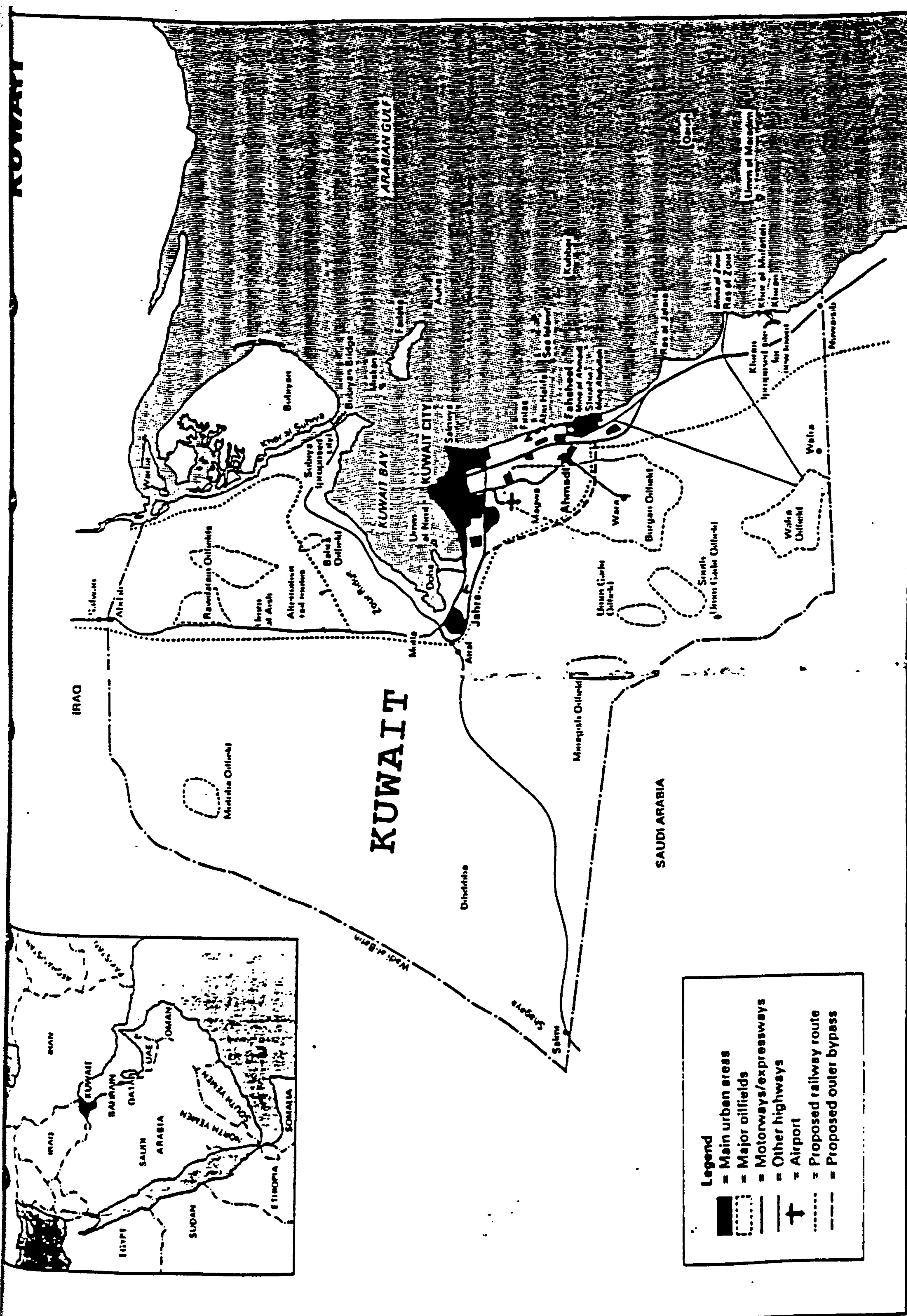


Figure 6.1 : Kuwait map

College	Academic Staff
Art	128
Commerce	82
Education	60
Science	149
Engineering	98
Law	35
Sharia'a	23
Medicine	90
Allied Medicine	11
<b>Total</b>	<b>673</b>

**Table 6.1 : Number of academic staff in Kuwait University.**

College	1st Stage		2nd Stage		3rd Stage		4th Stage		Others		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Commerce	641	666	304	473	168	279	113	222	1	0	2867
Law	185	193	57	57	50	63	74	75	1	0	755
Arts	178	812	75	491	43	288	86	318	3	1	2277
Science	516	878	165	366	105	293	140	322	5	1	2791
Medicine	41	37	82	88	2	1	107	94	34	42	528
Engineering	722	424	209	173	186	127	179	113	41	27	2201
Allied Health	15	151	19	89	18	81	19	72	0	1	465
Education	193	969	120	663	56	445	55	479	0	2	2982
Sharia'a	106	189	50	128	27	44	24	52	1	0	621
<b>Total</b>	<b>2597</b>	<b>4319</b>	<b>1081</b>	<b>2528</b>	<b>655</b>	<b>1621</b>	<b>779</b>	<b>1747</b>	<b>86</b>	<b>74</b>	<b>15487</b>

Table 6.2 : Number of students enrolled in the Kuwait university in 1993/94.

<b>College</b>	<b>Total</b>
<b>Basic Education</b>	<b>384</b>
<b>Business Studies</b>	<b>244</b>
<b>Health Sciences</b>	<b>63</b>
<b>Technological Studies</b>	<b>200</b>
<b>Total</b>	<b>891</b>

**Table 6.3 : Number of Academic staff in the Colleges of the Public Authority for Applied Education and Training, 1993/94.**

College ( Male )	Enrolled	Registered	Total
Basic Education	201	1160	1361
Business Studies	384	1100	1484
Health Sciences	14	64	78
Technological Studies	350	1600	1950
<b>Total</b>	<b>949</b>	<b>3924</b>	<b>4873</b>
College ( Female )	Enrolled	Registered	Total
Basic Education	341	3211	3552
Business Studies	597	2533	3130
Health Sciences	40	336	376
Technological Studies	40	289	329
<b>Total</b>	<b>1018</b>	<b>6369</b>	<b>7387</b>
<b>Sum Total</b>	<b>1967</b>	<b>10293</b>	<b>12260</b>

**Table 6.4 : Number of students in the Colleges of the Public Authority for Applied Education and Training, 1993/94.**



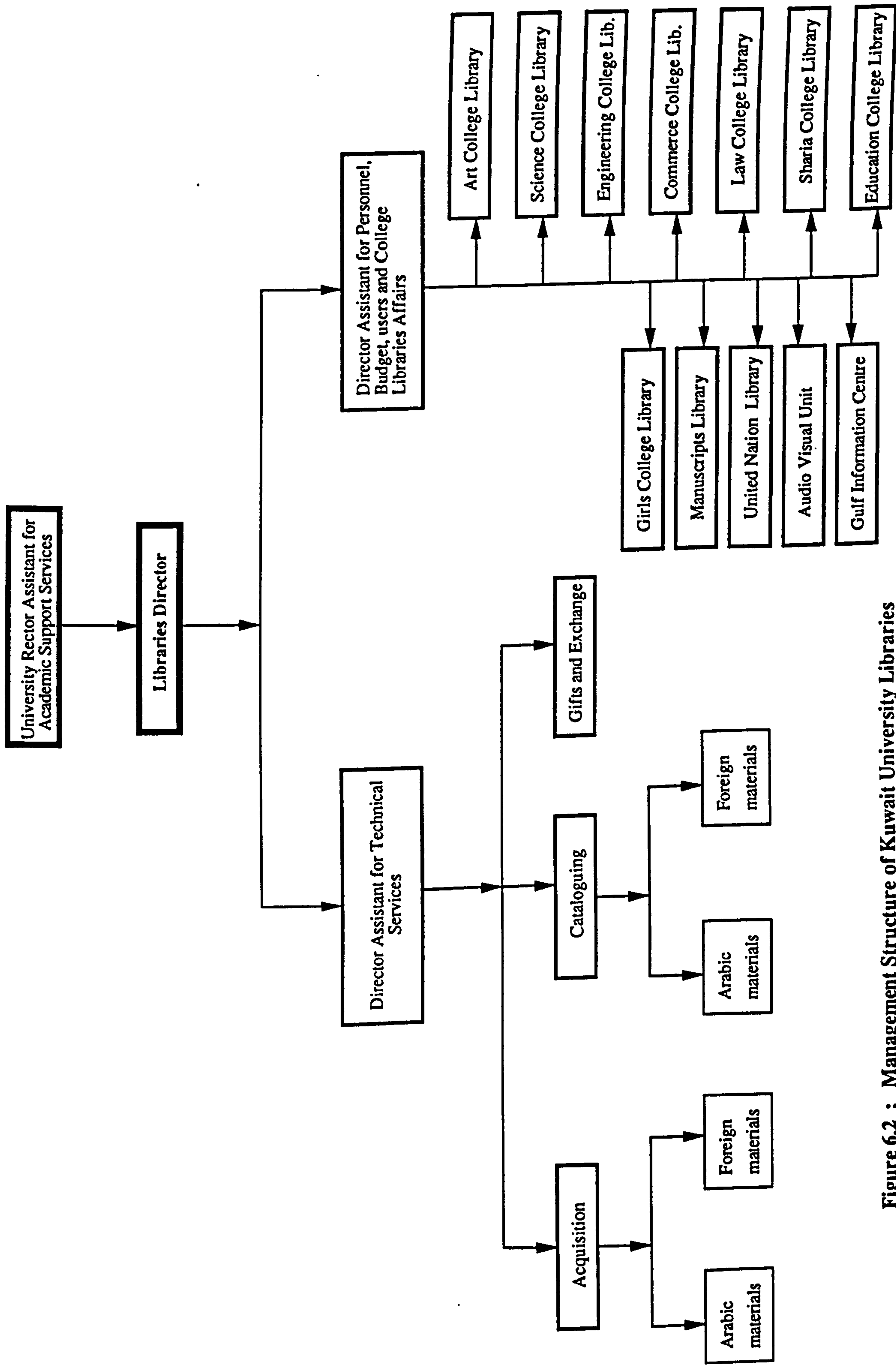


Figure 6.2 : Management Structure of Kuwait University Libraries

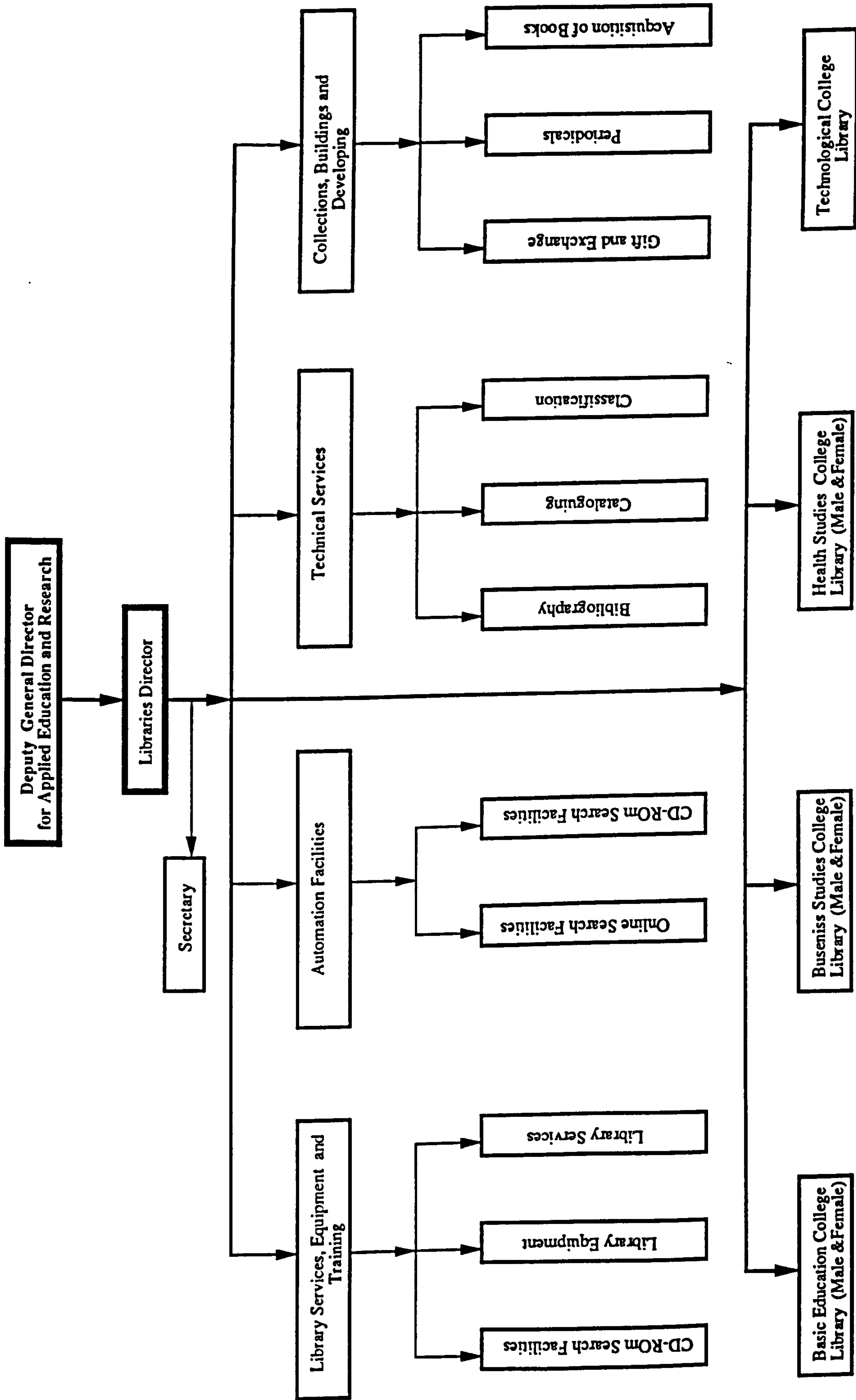


Figure 6.3 : Management structure of PAAET Libraries

## **CHAPTER SEVEN**

### **SURVEY OF THE HIGHER EDUCATION LIBRARIES IN KUWAIT**

#### **7.1 Introduction**

This chapter describes the procedures of the comprehensive survey which was conducted into the Higher Education libraries in Kuwait. Three separate visits for field work in Kuwait were made, using three different methods to collect the relevant data and information. These were questionnaires, interviews and observations. Librarians, library users and library authorities were the target groups involved.

#### **7.2 Purpose of the Survey**

The main purposes of this survey can be summarised as follows :

1. to investigate the current situation regarding IT, Arabisation, cooperation and telematics
2. to identify the main factors which may be hindering IT, Arabisation, cooperation and telematics in academic libraries in Kuwait.
3. to assess the user satisfaction in the current library services and to assess the user needs and attitudes in IT, Arabisation, cooperation and telematics.
4. to assess the librarians' and library

authorities' opinions and attitudes towards IT, Arabisation, cooperation and telematics.

5. to identify any mismatch between the perception and aspiration of users and library authorities.

### 7.3 Scope of the Survey

The survey was limited to the Higher Education libraries in Kuwait and since KU and PAAET are the only two Higher Education institutes in the country, their libraries were the subject of this survey. In KU, only the five main colleges of Commerce, Arts, Science, Engineering, and Education were surveyed. These five colleges have been selected for the following reasons:

1. They have the largest and the most developed university library system in KU.
2. They are the major colleges in KU.
3. They have comprehensive programmes which means a large population of academic staff and students with very different backgrounds, using the libraries.
4. Each one of these colleges is located in a different part of the country.

All four PAAET colleges were included in this survey. These are the Basic Education, Business Studies, Technological Studies, and Health Sciences Colleges.

## 7.4 Survey Population

The people involved with the academic libraries of KU and PAAET formed the target population of this survey. This includes library authorities, librarians and library users including academic staff and students, both postgraduate and undergraduate, in those colleges mentioned above. It should be noted, however, that PAAET does not yet have postgraduate students in its education system.

All library authorities, as well as all librarians were surveyed. However, a sample of library users was surveyed due to their large population number. A 10% quasi-random, systematic sample was taken of the academic staff, together with all postgraduate students. All undergraduate students who are in the third year of their study in some selected colleges and disciplines, were surveyed which represents a sample of their total population. They were chosen because they have experience in using their library, provide wide range of disciplines and by surveying entire subgroups a high response rate should be achieved, see Tables 7.1, 7.2 and 7.3. The following are the numbers in each group of the population :

### I. KU Libraries :

#### 1. Library authorities

deputy rector = 1

libraries' director = 1

college deans = 5

2. Librarians = 25

3. Academic Staff = 53

4. Students (post and undergraduate) = 490

## II. PAAET Libraries :

### 1. Library authorities

deputy rector = 1

libraries' director = 1

college deans = 4

2. Librarians = 25

3. Academic Staff = 72

4. Students = 365

## 7.5 Survey Methodology

Three survey methodologies comprising questionnaires, interviews and observations were used to collect the required data and information, see Figure 7.1.

### 7.5.1 Questionnaires

Four different questionnaires were used in this survey. These were the library profile questionnaire, librarians' questionnaire, academic staff questionnaire and students' questionnaire. See Appendix 3.

The library profile questionnaire sought data and information on the current status in these libraries, regarding library materials, services and librarians in general and their future plans for IT, Arabisation, cooperation and telematics in particular. The librarians' questionnaire provided data and information about librarians' opinions and views on the main obstacles hindering the introduction of IT, Arabisation, cooperation and telematics in their libraries and their

opinions and attitudes to the importance of introducing such facilities.

In addition, demographic data were collected for each librarian.

The academic staff questionnaire provided data and information about the needs of the academic staff and satisfaction with the current library services and facilities; their opinions and attitudes towards IT, Arabisation, cooperation and telematics facilities; and demographic data for each academic staff member. The students' questionnaire provided data and information about the needs of the students, both postgraduate and undergraduate, and their satisfaction with the current library services; their opinions and attitudes towards IT, Arabisation, cooperation and telematics facilities; and demographic data for each student.

#### **7.5.2 Administration of Students' Questionnaire**

The Basic Education College, where the author works as a lecturer, was chosen first. The Dean of the College was contacted and a letter of permission signed by him was obtained. This letter authorised the author to do the survey and asked for help and cooperation from the academic staff. Term schedules were collected from each department under the survey. These schedules contained various pieces of information including the course codes, course titles, lecturers' names, the time and place of lectures.

Courses in the 300s codes were chosen, which represented courses for third year undergraduate students and the information above was written down about these courses. Afterwards, each course lecturer was contacted. The author introduced himself, showed the Dean's letter, and asked to have the last 20 minutes of the lecture time to distribute the questionnaire to the students while they were in the class. Being with them until they completed it, could guarantee the return of their responses, and it enabled the author to explain any questions in the questionnaire which had been misunderstood. All academic staff were willing to help and cooperate. Many gave the author the whole lecture time and others gave half the lecture time. The author took a box of chocolates for students during the questionnaire time, as an expression of appreciation and to encourage them to carefully consider their answers.

No serious difficulties were encountered during the administration of the survey, and the author succeeded in collecting 90% of the responses of undergraduate students and 89% of the postgraduate students' responses, see Table 7.2.

Since the number of non-responses is very low, there should be no question of bias in the survey. All the responses to the above questionnaires were then transferred onto spreadsheets and all the data was inserted in a computer in order to be analysed by the SPSS package.



### **7.5.3 Structured Interviews**

Library authorities such as library directors, rector deputies for library affairs and college deans in these institutions were interviewed to determine their views, opinions and attitudes and to discover any mismatching with the users. Therefore, prepared structured interviews were used in this regard, see Appendix 4.

### **7.5.4 Structured Observations**

A prepared structured observation check-list was also used as further method to collect data and information needed. Information recorded included the status of these libraries after the Iraqi invasion, the level of recovery and rebuilding after the liberation, monitoring library services in general, see Appendix 5.

## **7.6 Field Work Visits**

### **7.6.1 The First Field Work Visit**

The first field work visit took place in June 1993, lasted two weeks. It was made as a pilot survey and as a preliminary study for these libraries, to discover the current status, especially after the war, and to prepare for the following field work visits for the comprehensive survey of these libraries. The main aims of that first visit were :

1. to obtain libraries' cooperation for the future study.
2. to collect base data for each academic library

3. to identify operational contact people and make practical arrangements
4. to assess the current situation in the academic libraries.

A short questionnaire and interviews with library directors and observations were used during that visit to achieve these aims. The outcome of that visit can be summarised as following: (i) permission was obtained from the library authorities for future cooperation in future visits; (ii) data and information on library users especially the academic staff in both KU and PAAET were collected according to their discipline/college; (ii) base data were collected and useful information materials were also collected such as statistical documents and reports.

#### **7.6.2 The Second Field Work Visit**

The second visit lasted for two months and was made during August and September 1994. The aims of this visit were:

1. to conduct a questionnaire survey of the librarians
2. to conduct a questionnaire survey of the academic staff in both KU and PAAET.
3. to collect the factual data and information on KU and PAAET libraries to produce a library profile.
4. to collect the data on the student population required for the next visit.
5. to make observations on the libraries.

### **7.6.3 The Third Field Work Visit**

The third field visit also lasted for two months and made during November and December, 1994. The aims of this visit were:

1. to conduct the students' questionnaire survey in both KU and PAAET. This included postgraduate and undergraduate students.
2. to conduct interviews with the library authorities in KU and PAAET.

### **7.7 Survey Questions**

Kuwait academic libraries are now in the process of rebuilding and recovery after the Iraqi invasion. It can be argued that it is an appropriate time to provide these libraries with adequate IT, Arabised systems, cooperation and telematics. Thus, and in the light of the AC study, it was decided that the Kuwait study should focus on collecting data which would provide insights into the following major issues:

1. What is the current state of IT, Arabised library systems, cooperation and telematics in Kuwait Higher Education libraries?
2. Is there a lack of satisfaction among the library users with the current library services, regarding the introducing of IT, Arabisation and cooperation and telematics?

3. Is there a mismatch between the perceptions and aspirations of users and library authorities?

## **7.8 Survey Results**

The results of the analysis of this comprehensive survey will be presented in the next chapters. Chapter Eight will evaluate the current status of KU and PAAET libraries. Chapter Nine will examine and discuss the opinions and attitudes of the all different groups involved, including librarians, library users (all sub-groups i.e. academic staff, postgraduate and undergraduate students) and library authorities.

Finally, Chapter Ten will discuss the outcome of the whole study, including the main findings, the main factors affecting IT and the main conclusions. It also presents suggestions on issues for further research, and finally it will evaluate how the study of Kuwait libraries might be applicable to the Arab countries.

KU		PAAET	
College	Academic Staff	College	Academic Staff
Art	128	Basic Education	318
Commerce	82	Business Studies	184
Education	60	Health Studies	46
Science	149	Technological Studies	160
Engineering	98		
<b>Total</b>	<b>517</b>		<b>708</b>

**Table 7.1 : Academic staff population in KU and PAAET**

			Target Number	Actual Response	Percentage
KU	College of Arts	Arabic Language	36	32	89%
		Sociology	32	27	84%
	College of Science	Mathematics	77	71	92%
		Chemistry	67	59	88%
PAAET	College of Basic Education	Arabic Language	124	112	90%
		Mathematics	107	100	93%
	College of Technological Studies	Production Engineering	63	55	87%
		Building Construction	71	64	90%
Total			577	520	90%

(a) : Undergraduate Students

			Target Number	Actual Response	Percentage
KU	College of Art		8	8	100%
	College of Science		60	52	87%
	College of Engineering		117	105	90%
	College of Medicine		5	3	60%
	College of Law		62	59	95%
	College of Sharia		26	21	81%
Total			278	248	89%

(b) : Postgraduate Students

Table 7.2 : Student sample, target numbers, actual responses and percentage rates

	Authorities	Librarians	Users	
			Academic staff	Students
<b>KU</b>	Total	25	517	13118
	Sample	25	53	490
<b>PAAET</b>	Total	25	708	12260
	Sample	25	72	365

**Table 7.3 : Population surveyed in KU and PAAET libraries**

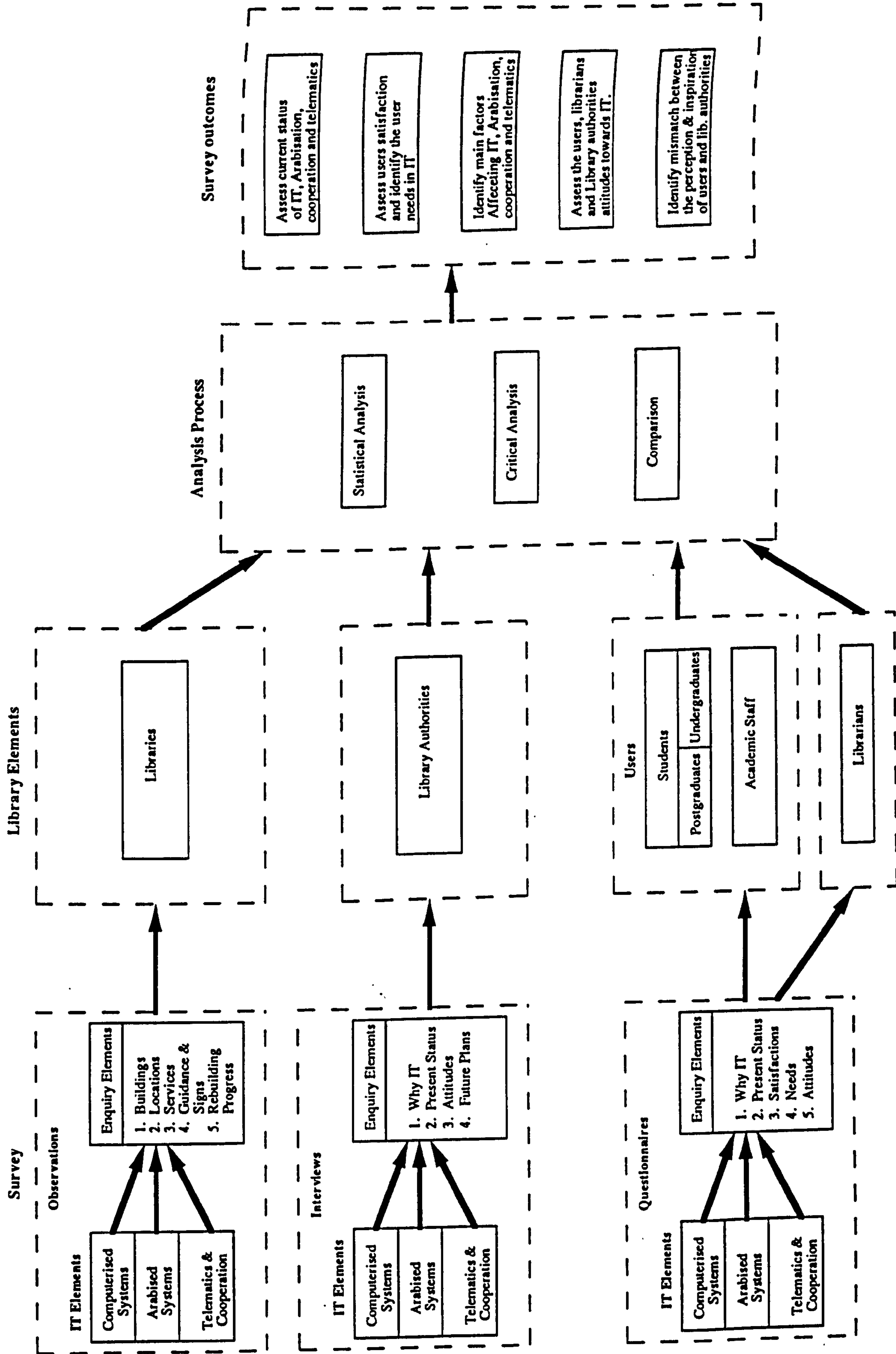


Figure 7.1 : Flow chart of the survey of the Higher Education Libraries in Kuwait



## **CHAPTER EIGHT**

### **CURRENT STATUS OF THE HIGHER EDUCATION LIBRARIES IN KUWAIT**

#### **8.1 Introduction**

Higher Education libraries in Kuwait, namely in KU and PAAET, have the largest library provision in the country, in terms of budget, stock and buildings, and they have the largest number of librarians and users. Users of these libraries are among the most educated people in the country and their current and future needs should be considered in view of the key role these users will have in the economic and the cultural life of the community.

This section provides an in-depth analysis of the current status of library staff, users, collections, buildings and budgets in the Higher Education libraries in Kuwait. It also analyses the current status in these libraries regarding the uptake of IT, Arabisation and cooperation and telematics and their future plans in relation to these developments.

#### **8.2 Current Status of Library Staff, Users, Collections, Buildings and Budgets**

##### **8.2.1 Library Staff**

In the Kuwait University Libraries currently, the total number of library employees is 157. 82 are Kuwaitis and 75 non-

Kuwaitis. 35% are qualified librarians, according to accepted standards in Kuwait, i.e. those who have B.A./B.Sc. though not necessarily in Library Studies. Some of those considered to be qualified may have completed a two year course together with some years of library experience. Prior to the Iraqi invasion, the total number was 205 employees and only 61 of these were Kuwaitis.

In PAAET College Libraries currently the total number of library employees is 48. 39 of them are Kuwaitis and 9 non Kuwaitis. 25% are qualified librarians. However, before the invasion, the total number was more than it is now, previously reaching 75 library employees, only 30 of them being Kuwaitis, see Table 8.1.

It is clear that the manpower in these libraries has been reduced after the liberation of Kuwait in 1991. After liberation, the Kuwait Government reduced the number of non-Kuwaiti employees to one third in each department. It also restricted the recruiting of such employees from pro-Iraq countries, and this caused shortages. This is in spite of the continued increase, as noted in Chapter Six, in the number of library users, expanded educational programmes including postgraduate studies, and the increase in user demands for more new library services. This suggests that libraries in both KU and PAAET may suffer from manpower shortages, especially of a professional kind. This shortages were identified in the interviews with library directors in PAAET Libraries, for

example, where they suggested the need for up to 30 more librarians.

### **8.2.2 Library Users**

Academic libraries in both KU and PAAET are used by all the academic staff and students (both undergraduate and postgraduate) in both institutes. However, PAAET has no postgraduate students as yet. In KU the total number of potential library users reached 15,487. 673 of them were academic staff and 14,814 were students. 248 of these were postgraduate. In PAAET the total number of potential users reached 12,968. 708 of them were academic staff and 12,260 were students, see Table 8.2.

### **8.2.3 Library Collections**

The Iraqi invasion in 1990 did severe damage to all library and information centres in Kuwait and hindered their development. This included the academic libraries. KU and PAAET libraries who lost almost all of their collections. However, since liberation, Kuwait is making a fast recovery, rebuilding its library and information systems. At the present time it is understood, from the interviews and observations, that most of the libraries have partly returned to normality.

The current status of library collections in KU libraries is that they have reached a total of 131,250 book volumes, including 98,000 titles. Arabic books make up 63,250 volumes with 38,000 titles, while non-Arabic books comprise 68,000 volumes with 60,000 titles. However, before the invasion, the

size of the collections was larger, totalling 750,000 book volumes with 475,000 titles for both Arabic and non-Arabic books. At present, the periodical collections consist of 6,580 titles which are acquired by subscription. 3,700 of these are non-Arabic. Before the invasion, the total was 9,050 periodical titles with 5,500 of these being non-Arabic.

In PAAET libraries, a recent count showed a total of 60,491 book volumes. 45,489 of these are Arabic and 15,002 non-Arabic. These libraries subscribed to 596 periodical titles. 552 of them are Arabic periodicals, see Table 8.3.

#### **8.2.4 Library Buildings**

Academic libraries are scattered among the old colleges of KU and PAAET since there are no unified campuses for either of the institutes. Most of these institute buildings are old and some are basically school buildings. Most library buildings in KU and PAAET are inadequate since they were not purpose-built, of limited size and poorly designed. So, for example, they provide limited facilities for handicapped users. Therefore, with the increased numbers of users and their needs, most of them are too small. They are also in unsuitable locations. Many libraries occupy only part of an existing building and there is no room for expansion as the number of users, collections and equipment increase. This was noted from library observations and interviews. Some of these libraries are in a bad state of repair. For example, the second floor of the Arts College Library in KU is not strong enough to hold the book shelves. The Technological Studies Library in PAAET had

water leaking from the roof. Therefore, problems of storage and the availability of reading spaces arise.

The Library Department Headquarters in both KU and PAAET are claimed to be situated in buildings which are too small and which are not purpose-built. In PAAET, the library director claims that the design of the Library Department Headquarters is not compatible with their needs as it is too small and the lifts do not reach the basement where their materials are stored. However, it is understood that four large new buildings will be soon constructed for KU libraries in different locations and this may help to improve the situation in KU libraries.

#### **8.2.5 Library Budgets**

Library budgets in both KU and PAAET are small in relative terms to library budgets in Western institutions. These budgets represent less than 2.0% in each institution from the total KU or PAAET budget. KU Libraries' budget for the 1993/94 academic year is 865,500 Kuwaiti Dinar (KD). This represents only 1.9% of the total University budget. PAAET Libraries' budget for the same academic year is 766,700 Kuwaiti Dinar (KD). This represents only 1.6% of the total PAAET budget. Most of the budgets are spent in purchasing books and periodicals. Only a small amount goes to the development of IT facilities.

### **8.3 Current Status Regarding Uptake of IT, Arabisation and Cooperation and Telematics**

#### **8.3.1 IT and Arabised Library Systems**

Academic libraries in both KU and PAAET have virtually no computerised library system so far. Therefore, none of the following functions have been automated: acquisition, cataloguing, online catalogue searching (OPAC), circulation and periodicals control. However, PC computers are used in some of the libraries and in the Library Department Headquarters in KU and PAAET partly to store data on new books and to print the card catalogue. All these libraries are equipped with photocopying and fax machines. Some libraries in KU provide CD-ROM and Online external database services. In PAAET these facilities are located in the Library Department Headquarters. These libraries lack other important IT facilities such as microcomputers, videotex, teletex and other new audio-visual systems. Moreover, these libraries completely lack any Arabised computer-based library systems.

Recently, KU Libraries have signed a contract to install the VTLS integrated library system and it was promised that this would be Arabised. KU considered other systems other than VTLS such as ORACLE and DOBIS/LIBIS. The VTLS system was chosen after KU established a special committee for this purpose. The committee produced a specification of requirements and identified criteria for selection of a suitable system. The criteria included price, software, hardware, maintenance, documentation, and company experience.

However, PAAET is not yet involved because they have reservations about the system since it is not yet Arabised and their main frame system is not compatible with the proposed system. PAAET will be using an Arabised programme called Assfar, supplied by a local dealer, to store bibliographies and print the card catalogue.

### **8.3.2 Cooperation and Telematics**

There is no cooperative telematics via E-mail, OPAC or CD-ROM services between KU and PAAET libraries nor among libraries in the same institute. Moreover, KU and PAAET libraries have no official cooperation between them in activities which are typically the subject of cooperation in libraries elsewhere :

- Cooperative acquisition of library materials.
- Preparation of a standard list of periodicals or microform.
- Indexing, abstracting or current awareness services.
- Interlibrary loan of books or photocopied materials.
- Delivery service system, such as a vehicle to distribute library materials among libraries.
- Coordination between library directors.
- Joint training programmes, seminars and conferences, visiting and exchange of experiences.

There is no official agreement between KU and PAAET for effective cooperation and coordination. Official cooperation and networking within these libraries at the national level is

absent. It is also not being considered in the foreseeable future. Each institute works independently.

### **8.3.3 Future Plans**

These libraries indicate that they are intending to introduce more IT in their libraries in the near future. This can be noted in KU libraries with their recently signed contract for a computerised library system with VTLS, including Arabisation. Also, KU intends to connect most of its college libraries with CD-ROM stations. However, from the data collected on PAAET libraries it is difficult to envisage a similar plan being put into operation in the next three years. Neither is any form of cooperative telematics nor effective cooperation between KU and PAAET libraries planned for the near future.

## **8.4 Summary**

Although Kuwait has only two academic institutions for higher education, the current situation of their library staff, collections, buildings and budgets is relatively underdeveloped. The current situation of their libraries regarding IT, Arabisation, and cooperation and telematics is particularly limited. The present traditional library systems used in these libraries may be unable to meet the future needs of their users who are increasing in their number and their demand for new services.

The Iraqi invasion caused severe damage to Kuwait libraries and information centres in general and to the academic libraries in



particular. These libraries have lost almost all their materials and equipment. The rebuilding of academic libraries is still taking place and is not yet complete. Therefore, this time is considered to be a suitable opportunity to provide these libraries with the new IT, Arabisation, cooperation and telematics systems, since the electronic library within the academic environment is the vision of the future.

The next chapter will examine the views of three groups as to factors affecting the implementation and introduction of IT, Arabisation, cooperation and telematics. These are: the library users, the librarians, and the library authorities.

	Professionally qualified	Others	Total
KU	55 (35%)	102 (65%)	157
PAAET	12 (25%)	36 (75%)	48

**Table 8.1 : Library staff number (full-time) in KU and PAAET libraries**

	Academic staff	Students		Total
		Postgraduate	Undergraduate	
KU	673	248	14566	15487
PAAET	708	0	12260	12968

**Table 8.2 : Number of potential library users in KU and PAAET libraries**

	Book (Volumes)			Periodical (Titles)		
	Arabic	Non-Arabic	Total	Arabic	Non-Arabic	Total
KU	63250	68000	131250	2880	3700	6580
PAAET	45489	15002	60491	552	44	596

**Table 8.3 : Number of books and periodicals in KU and PAAET libraries**

## CHAPTER NINE

### LIBRARIANS, LIBRARY USERS AND AUTHORITIES IN KUWAIT HIGHER EDUCATION LIBRARIES

This chapter presents survey analyses for the main library groups i.e. the librarians, library users and library authorities. This includes demographic data, IT background, satisfaction, needs, opinions and attitudes.

#### 9.1 Librarians

This section analyses the librarians' demographic data, background in IT, their opinions and attitudes towards introducing IT, Arabisation, cooperation and Telematics and the main factors hindering such introduction.

##### 9.1.1 Librarians Demographic Data

All librarians in KU and PAAET academic libraries under the study, were surveyed. Their total number was 50 librarians, 25 in both KU and PAAET. The important demographic data about them was collected. This included post position, age, qualifications and library experience.

The survey shows that the majority of librarians (37, 74%) are in librarian and assistant librarian post positions and only 6 (12%) are chief librarians, see Figure 9.1.

Most of the librarians (29, 58%) are young, less than 36 years old, and 21 (42%) are over 45. Surprisingly, the survey shows

that no librarians are in the middle age bracket between 36-45 years, see Figure 9.2.

The survey shows that almost half of the librarians (23, 46%) have no qualifications in Library Science. 36 (72%) have BA/B.Sc. qualifications, 20 of these being in Library Science and only two librarians have M.Sc. and one librarian has a Ph.D. qualification in Library Science, see Figure 9.3.

Although more than half of the librarians (27, 54%) have over six years library experience there are 15 (30%) who have less than 3 years library experience, See Figure 9.4.

#### **9.1.2 Librarians' Background in IT**

Librarians were questioned regarding their background in IT in general and in library computer-based systems in particular. The survey shows that almost half (24,49%) of the librarians have been on occasional training courses in computer-based systems in the last three years, see Figure 9.5. Almost half of them (23,46%) indicate that they are, always or often, using computer-based systems in their daily work, see Figure 9.6. Table 9.1 shows librarians' experience in computer-based system such as PC, mainframe, workstation and database. This Table indicates that librarians have more experience in PCs than the others.

However, more than half (30,60%) of the librarians have never or seldom used a library computer-based system in the last three years, and only 13 (26%) have used such systems at all,

see Figure 9.7. Table 9.1 shows the librarians current experience in library computer-based systems, such as OPAC, CD-ROM, online databases, and telematics. Less than half of librarians (47.9%) have never or seldom used CD-ROM stations, while most of them (between 68.8%-80.4%) have never or seldom used online databases, OPAC and telematics. This indicates that librarians have more experience in using a CD-ROM facility than the other systems, since over half (52.1%) of them have used it currently, whether always, often or occasionally. This is because CD-ROM facilities have been introduced into some Higher Education libraries in Kuwait in the last few years. In general, the survey shows that librarians in KU and PAAET lack experience in library computer-based systems, especially in OPAC, telematics and online database systems.

### **9.1.3 Librarians' Opinion and Attitudes of Introducing IT, Arabisation and Cooperation and Telematics.**

Librarians were asked to explain their opinions on and attitudes to certain issues regarding the introduction of IT, Arabisation, cooperation and telematics in their academic libraries.

The vast majority of the Librarians (90% or over) believe in the importance or great importance of computerised acquisition, cataloguing, OPAC, computerised circulation, CD-ROM, online external data bases, and microcomputer facilities in improving their library services. Only 2% or less believe it is not important or not very important. They also believe (between 78%-86%) that introducing Audio and Video Systems, videotex and

teletex systems, microform machines and photocopy machines will improve their library services and only 6% or less were against, see Table 9.2.

The librarians were also asked about their opinions and attitudes to the importance of Arabised library systems to improve their library services, see Table 9.3. The vast majority of librarians believe in the importance of an Arabised library computer-based system for their library functions. The survey shows the high percentage among librarians who are convinced of the importance of these functions. Table 9.3 shows that the majority of librarians (86%) believe that Arabised computerised acquisition is important or very important and only 2% disagreed. The majority of librarians (88%) believe that Arabised computerised cataloguing is important or very important and only 2% disagreed. None of the librarians felt that an Arabised computerised cataloguing search (OPAC) is not important, in fact 90% believe it is important or very important.

The majority of the librarians (76%) agreed that Arabised computerised circulation is important or very important and only 2% were against. The majority of the librarians (80%) agreed that Arabised CD-ROM stations are important or very important and only 4% were against. Most of the librarians (70%) agreed that an Arabised online external database is important or very important and only 8% were against. Most of the librarians (74%) agreed that microcomputer facilities with

an Arabised system are important or very important and only 6% were against.

Librarians were also asked to indicate their opinions and attitudes to the following selected statements:

- Electronic libraries will be the future trend of the academic libraries.
- Your library will be capable of training users in IT.
- Computer based systems deserve a high priority in the library budget.
- Your library users are ready for IT.
- You are ready for training and courses to learn new systems in IT.

Whilst the vast majority (92%) agree or strongly agree that electronic libraries will be the future trend of the academic libraries only 64% think their library is capable of providing user education in IT and that their users are ready for IT, see Table 9.4.

The majority of the librarians (76%) agreed or strongly agreed that library computer-based systems deserve a high priority in the library budget, while only 4% disagreed or strongly disagreed and 20% were neutral. Over half (64%) of the librarians agreed or strongly agreed that their library users are ready for IT, while 14% disagreed or strongly disagreed and 24% were neutral. Almost all librarians (96%) agreed or

strongly agreed that they are ready for training and courses to learn new systems in IT. However, there is a sizeable minority of librarians (18%) indicating that their libraries are not capable of supplying user education/training in IT. They also indicate that users are not ready yet to use IT facilities, (14%).

Almost all librarians (96%-98%) agreed or strongly agreed that introducing IT will offer new library services, remove drudgery from librarians, encourage research activities among users, and help to complete library tasks more accurately, more quickly and with greater control. The majority of the librarians (76%-84%) agreed or strongly agreed that introducing IT would help them to cope with the increased number of library users, help them to cope with the increase amount of library materials, help to overcome the shortage of qualified librarians, and help to create more space. While 68% of them agreed or strongly agreed that introducing IT would help them to compete with other academic libraries, 10% were against this and 22% were neutral, see Table 9.5.

Moreover, the librarians were also asked to explain their opinions and attitudes to some negative issues regarding the introduction of IT, Arabisation, cooperation and telematics. The majority of the librarians (88%) disagreed or strongly disagreed that IT is difficult to use. Again, the vast majority of the librarians (94%) disagreed or strongly disagreed that using IT would not save time and effort whilst 69.4% of them



disagreed or strongly disagreed that using IT would increase their work load. See Table 9.5.

Librarians were equally split as to whether IT will expose weaknesses in their collections. This indicates that there is a relatively large minority of librarians who feel that the introduction of IT would expose the weakness of their library collections. This is to be expected after the Iraqi invasion where almost all KU and PAAET library collections were looted or destroyed. Less than half of the librarians (46%) disagreed or strongly disagreed that introducing IT would be expensive, while 14% agreed or strongly agreed and 40% were neutral. See Table 9.5.

The librarians' responses were also cross tabulated with their IT background. The survey shows that none of the librarians who had used IT always or often, agreed that IT is difficult to use while most of those who had no IT experience, who had never or seldom used IT, also disagreed that IT is difficult to use, see Table 9.6. Again, the survey shows that none of the librarians who had used IT always or often, agreed that an Arabised computer-based system is difficult to use. However, the case is different with those who had never or seldom used IT. There were between 23.1% - 30.5% who agreed or strongly agreed that Arabisation is difficult to use, see Table 9.7.

Almost all librarians, regardless of whether or not they have or not have IT experience, disagreed that using IT would not save time and effort, see Table 9.8. Similarly in Table 9.9 a

background in IT does not appear to affect librarians views regarding whether IT will expose weakness of library collections.

Librarians were asked to rate their satisfaction for the current cooperation activities between KU and PAAET libraries. The survey shows that more than half (58%) of the librarians are very dissatisfied or dissatisfied with the current cooperation activities between KU and PAAET libraries, see Table 9.10.

A range of questions were directed at the librarians to discover their opinions and attitudes towards cooperation and telematics in both KU and PAAET libraries, see Table 9.11. The survey results show that all librarians (100%) in both KU and PAAET agreed that there should be effective official cooperation and telematics among Higher Education libraries in Kuwait. Almost all librarians (96%-98%) agreed that effective cooperation and telematics would help solve problems in these libraries. Participation in library cooperation and telematics would improve library services, would enhance library collections and should be an active policy for cooperation and telematics. Only 2% or less disagreed.

The vast majority of the librarians (92%) agreed that participation in library cooperation and telematics would lead to sharing of costs, that there should be a unit for

interlibrary loans in KU and PAAET and there should be an active policy for cooperation and telematics.

The majority of librarians (82%-88%) agreed or strongly agreed that it is feasible to establish a telematics cooperative for Higher Education libraries in Kuwait. They agreed that librarians are ready to use telematics facilities, the new telematics system would reduce the workload of librarians, college libraries in KU should be linked together, college libraries in PAAET also should be linked together, and their academic libraries in both KU and PAAET should be linked together. No more than 6% disagreed with this.

However, although the vast majority of librarians were in favour of telematics and cooperation, fewer (only 64%) feel that users are ready for IT, or that their library has the capability for user education and training. When asked if librarians were ready to take training courses in the new telematics systems, no librarians felt unable to consider retraining.

When the librarians were asked about the negative side of telematics, 75% disagreed or strongly disagreed that telematics is difficult to use and only 18% agreed or strongly agreed. 78% disagreed that telematics is not reliable and only 14% agreed, see Table 9.11.

#### **9.1.4 Librarians' Opinions of the Main Factors Causing Underdevelopment of IT, Arabisation, Cooperation and Telematics**

Library staff in both KU and PAAET academic libraries were asked to indicate in their opinions the main factors which may hinder the introduction of IT in their libraries. This included the main factors which might hinder implementation of a computer-based library system, the problems in using or adopting an Arabised library system and the main obstacles to the establishment of effective cooperation and telematics between KU and PAAET libraries. This section describes and analyses the librarians' opinions on these factors in IT, Arabised library systems and in cooperation and telematics.

##### **9.1.4.1 Main Obstacles to Introducing IT**

The survey shows that the main obstacles to the introduction of IT in Kuwait Higher Education libraries according to the librarians' opinions and views are financial, technical difficulties and a lack of user studies.

##### **Financial difficulties**

Although Kuwait is a rich country, surprisingly, the survey showed that 72% of the librarians feel that financial difficulties create obstacles in the implementation of IT, see Table 9.12. This perhaps is due to the rebuilding process in Kuwait Higher Education institutes and libraries after the Iraqi invasion. It may also be due to priorities being attached to the fact that a great deal of money had been spent on war and security after the liberation. Furthermore, a drop

in oil revenue may have contributed to the idea that spending priorities had been changed, and IT could not be seen as a priority at this time.

This view has been supported by interviews with the library authorities who believe that the priority now is to rebuild the Higher Education institutes as a whole. Therefore, the library budget goes mainly towards rebuilding the basic library structure such as buildings, furniture, library collections and so on.

Whether this view is valid is open to question as despite the war Kuwait still has a strong economy and IT is now less expensive than before. The financial problems may lie, not in the amount of money available but in its distribution.

#### **Technical difficulties**

The survey showed that 60% of librarians agree and strongly agree that technical difficulties are obstacles to the introduction of IT in their libraries, see Table 9.12. This could reasonably be attributed to the lack of skilled manpower in the new IT, in general, in the region as a whole (See Chapter five). It can also be attributed to a lack of qualified librarians with relevant skills as this survey shows that almost half of the librarians (46%) have qualifications in different disciplines other than the field of library and information science. The survey also shows that library staff have very little background knowledge of IT. For instance

52% of them have never used a library computer-based system in the last three years.

Kuwait is a small, developing country which imports the majority of its manpower and technology from abroad. After the liberation of Kuwait, the government restricted the importation of foreign manpower when, in general, these people had more experience than Kuwaitis. It is probable that this has contributed to technical underdevelopment in Kuwait Higher Education libraries. Further technical difficulties may stem from a perceived lack of maintenance provision. Also, because of the absence of a computer industry in Kuwait and in the region, imported computer hardware and software often require adaptation and there can also be problems with availability. Finally, the lack of bibliographic apparatus and control, and a lack of uniform standards of classification and cataloguing add to the problem.

#### **Lack of user studies**

The survey shows that 56% agree and strongly agree that there is a lack of user studies, see Table 9.12. This confirms The Literature Review which showed that there is a lack of library user studies in Kuwait as Al-Hassan (1992) reported. This could be attributed to the absence of postgraduate and research studies in the country, and would also be the result of the lack of qualified librarians who would stimulate such work. The government recently has sent some students to developed countries for Master and Ph.D. studies but they are few and their research as far as is known is not relevant to

library user studies. Although there are personnel with master and Ph.D. qualifications in the Department of Library and Information Science in PAAET, there is a lack of opportunity for research projects in general and user studies in particular.

Thus, this study appears to be the only one so far in this subject for Kuwait after liberation. There is also no committee to study and represent the user needs. In order for user studies to be conducted a committee of professional library staff is required. This should be built into the library aims and objectives to carry out research into user needs and satisfaction. However, from the interviews and observations it is apparent that there is a lack of an official, stable and adequate library management structure in these libraries which could militate against adequate attention to study of user needs.

#### **9.1.4.2 Main obstacles in Adopting and Using Arabised Library Systems**

The survey found that, in the view of the respondents, the following are the main obstacles in adopting and using Arabised library system (listed in sequence according to their importance): Lack of user education and training in IT, lack of qualified librarians with relevant skills, administration bureaucracy, technical difficulties, and lack of awareness about the importance of IT among the authorities.

### **Lack of user education and training in IT**

71.4 % of librarians agree and strongly agree that the lack of user education and training in IT is an obstacle for the adoption and use of an Arabised library system, see Table 9.12. The survey shows that users have very little background in IT in general. 79.2% of them have never or seldom been on training courses in the last three years and 86.8% of library users have never or seldom used Arabised computer-based systems in the last three years, see Table 9.14.

The user survey shows that a sizeable percentage of users are dissatisfied or strongly dissatisfied with the lack of library tours and training courses. It is obvious that the library should ensure that its users get the maximum benefit from resources provided. This can be achieved by effective library education and training programmes run by skilled manpower with adequate equipment and learning materials. The survey shows, as will be discussed in more detail later in the next chapter, that 74% of users feel they need training programmes for the use of IT.

### **Lack of qualified librarians with relevant skills**

70% of respondent agree or strongly agree that a lack of qualified librarians with relevant skills is another main obstacle. The survey shows that almost half of the librarians are qualified in different disciplines other than the field of library and information science. Librarianship education is relatively new in Kuwait. There is a department for Library and Information Sciences in PAAET but this provides



undergraduate study only. Another reason is the lack of IT courses in the Department' curriculum, there being only one course as an elementary introduction to computer applications. Few Kuwaitis are sent abroad to experience IT applications. After liberation, the Kuwait government, as was mentioned earlier, made a new manpower policy containing restrictions on manpower from some ACs classified as pro-Iraq which could also have had a limiting effect on access to IT skills.

Generally speaking, there is a lack of experience in using Arabised library systems in AC as a whole since these systems are in their early stages of development. A few such systems can be seen in some academic libraries in Saudi Arabia (See Al-Anzi and Collier, 1994).

#### **Administrative bureaucracy**

Administrative bureaucracy is also seen as another obstacle, 66% of the librarians agreeing or strongly agreeing with this. Library management in these libraries is not able to take advantage of the possible efficiencies provided by IT, see Table 9.12. Such facilities can provide library managers with immediate access to the data and information needed for the relevant management items such as personnel, budget, library collections and library users. Decisions in these libraries have to be approved from the most senior authorities and sometimes from the Minister of Higher Education himself as in the case when the Library Department in KU wanted to sign the contract for a VTLIS system, (this information was obtained by

interview). This, as might be expected, takes a long time to be processed.

### **Technical difficulties**

The survey shows that 62% agree or strongly agree that there are technical difficulties in adopting and using Arabisation, see Table 9.12. Arabised library systems are new in AC in general and in Kuwait especially. The vast majority of Higher Education libraries in Kuwait have no experience of these systems. This is perhaps due to two reasons. Firstly, using Arabic script in a computer process is a relatively new technique and is still under development, as discussed in chapter 3.2. Secondly, Kuwait's shortage of local manpower is compounded by the fact that imported manpower from Arab Countries, mainly Egypt, is equally lacking in expertise in such Arabised systems, as mentioned in Chapter Five.

### **Lack of awareness among authorities about the important of Arabisation**

The survey revealed that more than half of the librarians (56%) believe that a lack of awareness among the authorities about the importance of Arabisation is an obstacle for adopting and using Arabisation, see Table 9.12. This is in contrast with policies at national level which are strongly supportive of Arabisation. A possible reason is that the position of the library authorities is not stable and they are also involved in other academic responsibilities, therefore sufficient attention has not been paid to Arabisation.

#### **9.1.4.3 Obstacles Hindering Cooperation and Telematics**

The survey shows that most librarians (58%) are dissatisfied or strongly dissatisfied with the current cooperation and telematics between KU and PAAET libraries, see Table 9.10. The survey analysis shows that there are many perceived obstacles thought to hinder the establishment of a cooperation and telematics system between KU and PAAET libraries. However, the first four obstacles identified by the librarians are: Administrative bureaucracy, lack of library policy, lack of an official agreement for cooperation, and lack of coordination.

##### **Administrative Problems**

86% agree or strongly agree that administrative bureaucracy is an obstacle to the introduction of cooperation and telematics in these libraries, see Table 9.13. Excessive administrative bureaucracy is spread throughout government bodies in Kuwait, and Higher Education institutes are no exception. There is no vice-Rector in the university administration system specifically in charge of the library, he also has responsibility for other academic services. Library directors find that vice-Rectors are less concerned with library issues because of demands on their time and of other responsibilities. Furthermore, there is no stability in the position of Rectors in either KU or PAAET. They change almost every two years. The Library Department Director in PAAET, also changes every two years. The Library Department in KU has not had a director for eight years from 1987 to 1994. In PAAET the library director is, at present, in an acting position.

### **Lack of library policy**

The survey shows that most librarians (81.7%) agree or strongly agree that the lack of library policy hindered cooperation and telematics among academic libraries, see Table 9.13. This shows that these libraries had no clear official library policy which identified the objectives and goals to be achieved.

### **Lack of official agreement for cooperation,**

More than three out of four librarians (78%) agree or strongly agree, that there is a lack of official agreement for cooperation between KU and PAAET academic libraries. The survey also shows (70%) that each library prefers to work individually in its own way, see Table 9.13.

### **Lack of coordination**

Although KU and PAAET are the only two Higher Education institutes in Kuwait which are controlled and funded by the government, lack of coordination between them can be clearly noted in general and between their libraries in particular. This is reflected in librarians' opinions, 78% of whom agree or strongly agree that the lack of such coordination causes problems for cooperation and telematics between these libraries, see Table 9.13.

In brief it appears that the main obstacles thought to hinder the establishment of effective cooperation and telematics are human factors, management, and an absence of good will for such cooperation and telematics among library authorities.

The other main obstacles are listed below together with the percentage of librarians who agreed or strongly agreed that these were obstacles, see Table 9.13:

- Lack of IT (70%)
- Each library prefers to work in its own way (70%)
- Lack of qualified librarians (66%)
- Lack of user studies (64%)
- Lack of qualified and strong library leadership (64%)
- Lack of realisation of the importance of cooperation and telematics among the library authorities (60%)
- Technical problems (58%)
- Lack of uniform standard of classification and cataloguing (58%)
- Lack of bibliographic apparatus (58%)
- Lack of user readiness in using telematics equipment (54%).
- Lack of standard list of Arabic subject headings and periodical list (50%).

## **9.2 Library Users**

This section analyses the survey results of the library users, both academic staff and students (both postgraduate and undergraduate). This includes users' demographic data, user background in IT, user satisfaction, and user needs and attitudes.

### **9.2.1 Users' Demographic Data**

In this survey, the library users' sample consists of a 10% random sample of the academic staff, all postgraduate students, and all undergraduate students who are in the third year of their studies, in the selected colleges. Their total number reached 893 users. 125 (14%) of them were academic staff and 768 (86%) were students. Of those, 248 (32.3%) were postgraduate and 520 (67.7%) undergraduates, see Figures 9.8. Figure 9.9 shows academic staff according to their institutes. It shows that 53 (42.4%) were from KU and 72 (57.6%) from PAAET. Most of the academic staff surveyed 95 (79.0%) had Ph.D. qualifications and only 4 (3.2%) hold only BSc/BA degrees, see Figure 9.10. 71 (56.8%) of them were lecturers and 10 (8.0%) were professors, see Figure 9.11. 76 (59.2%) have over six years teaching experience and 18 (14.5%) have less than three years experience, see Figure 9.12.

### **9.2.2 Users' Background in IT**

Library users in Higher Education libraries in Kuwait have little background in IT in general. More than half of them (61.1%) have never or seldom used computers in their daily work. Only 22.3% indicate that they often or always use such facilities in their daily work, see Table 9.14. There is also some variations in experience of IT according to the status of the users (see Table 9.24).

Moreover, users have very little experience in using computerised library systems. The survey shows that 88.6% of them have never or seldom used a computerised library system in

the last three years, 84.1% have never or seldom used OPAC, 82.4% have never or seldom used CD-ROM, and 84.3% have never or seldom used external Online databases, see Table 9.14. However, there are some differences among user groups' background in IT, see section 9.4.

### **9.2.3 User Satisfaction**

The users were asked about their satisfaction in the current library services. The results' analysis of their satisfaction is presented next.

The survey shows that users are dissatisfied with the card catalogue which is the only method so far used in these libraries. The survey shows that the majority of users agree or strongly agree about the difficulties in using the card catalogue namely, it takes a long time to complete the searching (72.4%); sometimes cards are missing (60.7%); some cards have illegible writing (53.0%); it is necessary to understand the alphabetic order in both languages, Arabic and English (84.2%), see Table 9.15.

Library staff were also asked to indicate, in their opinion, which services caused dissatisfaction among their library users. The results show that 54% of the librarians confirmed that difficulties in using card catalogues caused dissatisfaction among library users and only 24% disagreed or strongly disagreed. The survey also shows, according to the librarians' opinion, that the main causes of dissatisfaction among academic library users are (see Table 9.16):

- Lack of automated circulation system (80% agreed or strongly agreed).
- Lack of external online databases ( 78% agreed or strongly agreed).
- Lack of OPAC (76% agreed or strongly agreed).
- The required document is not in stock (76% agreed or strongly agreed).
- Lack of CD-ROM (70% agreed or strongly agreed).

In general, library users are not satisfied with other library services, namely, library materials, materials arrangements, circulation services and library equipment, see Table 9.17. This dissatisfaction may be due the rebuilding process in these libraries after the Iraqi invasion, the expansion in the university numbers (i.e. user number) and the expansion in the postgraduate and research activities.

#### **9.2.4 User Needs and Attitudes**

Most library users (over 62.5%), both academic staff and students, agreed or strongly agreed on the importance of IT facilities, such as OPAC, computerised circulation, CD-ROM, external online databases, microcomputers and other new audio-visual equipment such as video, videotex, teletex and microforms, see Table 9.18.

Library users agreed or strongly agreed that the introduction of IT in their libraries would provide many advantages, such as offering encouraging research activities (84.1%), supporting teaching (85.9%), supporting postgraduate programmes (87.5%),



copied with an increasing number of users and materials, saving effort and time (92.3%), help to gain research grant (65.8%), help to be in touch with research activities in the advanced countries (79.2%) see Table 9.19. Users were divided on whether IT is difficult to use, 28.9% agreed or strongly agreed and 40.7% disagreed or strongly disagreed. Table 9.25 tabulates users' opinions against status, academic staff, postgraduates and undergraduates students. This Table shows that a higher percentage of students particularly the undergraduates compared to academic staff feel that IT will be difficult to use.

The majority, more than 71.3%, of library users have agreed on the importance of Arabised library-based systems in their libraries. The survey shows that users, whether with or without IT backgrounds, have high expectations of the importance of such facilities in their libraries. The survey analysis shows there is a strong need among the library users (78.9%) for Arabised systems in KU and PAAET. They believe that such systems are easier to use (77.9%) than the English system, and will encourage them to use their library more often (80.9%), see Table 9.20 and Table 9.21.

Library users were also asked to indicate their opinions and attitudes in some selected statements regarding using IT facilities. The survey shows that the vast majority of them have agreed positively with all these statements. Table 9.22 shows that the vast majority of library users strongly agreed or agreed that; electronic libraries will be the future trend of the academic environment (76.7%); a training programme in

the use of IT facilities is needed in the library (74%); they would be willing to join training courses to learn about new IT facilities (83.8%); it is important to involve academic staff in planning for IT in the library (81.3%).

Most library users, (over 89.1) agreed or strongly agreed that PC terminals in their offices or departments connected with the library system would support their teaching, research and learning activities. They also, (over 81.6%), agreed or strongly agreed that a telematics systems between academic libraries in KU and PAAET would support their teaching, research and learning activities, see Table 9.23.

31.3% of library users felt that a telematics system is difficult to use. This is a common view across the subgroups of academic staff and students, see Table 9.30. The survey shows that 13.8% of library users agreed or strongly agreed that telematics systems are not reliable, see Table 9.23.

### **9.3 Library Authorities' Attitudes**

Library authorities in both KU and PAAET were interviewed to investigate their opinions and attitudes towards introducing IT, Arabisation and cooperation and telematics in their academic libraries. The authorities who were interviewed amounted to 13 persons, and these were, the deputy director general at PAAET, the vice-rector in KU, college deans or their deputies and library directors. However, it should be noted that there is no official library director for either KU or PAAET since these posts are in an acting capacity.

In general, library authorities are not satisfied with the current library services, namely, card catalogue, circulation services, online external database systems and audio-visual systems. The interviews show that all the authorities were keen to introduce IT, Arabisation and telematics and cooperation in their academic libraries, to improve their services. However, the authorities have no clear idea about the most suitable systems to be introduced. The authorities show a strong desire and willingness for cooperation between KU and PAAET. However, they agreed that there is no official agreement for such cooperation. They also explained that at the present time each institute makes its own decisions independently.

The authorities in both KU and PAAET have agreed that the main obstacles to the introduction of IT, Arabisation and telematics are a lack of qualified librarians, administration bureaucracy, technical difficulties, lack of user studies, non-purpose built libraries and lack of coordination. However, the authorities in PAAET believe that there are other problems namely, the absence of firm library policy and the lack of an official career structure and library director. These problems do not improve the motivation of their librarians. The authorities also point out that they do not have updated user-need studies to help them in decision making especially after the invasion of Kuwait.

Kuwait University libraries are connected regionally to the GCC academic institutes, and internationally through Internet. The interviews exposed the absence of a telematics connection

between colleges and between KU and PAAET locally. The KU authorities emphasised that the current priority is to connect the college libraries through telematics in each institute. A connection between PAAET and KU is not being considered in the near future. The interviews indicate that there is an awareness of and enthusiasm for library automation, particularly in KU where steps will be taken to link all the university libraries in different colleges into one system through a CD-ROM network and to expand the use of online DIALOG international database. They believe IT is necessary in their libraries as an academic environment. This could support research and teaching activities. The authorities are in favour of a bilingual library system which has Arabic and English facilities.

#### **9.4 Comparison Between Sub-groups**

This study shows that both librarians and users have a limited background in IT in general and in automated library systems in particular. However, there are some differences among these groups. Librarians tend to have more experience while undergraduate students have the lowest experience in IT. More than 80% of the undergraduate students have had no training courses in computer-based systems and only 51.6% of the academic staff have received IT training, see Table 9.24.

As mentioned above, the majority of users indicate their dissatisfaction with the current card catalogue service used in their libraries. Librarians (54%) confirmed their users'

dissatisfaction. The authorities also show their dissatisfaction with a card catalogue system.

Both librarians and library users (academic staff, postgraduate and undergraduate) believe in the importance of IT facilities in improving their library services. They strongly agree that adopting such facilities would support the educational programmes in these institutes, KU and PAAET. These IT facilities would support research, teaching and learning activities, would offer new library services, would help with the increased numbers and needs of library users, especially for postgraduate studies, would help to cope with shortages in library manpower and would help in saving time and effort, see Table 9.25.

Both librarians and library users (all groups) again believe that new IT facilities are not difficult to use. However, there are differences in their percentages between librarians and users. While only 4.0% librarians agreed and strongly agreed that IT is difficult to use, there are sizeable minority in the students especially undergraduates (33.9%) as shown in Table 9.25. It should be noted that all groups explained that they would need education and training programmes in the use of such facilities, since the survey shows that they have little experience of this. There are some differences between the groups. All groups show their willingness and readiness to join such programmes. Again, it should be noticed, as mentioned above, that relatively fewer librarians feel that

libraries are ready to provide user education and training in IT.

All groups have agreed on the importance of introducing library computer-based system to improve library services. More than 90% of librarians have agreed in the importance of OPAC, computerised circulation, CD-ROM stations and online external databases. This view is strongly supported by academic staff (more than 84%), postgraduate students (more than 75%) and undergraduates (more than 64%), see Table 9.26.

The survey also shows that all the groups have agreed on the importance of introducing an Arabised system to improve the library services. Librarians show high awareness (90%) of Arabised OPAC systems. This may be due to the high level of demand from library users, especially from colleges who conduct most of their teaching and research in the Arabic language. This is also supported by academic staff (73.6%), postgraduate students (88.5%) and undergraduate students (76.7%).

Postgraduate students are more enthusiastic than other groups about the introduction of Arabised CD-ROM stations and Arabised online external databases. This may be due to their need for more information access to support their research and learning, see Table 9.27.

The users believed that introducing an Arabised system would encourage them to use the library more often. Postgraduate students strongly agreed (91.1%), 68.1% of undergraduate

students agreed while academic staff were less supportive (61.6%), see Table 9.28.

Librarians strongly believed (92.0%) in the future trend of the electronic library in an academic environment. This view is strongly supported by the academic staff (86.3%) while fewer undergraduate students (69.2%) supported this view, see Table 9.29.

All library user groups, academic staff, postgraduate and undergraduate students, have agreed that introducing IT, Arabisation, cooperation and telematics will improve their library services and this will support teaching and research activities in their institutes. Although users have limited IT background they have high expectations and positive attitudes to the importance of IT, Arabisation, cooperation and telematics to be adopted in their libraries.

All groups, librarians and users, have agreed that it is important or very important that PAAET and KU libraries should be linked through a telematics system. Postgraduate students are more aware of the importance of IT in teaching, learning and research than the undergraduate. They agreed that IT will improve the teaching and research in their departments. They both support proposals to link KU and PAAET in order to improve the teaching and research and also express a need for cooperation and telematics, See Table 9.30.

The interviews explored the financial readiness of the authorities and the librarians' concern about this. The authorities emphasised that there are no financial difficulties although, in some cases, priorities may be changed.

The next chapter will discuss the outcomes of the study and its main conclusions.



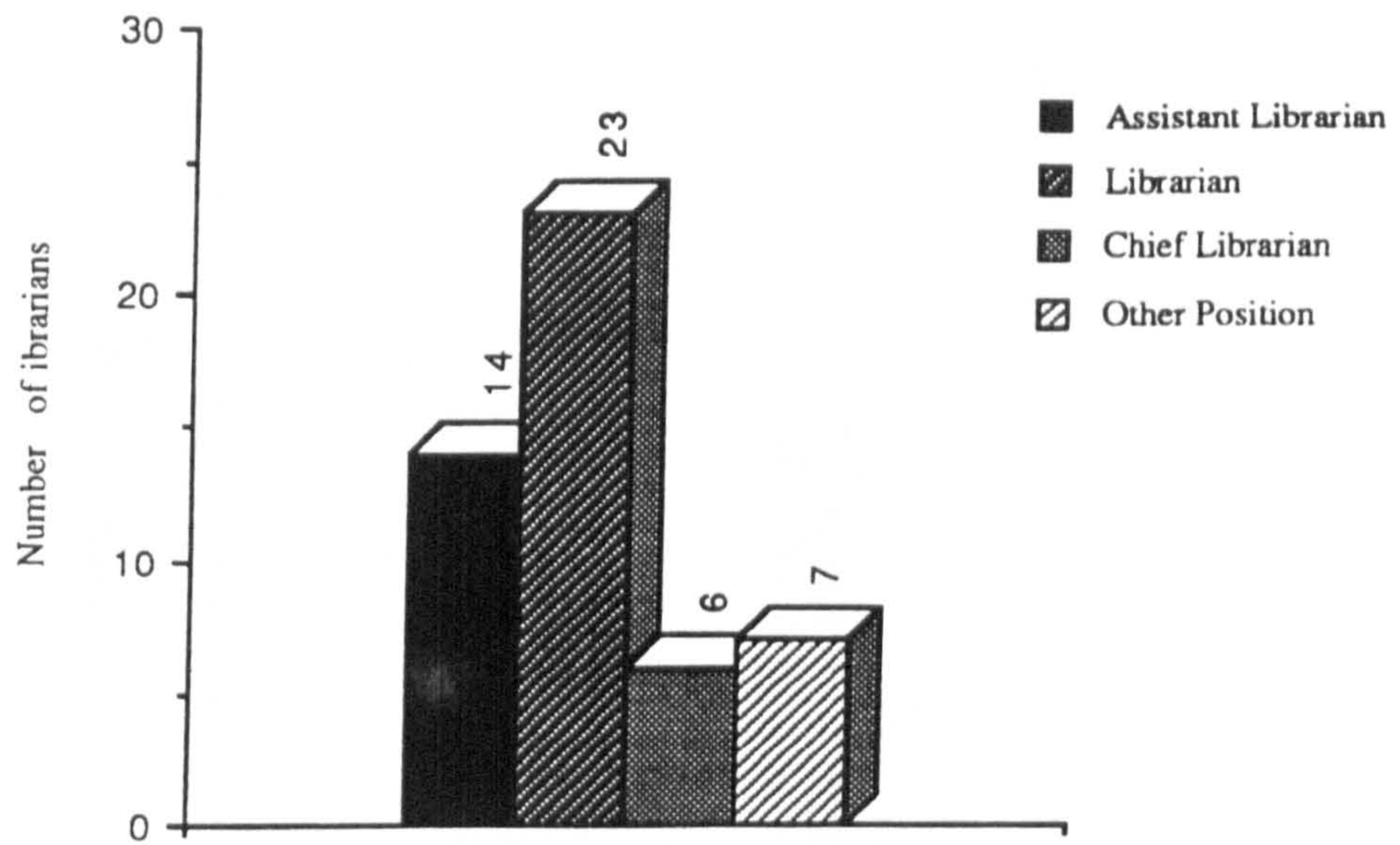


Figure 9.1 : Librarians according to their post position

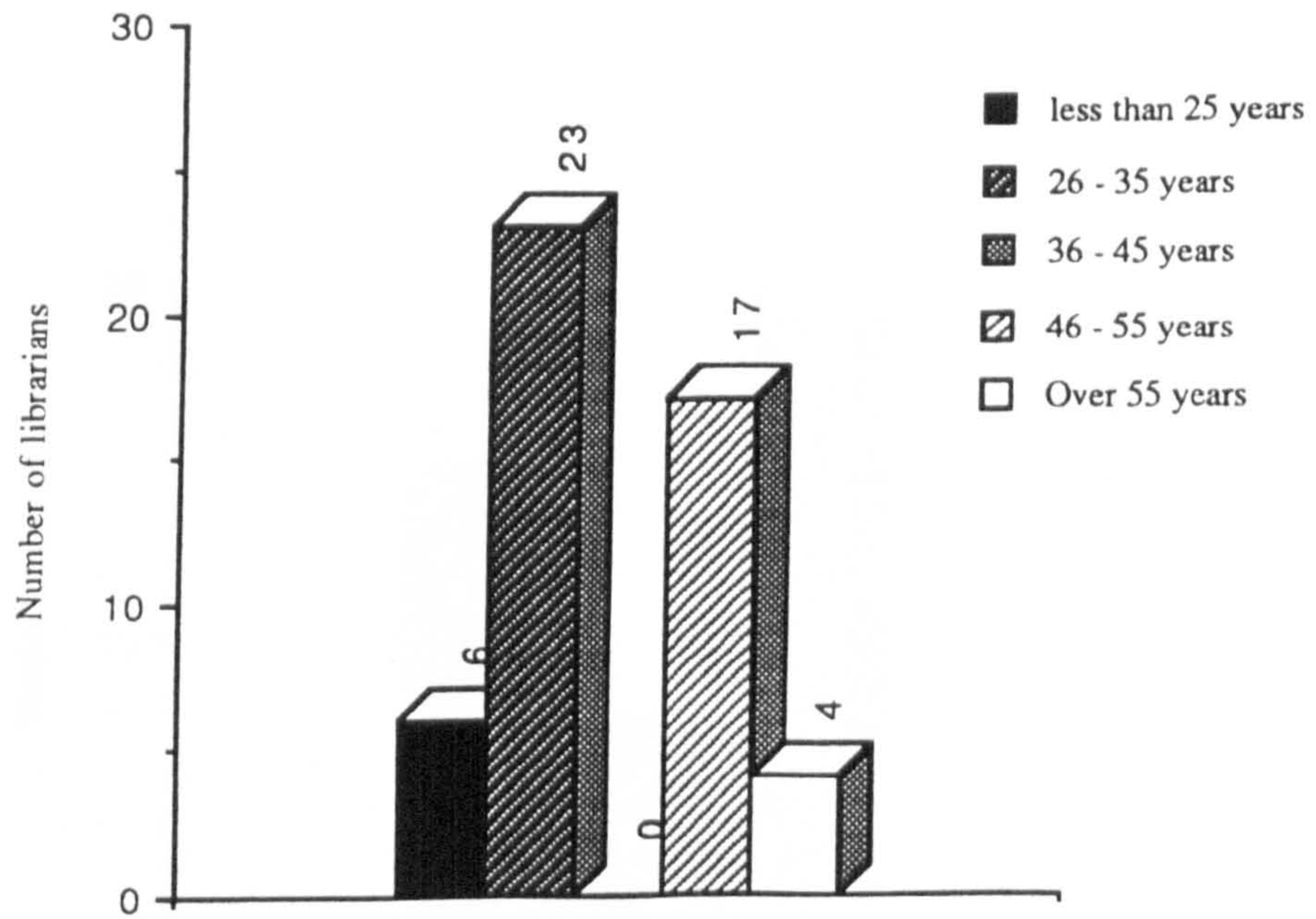


Figure 9.2 : Librarians according to their age

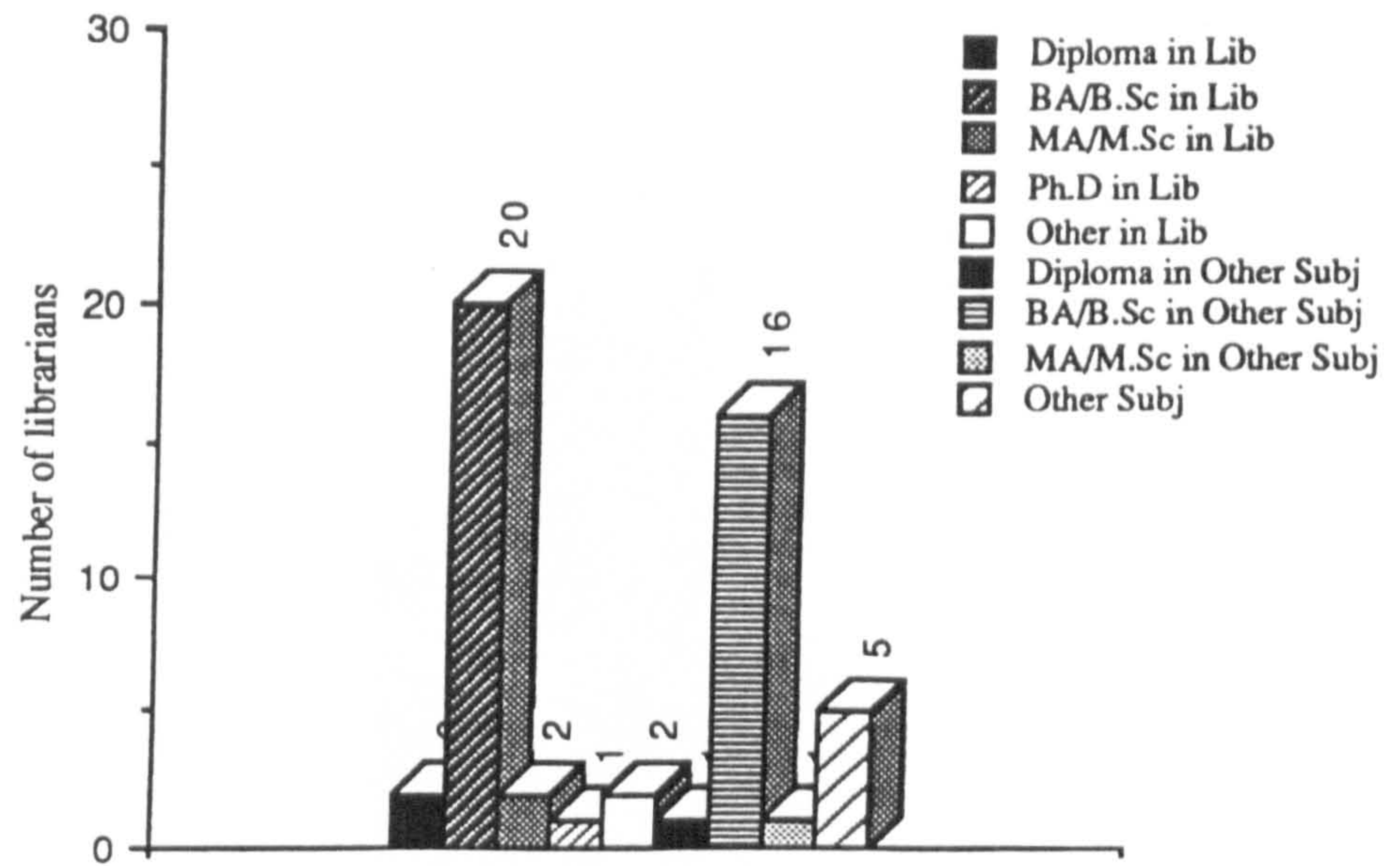


Figure 9.3 : Librarians according to their qualifications

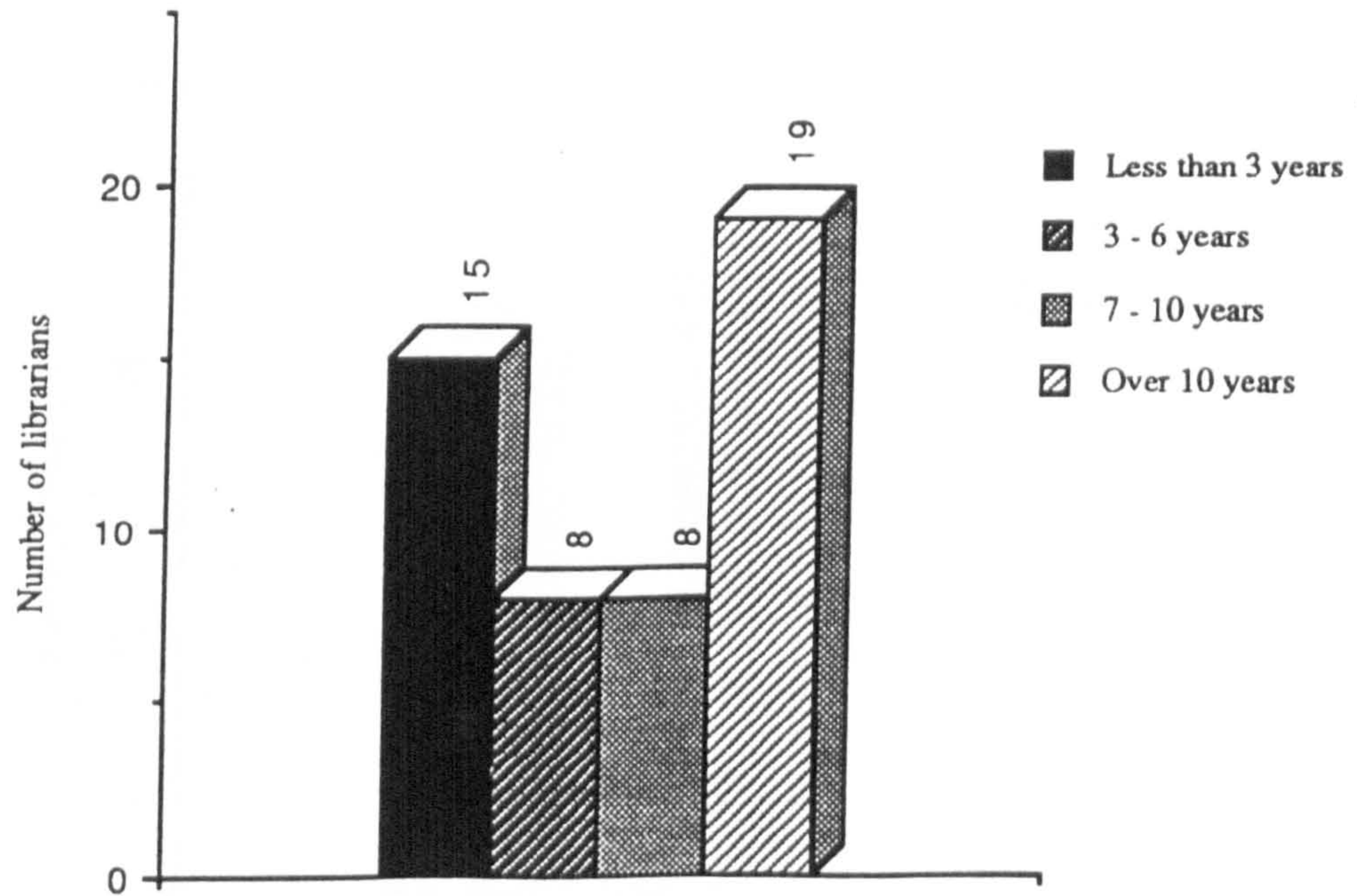


Figure 9.4 : Librarians according to their library experience

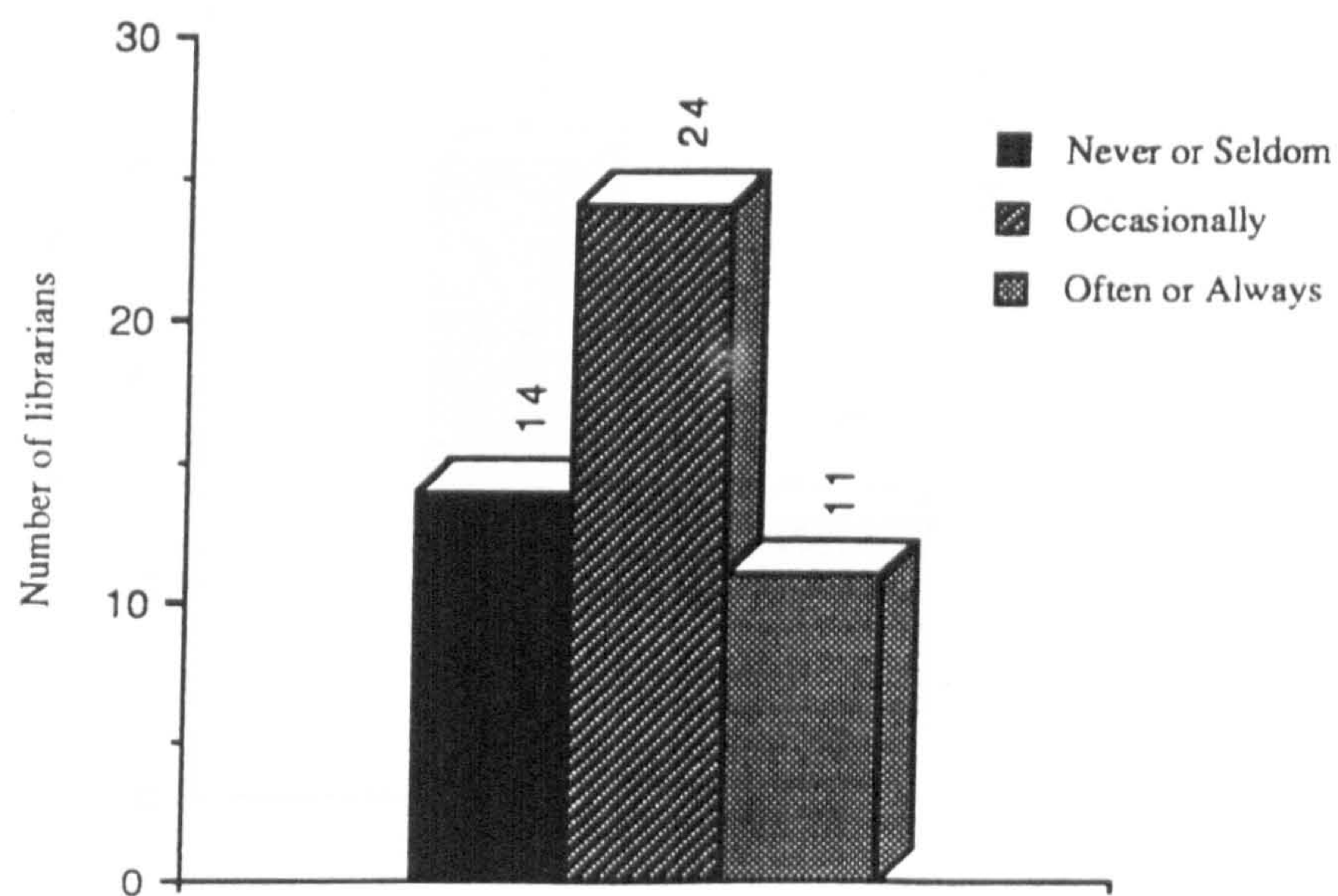


Figure 9.5 : Librarians in training course in the last three years

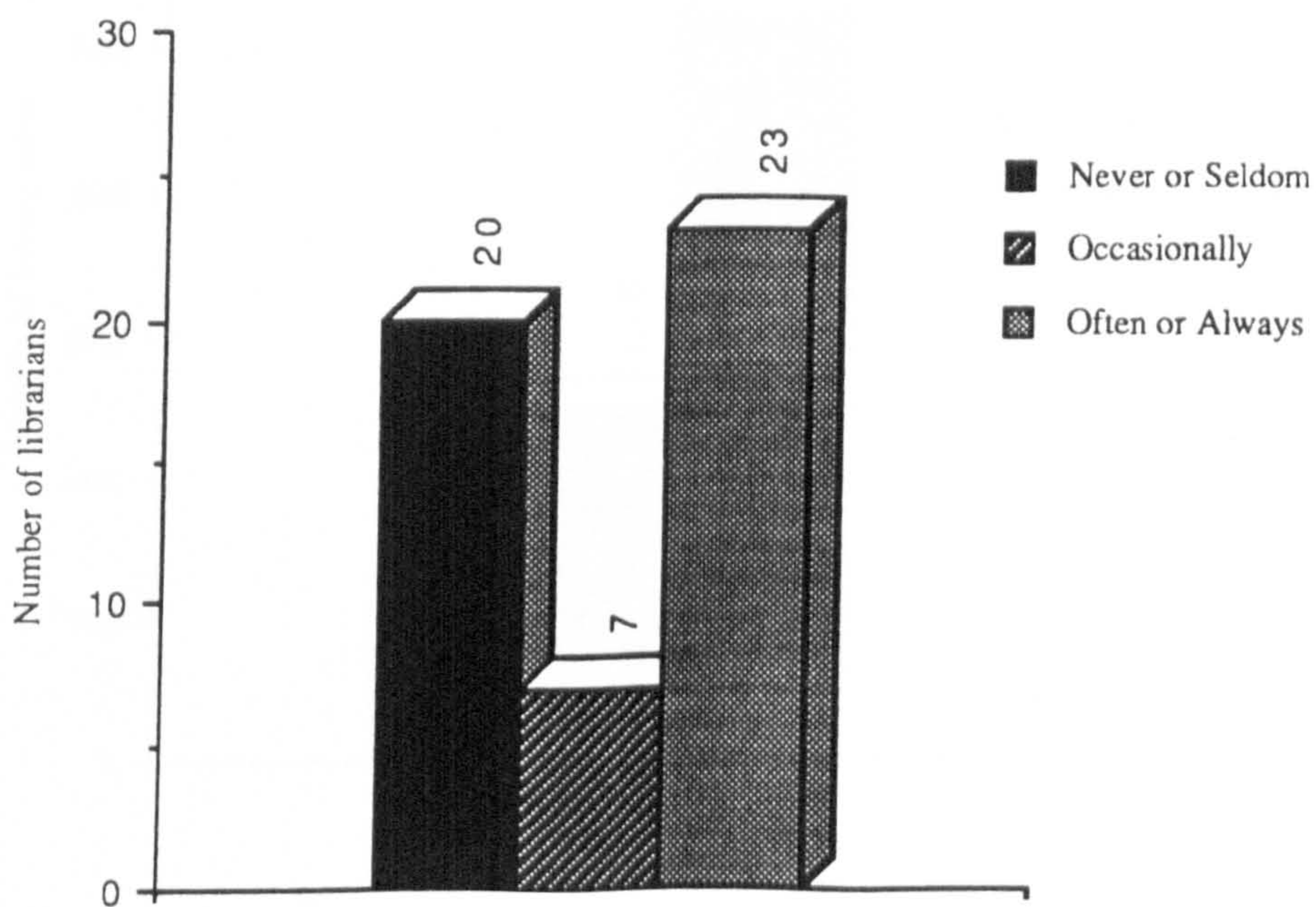


Figure 9.6 : Librarians use computer-based system in their daily work

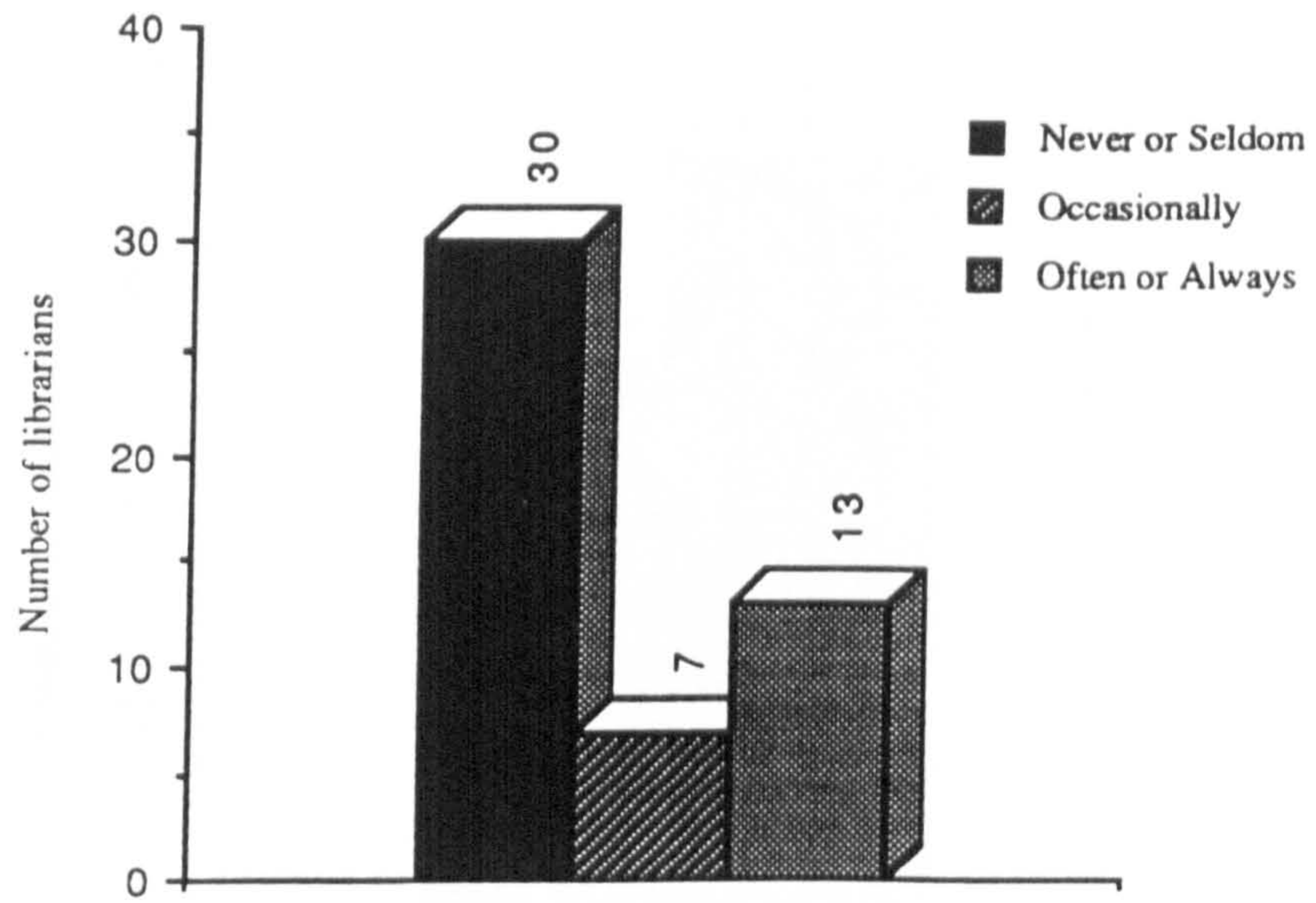


Figure 9.7 : Librarians used library computer-based system in the last three years

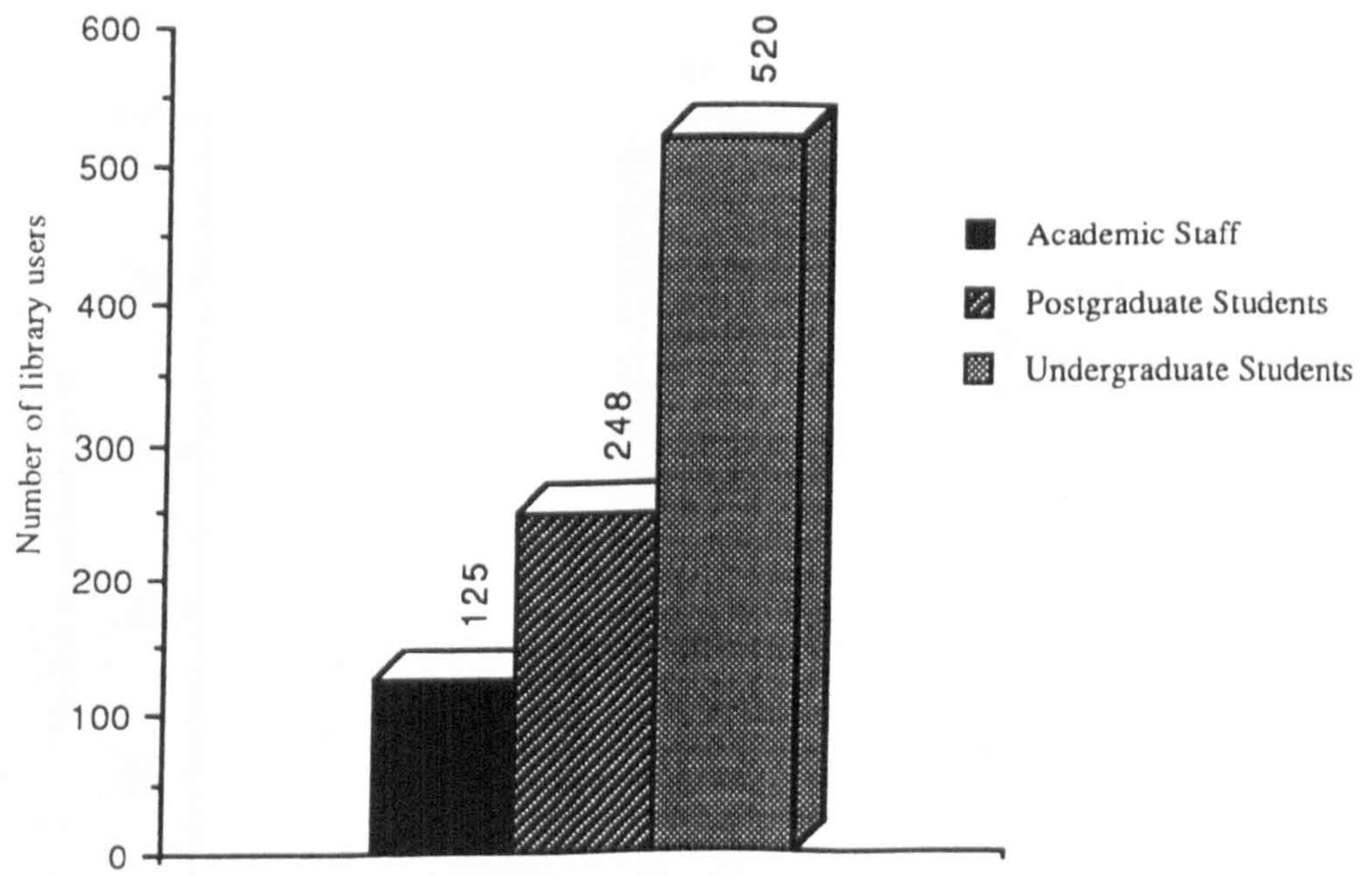


Figure 9.8 : Library users surveyed

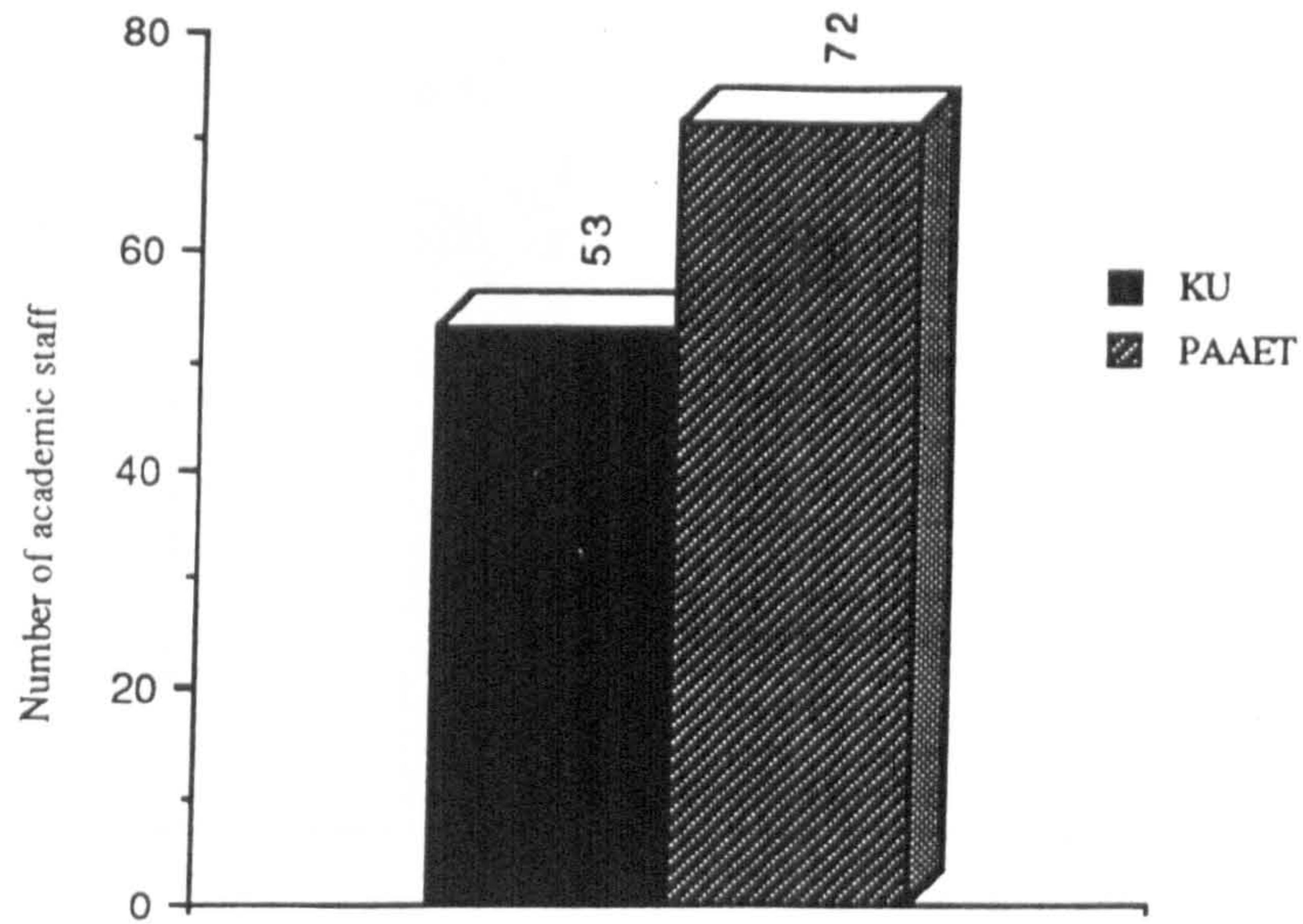


Figure 9.9 : Academic staff surveyed according to their institute

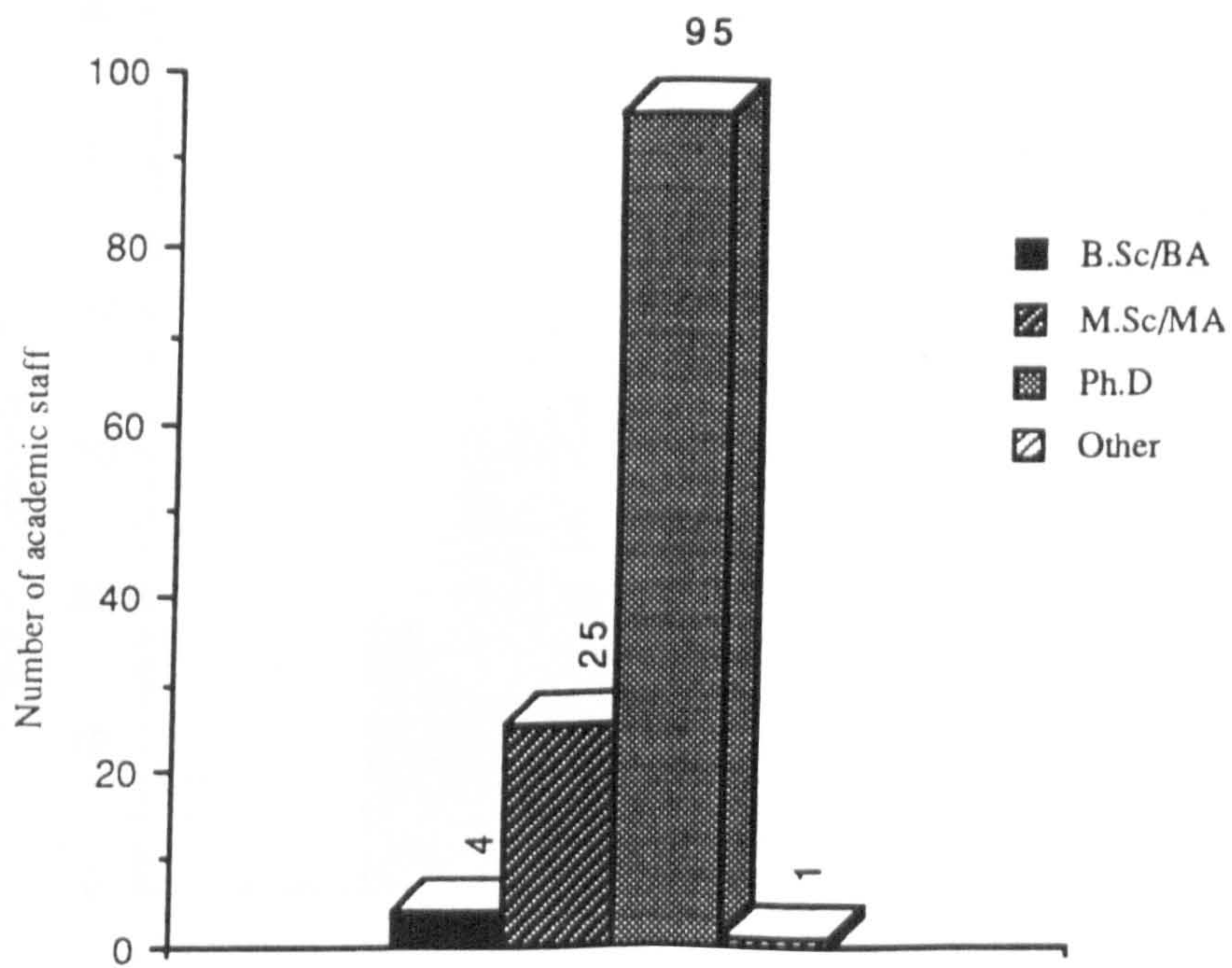


Figure 9.10 : Academic staff surveyed according to their qualification

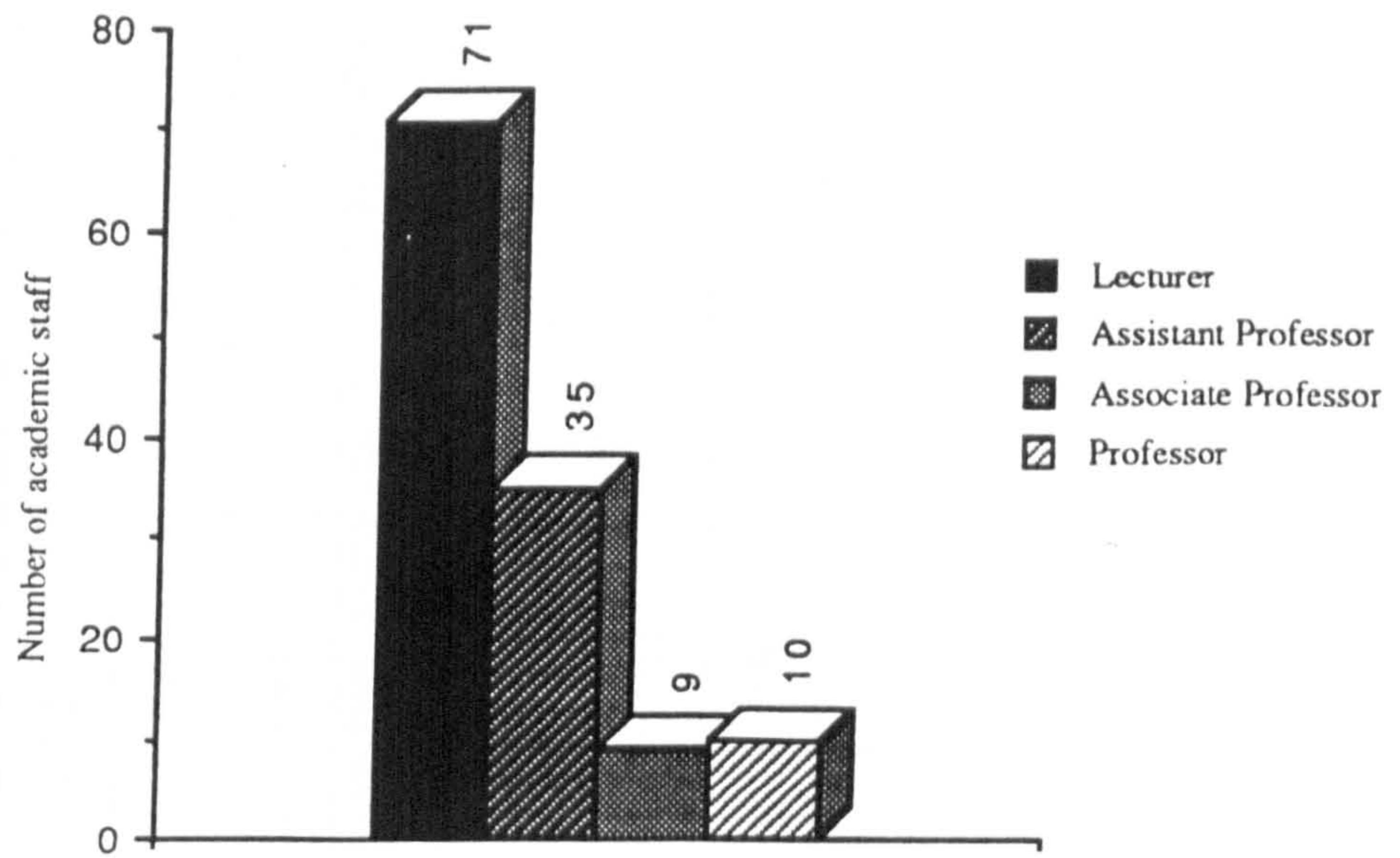


Figure 9.11 : Academic staff according to their academic rank

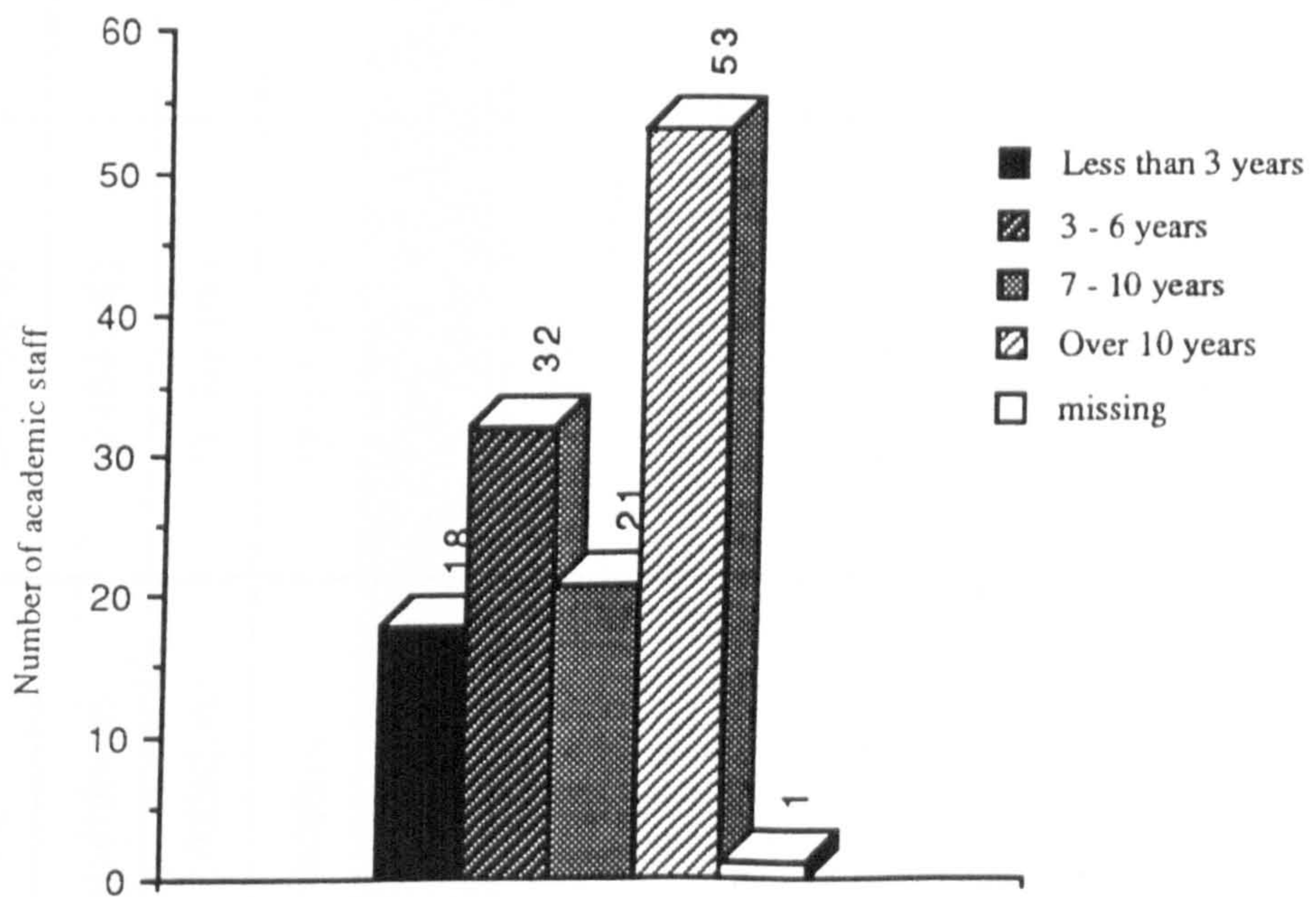


Figure 9.12 : Academic staff according to their teaching experience

	Never or seldom	Occasionally	Always or often	No. of missing
PC	28 (56.0%)	10 (20.0%)	12 (24.0%)	0
mainframe	39 (84.8%)	5 (10.9%)	2 (4.3%)	4
Workstation	37 (80.4%)	2 (4.3%)	7 (15.2%)	4
Database	33 (68.8%)	5 (10.4%)	10 (20.8%)	2
OPAC	35 (76.1%)	7 (14.0%)	4 (8.6%)	4
CD-ROM	23 (47.9%)	5 (10.4%)	20 (41.7%)	2
Online	33 (68.8%)	5 (10.4%)	10 (20.9%)	2
Telematics	37 (80.4%)	0	9 (19.5%)	4

Total number of librarians = 50

**Table 9.1** : Librarians background in computer-based systems in general and in library systems in particular

Library service	IT				Number of missing %
	Important and Very important %	Neutral %	Not important and Not very important %		
Computerised acquisition	100.0	0	0	1	
Computerised cataloguing	98.0	2.0	0	0	
Comput. catalog. search (OPAC)	98.0	2.0	0	0	
Computerised circulation	92.0	6.0	2.0	0	
CD-ROM stations	90.0	8.0	2.0	0	
Online external database	90.0	8.0	2.0	0	
Microcomputer facilities	94.0	6.0	0	0	
Videotex and teletex systems	80.0	18.0	2.0	0	
Microform machines	78.0	20.0	2.0	0	
Photocopying machines	82.0	12.0	6.0	0	
Audio and video systems	86.0	14.0	0	0	

Total number of librarians : 50

Table 9.2 : Librarian opinions on the the importance of IT facilities to improve library services



Library service	Arabisation		
	Important and Very important %	Neutral %	Not important and Not very important %
Computerised acquisition	86	12	2
Computerised cataloguing	88	10	2
Comput. catalog. search (OPAC)	90	10	0
Computerised circulation	76	22	2
CD-ROM stations	80	16	4
Online external database	70	22	8
Microcomputer facilities	74	20	6

Total number of librarians : 50

Table 9.3 : Librarian' opinions on the the importance of Arabisation facilities to improve library services

	Strongly disag- or disagree %	Neutral %	Strongly agree or agree %
Electronic library will be future trend of academic libraries	2.0	6.0	92.0
Your library is capable of user education in IT	18.0	18.0	64.0
Computer-based systems deserve a high priority in the library budget	4.0	20.0	76.0
Your library users are ready for IT	14.0	24.0	64.0
You are ready to take training/courses in the new system in IT	2.0	2.0	96.0

**Total number of librarians = 50**

**Table 9.4 : Librarians' opinions on selected statements**

Introducing IT in your library would :	Agree or Strong. agree %	Neutral %	Strongly disag. or disagree %	No. of missing %
offer new service in your library	98.0	2.0	0	0
remove drudgery from librarians	96.0	0	4.0	0
encourage research activities among users	96.0	4.0	0	0
help to overcome the shortage of qualified librarians	76.0	10.0	14.0	0
help to cope with increased number of library materials	84.0	14.0	2.0	0
help to cope with increasing number of library users	84.0	10.0	6.0	0
help to complete library tasks more accurately, more quickly and with greater control	96.0	4.0	0	0
help to create more space	80.0	18.0	2.0	0
help to compete with other academic libraries	68.0	22.0	10.0	0
increase workload	10.2	20.4	69.4	2.0
be difficult to use	4.0	8.0	88.0	0
be high cost	14.0	40.0	46.0	0
not save time or effort	2.0	4.0	94.0	0
exposes weaknesses of library collections	38.0	18.0	44.0	0

Total number of librarian = 50

**Table 9.5** : Librarians' attitudes and opinion towards introducing IT in their libraries

		Strongly disag. or disagree	Neutral	Strongly agree or agree
Network	Always or often	9 (100%)	0	0
	Never or seldom	31 (83.8%)	4 (10.8%)	2 (5.6%)
Mainframe	Always or often	2 (100%)	0	0
	Never or seldom	33 (84.6%)	4 (10.2%)	2 (5.1%)
Workstation	Always or often	7 (100%)	0	0
	Never or seldom	32 (86.4%)	3 (8.1%)	2 (5.4%)
Online	Always or often	10 (100%)	0	0
	Never or seldom	27 (81.8%)	4 (12.1%)	2 (6.6%)
Wordproc.	Always or often	6 (100%)	0	0
	Never or seldom	31 (86.1%)	4 (11.1%)	1 (2.7%)

Total number of librarians = 50

Table 9.6 : Librarians opinion that IT is difficult to use, according to their background in IT

		Strongly disag. or disagree	Neutral	Strongly agree or agree
Network	Always or often	8 (88.8%)	1 (11.1%)	0
	Never or seldom	22 (59.4%)	5 (13.5%)	10 (27.0%)
Mainframe	Always or often	2 (100%)	0	0
	Never or seldom	25 (64.1%)	5 (12.8%)	9 (23.1%)
Workstation	Always or often	6 (85.7%)	1 (14.3%)	0
	Never or seldom	23 (62.2%)	4 (10.8%)	10 (27.0%)
Online	Always or often	6 (100%)	0	0
	Never or seldom	19 (57.7%)	4 (12.1%)	10 (30.2%)
Wordproc.	Always or often	8 (80.0%)	2 (20.0%)	0
	Never or seldom	22 (61.1%)	3 (8.3%)	11 (30.5%)

Total number of librarians = 50

Table 9.7 : Librarians opinion that Arabisation is difficult to use, according to their background in IT

		Strongly disag. or disagree	Neutral	Strongly agree or agree
Network	Always or often	8 ( 88.9%)	1 (11.1%)	0
	Never or seldom	35 ( 94.6%)	1 ( 2.7%)	1 ( 2.7%)
Mainframe	Always or often	1 (50.0%)	1 (50.0%)	0
	Never or seldom	37 ( 94.9%)	1 ( 2.5%)	1 ( 2.5%)
Workstation	Always or often	7 ( 100%)	0	0
	Never or seldom	35 ( 94.6%)	1 ( 2.7%)	1 ( 2.7%)
Online	Always or often	10 ( 100%)	0	0
	Never or seldom	31 ( 93.9%)	1 ( 3.0%)	1 ( 3.0%)
Wordproc.	Always or often	6 ( 100%)	0	0
	Never or seldom	34 ( 94.4%)	1 ( 2.8%)	1 ( 2.8%)

Total number of librarians = 50

**Table 9.8** : Librarians' opinion that introducing IT will not save time and effort, according to their background in IT.

		Strongly disag. or disagree	Neutral	Strongly agree or agree
Network	Always or often	3 ( 33.3%)	3 ( 33.3%)	3 ( 33.3%)
	Never or seldom	18 ( 48.6%)	6 ( 12.2%)	13 ( 35.1%)
Mainframe	Always or often	1 ( 50%)	0	1 ( 50%)
	Never or seldom	19 ( 48.7%)	6 ( 15.3%)	14 ( 36.0%)
Workstation	Always or often	3 ( 42.9%)	4 ( 57.1%)	0
	Never or seldom	17 ( 45.9%)	5 ( 13.5%)	15 ( 40.5%)
Online	Always or often	5 ( 50%)	3 ( 30%)	2 ( 20.0%)
	Never or seldom	17 ( 51.5%)	3 ( 9.1%)	13 ( 39.4%)
Wordproc.	Always or often	1 ( 16.7%)	2 ( 33.3%)	3 ( 50.0%)
	Never or seldom	16 ( 44.4%)	5 ( 13.9%)	15 ( 41.7%)

Total number of librarians = 50

**Table 9.9** : Librarians' opinions that introducing IT will expose weakness of library collections, according to their background in IT.

	Very dissat. or dissatisfied %	Neutral %	Very satisfied or satisfied %
Please rate your satisfaction on the current cooperation activities between KU and PAAET libraries	58.0	22.0	20.0

Total number of librarians : 50

**Table 9.10 : Librarians' satisfaction on the current cooperation activities between KU and PAAET libraries**

<i>Please indicate your opinion for the following :</i>	<b>Strongly disag. or disagree %</b>	<b>Neutral %</b>	<b>Strongly agree or agree %</b>
There should be effective official cooperation/telematics for academic libraries in Kuwait	0	0	100.0
Effective cooperation/telematics would solve problems in Kuwait academic libraries	2.0	0	98.0
Participation in library cooperation/telematics would improve the library services	2.0	0	98.0
Participation in library cooperation/telematics would lead to sharing of cost	2.0	6.0	92.0
It is feasible to establish a telematics cooperative for academic libraries in Kuwait.	2.0	14.0	84.0
You are ready to take training/courses in the new telematics systems	0	6.0	94.0
Librarians are ready to use telematics facilities	0	12.0	88.0
Library users are ready to use telematics facilities at the present time	12.0	24	64.0
Your library has the capability of user education/training for new telematics	18.0	22.0	60.0
The new telematics system will reduce the workload of librarians	6.0	6.0	88.0
Cooperative telematics would enhance your library collections	0	2.0	98.0
There should be a unit for interlibrary loans in KU and PAAET	2.0	6.0	92.0
College libraries in KU/PAAET should be linked together	4.0	14.0	82.0
Academic libraries in both KU and PAAET should be linked together	4.0	10.0	86.0
There should be an official agreement for cooperation/telematics	2.0	6.0	92.0
There should be an active policy for cooperation/telematics	2.0	2.0	96.0
A telematic system is difficult to use	75.0	7.0	18.0
Telematics is not reliable	78.0	8.0	14.0

Total number of librarians = 50

**Table 9.11 : Librarians' attitudes and opinion towards cooperation and telematics**

	IT %	Arabisation %
Financial difficulties	72.0	38.0
Lack of qualified librarians with relevant skills	14.9	70.0
Librarian attitudes	36.0	28.0
Technical difficulties	60.0	62.0
Administration Bureaucracy	32.0	66.0
Users' readiness to use IT	34.0	46.0
Inadequate library building	34.0	36.0
Lack of library policy	32.0	50.0
Lack of user studies	56.0	48.0
Lack of user education/training in IT	24.0	71.4
Computer-based systems are difficult to use	17.4	24.0
Lack of local support from computer dealers	20.9	28.0
Fear of change among librarians	38.0	24.0
Lack of awareness about the importance of IT among authorities	52.0	56.0

**Table 9.12 : Librarians' opinions of obstacles hindering IT and Arabisation: Strongly agree or agree**



	Cooperation Telematics %
Financial difficulties	40.0
Lack of qualified librarians with relevant skills	66.0
Technical difficulties	58.0
Administration Bureaucracy	86.0
Users' readiness to use IT	54.0
Lack of library policy	81.7
Lack of user studies	64.0
Poor communication and post system	42.0
Lack of coordination	78.0
Lack of a qualified and strong library leadership	64.0
Lack of realisation of the importance of cooperation and telematics among the library authorities	60.0
Each library prefers to work in its own way individually	70.0
Lack of official agreement for cooperation	78.0
Lack of IT	70.0
Lack of uniform list of Arabic subject headings and uniform periodical list	50.0
Lack of uniform standards of classification and cataloguing	58.0
Lack of reference tools	38.0
Inadequate library resources	30.0
Lack of bibliographic apparatus	58.0

**Table 9.13** : Librarians opinions of obstacles hindering cooperation and telematics :  
Strongly agree or agree

	Never or seldom %	Occasionally %	Always and often %	No. of missing %
Have you been on a training course in computer-based systems in the last three years ?	79.2	11.6	9.2	0
Do you use computer-based systems in your daily work ?	61.1	16.6	22.3	0.1
Have you used a library computer-based system in the last three years ?	86.8	7.2	7.1	0.1
Your current use of the following	PC	16.2	20.3	0.3
	Mainframe	8.0	8.0	0.8
	Workstation	84.6	7.8	0.6
	OPAC	84.1	6.7	1.5
	CD-ROM	82.4	7.0	7.0
Online databases	84.3	5.4	10.4	15.3

Total number of users = 893

Table 9.14 : Library users' background in computer-based systems

	Strongly disag. or disagree %	Neutral %	Strongly agree or agree %	No. of missing %
It takes quite long time to complete the searching	16.2	11.4	72.4	1.0
Sometimes cards are missing	20.8	18.4	60.7	0.4
Some cards have unclear writing	33.2	14.8	53.0	0.1
It requires one to understand the alphabetic order in both Arabic and English	7.2	8.6	84.2	0

Total number of users = 893

Table 9.15 : User opinions on the main difficulties in using library card catalogue

	Strongly dsag. or dsagree %	Neutral %	Strongly agree or agree %
Difficulties in using card catalogue	24.0	22.0	54.0
The required document is not in stock	14.0	10.0	76.0
Lack of photocopying facilities	28.0	22.0	50.0
Lack of computer-based library system including the following	cataloguing search (OPAC)	10.0	76.0
	automated circulation	10.0	80.0
	external online database	16.0	78.0
	CD-ROM station	20.0	70.0
Lack of enough space	28.0	16.0	56.0

Total number of librarians = 50

Table 9.16 : Librarians' opinions on the main factors causing dissatisfaction among library users

			V. dissatisf. or dissatisf. %	Neutral %	V. satisfied or satisfied %	Missing %
Library materials	Quantity	Books	55.5	13.2	31.2	11.1
		Periodicals	48.5	28.5	23.0	13.7
		References	50.3	20.7	29.0	14.7
		Audio-Visual	63.5	26.5	10.0	0.6
	Quality	Books	53.8	13.8	32.4	0.2
		Periodicals	47.8	31.7	20.4	1.2
		References	46.6	25.0	28.4	0
		Audio-Visual	51.2	39.4	9.4	0.6
Materials arrangement	Using card catalogue		55.7	19.2	25.0	0.3
	Shelf arrangement		36.2	17.3	46.4	0.4
	Book labelling		38.4	18.9	42.7	0.6
	Library signing		52.6	13.7	33.7	0.1
Circulation Services	Borrowing/Return		54.6	16.8	28.6	0.1
	Short Loan		43.0	18.3	38.7	0.7
	Reservation		43.3	30.1	66.6	1.0
	Interloan library		47.4	30.6	22.1	0.4
Equipment	External Online Databases		48.4	38.3	13.3	2.4
	Photocopy machines		14.3	22.5	26.2	0.8
	Videotex system		53.3	34.9	11.9	2.7
	Video system		60.9	25.2	13.9	1.7
	Using CD-ROM		54.2	32.3	13.3	1.2
Other services	library tour/training courses		64.0	23.2	12.8	0.4
	Help/advice from library staff		46.5	22.5	31.0	0.1
	Study space		53.0	13.4	33.6	0.2
	Library opening hours		56.8	13.9	29.2	0.4

Total number of library users = 893

Figure 9.17 : Users satisfaction in the current library services

	Not v. import or not import %	Neutral %	V. important or important %	Missing %
computerised cataloguing search (OPAC)	16.2	10.3	73.4	1.0
computerised circulation	12.9	15.8	71.3	0.9
CD-ROM stations	14.3	23.1	62.6	0.4
Online external database	9.3	16.7	79.0	1.2
Audio and video systems	7.7	13.8	78.5	1.0
videotex and teletex systems	8.4	14.8	76.9	2.2
Microform machines	8.8	15.6	75.5	1.2
photocopying machines	5.4	10.5	83.9	0.8
Microcomputer facilities	5.2	10.5	84.1	1.0

Total number of users : 893

Table 9.18 : Users' opinions in the importance of introducing IT

Introducing IT in your library would :	Strongly disag. or disagree %	Neutral %	Strongly agree or agree %	Missing %
encourage research activities	6.7	9.2	84.1	1.3
support teaching	6.0	8.1	85.9	0.7
help to gain research grants	7.4	26.9	65.8	15.3
help to support the postgraduate programmes	4.8	7.7	87.5	1.3
help to meet the postgraduate students needs	3.6	8.6	87.8	0.9
help to save more space	5.2	15.1	79.7	0.8
help to save your time and effort	3.3	4.5	92.3	0.6
help to encourage your students to use the library more often	4.1	10.5	85.5	0.6
help to be in touch with research activities in the advanced countries	6.7	14.0	79.2	0.7
Difficult to use	40.7	19.1	28.9	0.5

Total number of users : 893

**Table 9.19** : Users' opinions in the importance of introducing IT for research and teaching

	Not v. impor. or not impor. %	Neutral %	v. import. or important %	Missing %
Arabised computerised cataloguing search (OPAC)	7.2	11.3	81.4	0.9
Arabised computerised circulation	7.6	14.6	77.9	0.9
Arabised CD-ROM stations	7.5	21.1	71.3	0.3
Arabised Online external database	7.3	19.6	73.0	0.4
Microcomputer facilities with Arabised system	6.4	16.2	77.4	0.3

Total number of users : 893

Table 9.20 : Users' opinions and attitudes on the importance of Arabised library computer-based system



User opinions for the following statements :	Strongly disag. or disagree %	Neutral %	Strong. agree or agree %	Missing %
There is a need for an Arabised computer system in your library	7.5	13.7	78.9	11.6
Arabised system would encourage you to use the library more often	7.4	11.7	80.9	0.1
Arabised system would be easier for your use than the English system	10.7	11.4	77.9	15.3

Total number of users : 893

Table 9.21 : Users' opinions and attitude on selected statements

User opinions for the following statements :	Strongly disag. or disagree %	Neutral %	Strong. agree or agree %	Missing %
The electronic library will be the future trend for academic environment	6.8	16.6	76.7	1.2
You need a training programme in the use of IT facilities in the library	12.3	13.6	74.0	0.7
You are willing to join training courses to learn new IT facilities	6.3	10.0	83.8	14.6
It is important to involve academic staff in planning for IT in the library	5.4	13.3	81.3	0.9

Total number of users : 893

Table 9.22 : Users' opinions and attitude on selected statements

	Strongly disag. or disagree %	Neutral %	Strongly agree or agree %	Missing %
There should be effective official cooperation/telematics for academic libraries in Kuwait	3.6	7.6	88.8	0.8
Participation in library cooperation/telematics would improve the library services	5.2	7.3	87.3	0.6
It is feasible to establish a telematics cooperative for academic libraries in Kuwait	5.5	12.3	82.1	1.1
You are ready to take training/courses in the new telematics systems	4.3	11.5	84.2	0.6
College libraries in KU/PAAET should be linked together	3.1	6.5	90.3	0.4
Academic libraries in both KU and PAAET should be linked together	2.4	7.5	90.2	1.0
A telematic system will save you time and effort	1.9	7.1	91.0	0.8
A telematics system is difficult to use	56.3	12.4	31.3	0.9
A telematic system between your library and other colleges libraries in KU/PAAET will improve your research activities	2.6	4.9	92.5	0.4
A telematic system between your library and other colleges libraries in KU/PAAET will improve your teaching/learning activities	1.9	6.4	91.7	0.7
A telematic system between your library and other college libraries in KU/ PAAET will improve your research activities	7.8	10.6	81.6	0.7
A telematic system between your library and other college libraries in KU/ PAAET will improve your teaching/learning activities	1.1	10.9	87.8	0.7
An online catalogue searching terminal in your office connected with your library will support your research activities	2.3	8.1	89.4	0.8
An online catalogue searching terminal in your office connected with your library will support your teaching/learning activities	2.0	8.8	89.1	1.2
Telematics systems are not reliable	70.6	15.6	13.8	0.9

Total number of users = 893

**Table 9.23 :** Users opinion and attitude on telematics and cooperation in and between KU and PAAET .

	Academic Staff %	Students %		Librarians %
		Postgraduate	Undergraduate	
Have you been on a training course in computer-based systems in the last three years?	51.6	74.2	80.2	28.6
Do you use computer-based system in your daily work ?	56.0	52.0	70.4	40.0
Have you used a library computer-based system in the last three years ?	61.6	84.3	89.5	60.0
Your current use of the following	PC	54.0	70.8	56.0
	Workstation	83.1	92.2	80.4
	Mainframe	89.1	92.2	84.8
	Wordprocessor	52.4	81.6	73.5
	Spreadsheet	58.9	89.3	85.4
	Database	65.3	81.5	68.8
	Graphics package	54.8	75.5	86.0
	Statistics package	77.0	79.8	81.6
	Programming languages	68.5	82.3	85.7
	OPAC	82.5	88.5	76.1
	CD-ROM	68.9	89.9	47.9
	Online Databases	68.0	91.8	68.8
	Telematics	89.4	94.6	80.4

Total number of librarians = 50  
 Total number of academic staff = 125  
 Total number of postgraduate students = 248  
 Total number of undergraduate students = 520

Table 9.24 : Comparison sub-group: Percentage of users and librarians who never or seldom use stated IT facility

Introducing IT in your library would	Academic Staff %	Students %		Librarians %
		Postgrad.	Undergrad.	
offer new services in your library	82.7			98.0
remove drudgery from librarians				96.0
encourage research activities among users	92.7	90.4	81.8	96.0
help to overcome the shortage of qualified librarians				76.0
help to cope with increased number of library materials				84.0
help to cope with increasing number of library users				84.0
help to cope with increasing workload				92.0
help to complete library tasks more accurately, more quickly and with greater control				96.0
help to create more space	88.7	88.1	77.2	78.0
help to compete with other academic libraries				68.0
increase workload				10.2
be difficult to use	14.6	25.8	33.9	4.0
be high cost				14.0
not save time or effort				2.0
expose weaknesses of library collections				38.0
support teaching	92.0	88.1	84.1	
help to gain research grants	73.8	77.1	60.2	
help to support the postgraduate programmes	92.7	91.0	84.7	
help to meet the postgraduate student needs	92.8	93.4	84.3	
help to save time and effort	83.6	91.0	87.7	
help to encourage your students to use the library more often	93.5	86.5	84.6	
help to be in touch with research activities in the advanced countries	89.6	87.3	73.3	

Total number of librarians = 50  
 Total number of academic staff = 125  
 Total number of postgraduate students = 248  
 Total number of undergraduate students = 520

**Table 9.25 : Comparison sub-group: Percentage of agree or strongly agree**  
 (empty cells indicates question not asked of this subgroup)

	Users															
	Librarians					Academic Staff					Students					
	%					%					%					
	v. impo or impo	Neutral	Not v. imp or not imp	No. of missing	v. impo or impo	Neutral	Not v. imp or not imp	No. of missing	v. impo or impo	Neutral	Not v. imp or not imp	No. of missing	v. impo or impo	Neutral	Not v. imp or not imp	No. of missing
Computerised acquisition	100.0	0	0	1												
Computerised cataloguing	98.0	2.0	0	0												
Comput. catalog. search (OPAC)	98.0	2.0	0	0	87.2	4.0	8.8	0	83.2	1.6	15.2	4.0	77.9	12.8	9.3	4.0
computerised circulation	92.0	6.0	2.0	0	85.4	4.8	9.7	1	83.6	9.0	7.4	4.0	76.0	16.5	7.6	4.0
CD-ROM stations	90.0	8.0	2.0	0	84.6	5.7	9.8	2	75.0	17.6	7.4	4.0	64.4	28.7	6.9	0
Online external databases	90.0	8.0	2.0	0	87.8	6.5	5.7	2	87.1	11.9	11.1	4.0	69.4	20.9	9.7	7.0
Audio and video systems	86.0	14.0	0	0	81.1	8.2	10.6	3	77.7	13.6	8.6	5.0	77.2	14.9	7.9	3.0
Videotex and teletex systems	80.0	18.0	2.0	0	82.1	6.5	10.5	2	81.6	10.9	7.5	9.0	72.8	17.8	9.4	9.0
Microform machines	78.0	20.0	2.0	0	73.6	7.2	19.2	0	77.1	18.4	4.5	4.0	71.8	16.7	11.5	5.0
Photocopying machines	82.0	12.0	6.0	0	80.7	6.5	12.9	1	88.5	9.8	8.0	4.0	82.3	10.8	6.9	0
Microcomputer facilities	94.0	6.0	0	0	89.4	49.0	5.7	2	86.5	10.2	3.3	4.0	83.5	10.7	5.8	4.0

Total number of librarians = 50  
 Total number of academic staff = 125  
 Total number of postgraduate students = 248  
 Total number of undergraduate students = 520

Table 9.26 : Comparison sub-groups: The importance of IT facilities to improve library services

Library Services	Academic Staff %	Students %		Librarians %
		Postgraduate	Undergraduate	
Arabised computerised cataloguing search (OPAC)	73.6	88.5	76.7	90.0
Arabised computerised circulation	69.6	86.9	72.7	76.0
Arabised CD-ROM stations	69.1	85.5	60.5	80.0
Arabised Online external database	69.4	86.7	66.3	70.0
Microcomputer facilities with Arabised system	72.8	92.0	52.4	74.0

Total number of academic staff = 125  
Total number of postgraduate students = 248  
Total number of undergraduate students = 520

Table 9.27 : Comparison sub-group: Very important or important in selected library facilities

Statement	Academic Staff %	Students %	
		Postgraduate	Undergraduate
There is a need for an Arabised computer system in your library	71.5	85.3	77.8
Arabised system would encourage you to use the library more often	61.6	91.1	78.1
Arabised system would be easier for your use than the English system	66.0	84.8	74.6

Total number of academic staff = 125  
Total number of postgraduate students = 248  
Total number of undergraduate students = 520

Table 9.28 : Comparison sub-group: Strongly agree or agree opinions in selected statements.

	Academic Staff %	Students %		Librarians %
		Postgraduate	Undergraduate	
The electronic library will be the future trend for the academic environment	86.3	85.7	69.2	92.0
You need a training programme in the use of IT facilities in the library	87.2	94.3	78.6	
You are willing to join training courses to learn new IT facilities	81.6	91.8	80.0	96.0
It is important to involve academic staff in planning for IT in the library	88.0	77.9	81.6	

Total number of librarians = 50  
Total number of academic staff = 125  
Total number of postgraduate students = 248  
Total number of undergraduate students = 520

Table 9.29 : Comparison sub-group: Strongly agree or agree in opinions in selected statements



	Academic Staff %	Students %		Librarians %
		Postgrad.	Undergrad.	
There should be effective official cooperation/telematics for academic libraries in Kuwait	88.8	95.1	90.0	100.0
Participation in library cooperation/telematics would improve the library services	93.6	94.7	90.4	98.0
It is feasible to establish a telematics cooperative for academic libraries in Kuwait.	89.6	94.3	82.7	84.0
You are ready to take training/courses in the new telematics systems	83.2	90.1	80.2	94.0
College libraries in KU/PAAET should be linked together	92.8	96.7	86.6	92.0
Academic libraries in both KU and PAAET should be linked together	90.4	95.1	88.0	82.0
A telematic system will save your time and effort	86.3	97.1	89.6	
A telematic system is difficult to use	30.9	29.7	33.2	18.6
A telematic system between your library and other college libraries in KU/PAAET will improve your research activities	82.3	99.1	89.9	
A telematic system between your library and other college libraries in KU/PAAET will improve your teaching/learning activities	81.2	98.3	89.8	
A telematic system between your library and other college libraries in KU/PAAET will improve your research activities	87.9	95.5	87.2	
A telematic system between your library and other college libraries in KU/PAAET will improve your teaching/learning activities	79.9	96.3	85.2	
An online catalogue searching terminal in your office/department connected with your library will support your research activities	86.4	98.4	87.5	
An online catalogue searching terminal in your office/department connected with your library will support your teaching/learning activities	76.0	98.0	85.2	
Telematic systems are not reliable	8.8	11.3	21.7	14.2
Librarians are ready to use telematics facilities				88.0
Library users are ready to use telematics facilities at the present time				64.0
Your library has the capability of user education/training for new telematics				60.0
The new telematics system will reduce the workload of librarians				88.0
Cooperative telematics would enhance your library collections				98.0
There should be a unit for interlibrary loans in KU and PAAET				92.0
There should be an official agreement for cooperation/telematics				92.0
There should be an active policy for cooperation/telematics				96.0

Total number of librarians = 50  
 Total number of academic staff = 125  
 Total number of postgraduate students = 248  
 Total number of undergraduate students = 520

Table 9.30 : Comparison sub-groups: Strongly agree or agree on cooperation and telematics (empty cells indicates question not asked of this group)

## CHAPTER TEN

### DISCUSSION

#### 10.1 Introduction

This study sought to investigate the main factors involved in the development of IT in Higher Education libraries in Arab Countries with special reference to Kuwait. In particular this study aims to identify the critical issues affecting the introduction and usage of IT in the Higher Education libraries in Kuwait and includes possible solutions for these issues.

The research approach adopted was: (i) Examination and evaluation of the present situation and future plans for IT, Arabisation, cooperation and telematics in Higher Education libraries in the AC in general and in Kuwait in particular. (ii) Completion of a detailed user study. (iii) Assessment and analysis of users', librarians' and library authorities' opinions and attitudes to IT, Arabisation, cooperation and telematics in Kuwait Higher Education libraries.

Several research methods were utilised as part of this study. These comprised: a critical literature review to examine the three main aspects of IT, Arabisation, cooperation and telematics; a questionnaire survey conducted in the university libraries in AC; a field work study; and a comprehensive survey including questionnaires, interviews and observations conducted in the higher education libraries in Kuwait specifically.

## 10.2 Study Main Findings

This section presents the main study findings in AC Higher Education libraries in general, and in Kuwait in particular.

### 10.2.1 In AC University Libraries

1. The university libraries in AC are still at an early stage of IT. Traditional manual methods are still commonly used for most library operations and services, such as card cataloguing, even in some old and well-known universities such as those in Egypt.
2. IT status in most GCC university libraries can be seen to be more advanced. This is especially true in Saudi Arabia. The KFUPM Library in particular is one of the more advanced in the region. This could be related to the fact that these countries have a strong oil economy and are therefore able to buy new IT facilities and are also able to import qualified librarians and technical manpower to run such facilities. This could also relate to the fact that most of the chief librarians in these libraries have high qualifications, such as Master and PhD degrees in Library and Information Science from the most developed countries with respect to IT, such as the USA and UK.
3. Very few university libraries in AC are using Arabised library systems so far, and these are mainly in the GCC countries. Most of the other libraries believe in the value of such systems and intend to install them in future. However,

only a few libraries are expected to adopt such systems in the near future, such as those in Qatar and UAE.

4. DOBIS/LIBIS and MINISIS are the only two Arabised library systems that have been used so far in these libraries. DOBIS/LIBIS is more widely used but is, however, only partly Arabised. However, the VTLS system is expected to be installed soon in UAE and Kuwait.

5. A lack of qualified librarians, especially those who have advanced skills with the new IT in library and information centres, is viewed by the Library Heads as a serious problem in the implementation of IT, including Arabised library systems. This problem is made worse by the shortage of suitably qualified nationals in the GCC countries. These libraries also need chief librarians who are professionals in the field and particularly those with knowledge of trends in IT. They also need the leadership skills to deal with the top decision makers in promoting the best interests of the library service.

6. This survey confirms that the university libraries in AC have a large number of potential users and, on the basis of population growth this number is likely to grow quite rapidly. Therefore, adopting modern IT in these libraries is urgent in order to enable them to provide adequate services to their users, especially to meet the current and future educational and research demands of both postgraduates and academic staff.

7. The steady growth in collections in these libraries indicates the need for the utilisation of IT to achieve quick and effective access and control. This could free the limited number of qualified staff from the repetitive tasks which occur in a traditional library system and enable users to gain access directly through IT equipment. It would thus help to close the gap between the number of potential users and the number of librarians available to assist them.

8. Financial difficulties, especially amongst non-GCC countries are seen as a major problem in the introduction of such developments in IT. Most of the library budget in many AC university libraries goes towards acquisition activities and only a small amount is allocated towards library automation. Libraries will need to consider whether more funds should be directed towards IT.

9. Problems such as maintenance, linguistic difficulties in system development, and limited capabilities of current implementations are seen as significant obstacles in adopting and using Arabised library systems in AC university libraries. As almost all library users in these libraries are Arabic speaking and the Arabic collections are large, it is essential to install bilingual Arabic/English systems.

10. Effective cooperation and telematics, both at national and regional levels, which are most common in the west, are lacking in the AC Higher Education libraries in general. Therefore, inadequate library services can be noticed as a result. The

library users now in AC are mainly restricted to using the library materials and facilities locally available which may not be able to meet their present and future needs.

#### **10.2.2 In Kuwait Higher Education Libraries**

The main outcome of the Kuwait Higher Education libraries study can be presented in the following :

1. Although Kuwait is a rich country and KU is one of the oldest universities in the Gulf, its academic libraries, as well as those in PAAET, are still using a traditional manual library system. For example, card catalogues are still used in these libraries. These libraries in Kuwait, as the survey shows, lack an integrated computer-based library system, Arabised library system and cooperation and telematics. There are no telematics, neither between KU and PAAET libraries, nor even among the college libraries which are scattered throughout each institute. Moreover, such a system has not yet been planned for the near future.

This deficiency could be explained by the following :

- a. That library management is not active and dynamic.
- b. That library authorities are not concerned about modern management techniques.
- c. That there is a lack of planning.
- d. That these libraries are under-resourced.
- e. That there is insufficient user feedback to be clear about user satisfaction, requirements and needs.

- f. That the Iraqi invasion has had an impact in delaying the introduction of IT.

Indications can be found in the survey which raise important questions such as the awareness and understanding of issues in library IT.

2. Although most colleges in both KU and PAAET conduct their teaching and research in the Arabic language and their libraries have a large stock of collections in Arabic, the study shows there is no Arabised computer-based system in these libraries. Such a system would support their library functions in managing and controlling these collections and would support the needs of their users. However, the lack of such systems may be due to the fact that Arabised library systems are relatively new to the market, that there is a lack of experience and awareness in Arabised systems amongst library authorities, librarians and users, and finally, that there is a lack of planning based on studies to implement such facilities.
3. Library users have expressed some dissatisfaction with the current traditional library system and services being used and offered in these libraries. They stress the urgent need for a computerised library system, for an Arabised system and for co-operation and telematics to be adopted in their libraries, since they believe that the electronic library will be the future trend for the academic environment.

4. Both librarians and library users, although they have limited IT backgrounds, have high expectations and positive

attitudes to the importance of IT facilities in improving their library services. They believe that adopting such facilities would support the educational and research programmes in KU and PAAET. These views are in marked contrast to the lack of development taking place.

5. Despite their lack of expertise the majority of Librarians, academic staff and students believe that IT is not difficult to use and that telematics systems have reached a stage where they are sufficiently reliable to be used in Kuwait Higher Education libraries. They also indicated that user-education and training programmes are needed when such facilities are to be implemented.

6. Librarians in both KU and PAAET believe that the main obstacles hindering the introduction of IT, Arabisation, cooperation and telematics, in Kuwait Higher Education libraries are the following

- Technical difficulties
- Administration bureaucracy
- Lack of qualified librarians with the relevant skills
- Lack of awareness among the authorities
- Lack of user studies
- Lack of library policy
- Lack of official agreement about cooperation
- Lack of coordination.



These are crucial difficulties in these libraries. Therefore, prior to the implementation of such facilities, it is essential for these obstacles to be tackled.

7. Although KU and PAAET are the only two higher educational institutes in this small country, are situated close together geographically and come under the umbrella of the Ministry of Higher Education, there is a lack of official cooperation, coordination and telematics between their libraries. There is an absence of agreement between the institutes and each library system works in its own way. Even a basic interlibrary loan system or a van delivery service between KU and PAAET is not in place. Although KU is connected through a telematics system regionally and internationally through Gulfnet and Internet, surprisingly, such connection at national level is absent.

The absence of cooperation and telematics in KU and PAAET may be due to a lack of awareness among library authorities and a lack of planning. A well-organised cooperation and telematics system among KU and PAAET libraries would serve the academic environment, reduce cost, and facilitate resources sharing.

8. There is a gap between the current library services, based on the traditional card catalogue system and limited resources, and the present and future user need for a computer-based library system with telematics connections through KU and PAAET for easy and quick information access. There is also a mismatch between the aspirations and perception of library users and authorities. This is quite clear in the users'

immediate needs for and expectation of library services which may not be matched by the planning priorities of the library authorities.

### **10.3 The Main Critical Issues Affecting IT, Arabisation and Cooperation and Telematics in Kuwait Higher Education Libraries and Possible Solutions**

We have seen that IT, and effective cooperation and telematics, both at national and regional levels, which are common in the West, are generally lacking in AC libraries, resulting in inadequate library services. The library users now in AC are mainly restricted to using the library materials and facilities which are locally available and which may not be able to meet their user present and future needs.

As a member country of the AC, the Higher Education libraries in Kuwait have similar problems. Very limited IT, Arabisation and cooperation and telematics can be clearly observed. Although Kuwait University is one of the oldest in the Gulf it appears that its libraries, as well as those of PAAET, are still behind those of its neighbours in the GCC countries. This is in spite of the fact that Kuwait is small country and has a strong economy.

However, the Iraqi invasion caused severe damage to these libraries. This is, perhaps, a suitable opportunity for the authorities to consider the advantages of IT, Arabisation and cooperation and telematics, in these libraries. Unfortunately, despite the fact that rebuilding after the invasion is taking

place there are no signs of improvement in strategic planning and cooperative development.

This study now explores the following major issues or factors which perhaps affect IT, Arabisation and cooperation and telematics and proposes key solutions.

### **10.3.1 Lack of Strategic Planning**

The importance of strategic planning is paramount as libraries need to consider their future development. It is necessary for library staff to have a clear view on the goals of the library and on the way their work and their ideas can make a contribution to new developments. Cooperation, agreement on technology and standards must be considered in order to achieve the realisation of planned goals. Most of all it needs the involvement and creativity of people (Geleijnse, 1994 a).

In 1989 the Tilburg University Library made an strategic plan to build a new library with new services by utilising IT facilities.

Geleijnse (1994 b) summarised the main success factors in that programme as follows:

1. There was an idea, a strategic plan.
2. A close cooperation between the library and the computer centre.
3. Commitment from the Board of Governors of the university.
4. Support from the Government.
5. Cooperation with others.
6. The most important success factor was however the people, staff members who worked with enthusiasm and expertise to create a new library and new services.

Unfortunately, it is quite clear from the present study that Kuwait Higher Education libraries are lacking in strategic plans. It appears that this is one of the main factors affecting the implementation of IT, Arabisation and cooperation and telematics. It is very important for any library to work according to a clear and adequate plan. Such plans must be based on studies and consultations with relevant players and stakeholders. It is important to provide all necessary materials and human resources to support these plans to achieve its objectives. Dickmann (1993) stated that the first rule is that, if anything, more time and attention should be allocated to planning than to any other process.

There are many management problems in Kuwait academic libraries which no doubt handicap their development. These problems exist at various levels. Disagreement and conflict are present both laterally and vertically in library administrations, and also exist between different kinds of library (Al-Hassan, 1992).

Al-Hassan described management problems in Kuwait libraries. These can be summarised as follows :

- Library staff are demotivated and lack enthusiasm.
- Favouritism and unfairness in recruitment, together with deficiencies in job promotion and staff performance evaluation are widely claimed by library staff.

- Personnel relationships are not constructive, particularly between supervisors and the supervised information workers.
- Job descriptions do not exist.
- Authoritarian management style and bureaucracy are stifling creativity and causing staff apathy.
- There is a gap between written information on job position and actual performance.
- Sound written recruitment policies do not exist.
- Kuwait libraries' objectives are too general to be measured and achieved.

It can be said that academic libraries in Kuwait may have no fixed or adequate official policies and plans which direct their work in the short or long term. It seems somewhat chaotic and decision making is very much day to day. Generally speaking, the development of IT and cooperation has received, as Khalid (1995) describes, little more than lip service, conducted informally and attributed to personal decision-making rather than group planning. If there are any plans and policies, they may be neither official nor adequate. Official plans that do exist are not always implemented and policies may be "on hold" for many years.

There have been recommendations for several different types of Kuwait libraries made by consultant teams long before the invasion, but they have been not implemented yet. It seems there is a gap between the level of these recommendations and their recognition among library directors, between the

directors and the top authorities in their enthusiasm for new developments and between the perceptions and aspirations of the two groups.

There are several examples which could be cited as evidence for this. In Kuwait University, a Master's programme for Library Science has been planned for more than a decade but, as yet, no action has been taken. There was also a plan to establish a new campus for KU more than a decade ago. First, it was decided to situate the campus in Shuwaikh. Then the plan was changed to Shidadiya, but as yet, no campus has been built. After liberation in 1992, the Higher Education Minister promised to establish this long-awaited campus within four years but up until now nothing has been done. A similar situation exists with PAAET buildings. There was a plan for new campus, but again nothing has been done.

It has been recognised in this study that until last year, the Libraries' Department in KU had no director for a number of years. In PAAET the situation is similar. The position of the Library Director is not stable. The former directors resigned over after short periods in office and the current director is now in an acting position. These administration problems could clearly contribute to a lack of strategic planning in Kuwait Higher Education, and have a negative effect on the development of these libraries. The introduction of IT in academic libraries requires, as Geleijnse (1994 a) states, the application of new management methods and a new management style.

There is no doubt that the Iraqi invasion and its aftermath in both Kuwait and the whole region caused severe damage to the Higher Education libraries in Kuwait which handicapped and delayed their development. The invasion has changed the priorities of the Government's plans. Threats from Baghdad still worry the authorities and the people in this area.

From the above, it is quiet clear that the main step for introducing IT, Arabisation, cooperation and telematics is the strategic planning. The following are major factors to be considered :

- i. Clear analysis of library needs.
- ii. Close cooperation and coordination between KU and PAAET libraries and their computer science departments and computer centres.
- iii. Financial, moral and political support from top governmental officials.
- iv. Cooperation with others locally, regionally and internationally.
- v. Support for the enthusiasm and expertise of the library staff.

#### **10.3.2 Quality of Existing Personnel**

Librarians of the information age need to develop attitudes, abilities and skills which are markedly different from those required in traditional libraries. New skills are required of library staff, such as in information technology. Librarians

should also be trained to specialise in ways of accessing or using information. They need to develop the ability to communicate, with electronic access to information, to instruct users. Since the English language is becoming more important, as research and study programmes become more international, library staff should develop their ability to communicate in English. They also need skills in public relations and marketing since librarians must "sell" their library services to the academic community and to society (Geleijnse a, 1994).

This study shows that librarians in Kuwait Higher Education libraries have a limited background and experience in IT, Arabisation, cooperation and telematics. This can perhaps be attributed to the following :

- a. lack of IT in their library,
- b. lack of awareness of the importance of IT,
- c. IT is a new phenomenon in the country,
- d. lack of training and sponsored studies in IT. Most current training programmes deal with the traditional aspects of librarianship. Most librarians received their education from traditional schools of librarianship (Al-Hassan, 1992).
- e. The Department of Library and Information Science in PAAET is lacking IT and computing courses in its curriculum. It is the only department in the country to supply library manpower. This Department is relatively new. In the late 1980s it started



B.A. programmes, and before that it had college status for only two years.

- f. Most of the existing librarians have qualified in different disciplines from the library and information field. Almost all librarians have a B.A. degree , especially in PAAET. They are considered to be paraprofessional and lack skills which are relevant to the new technology in the information and library field.
- g. There are shortages of publications in Arabic about IT since most such publications are in English and librarians may face difficulties with the language.

However, any successful plan to introduce and implement IT in any library requires a serious consideration of the quality and quantity of the existing librarians. They are the manpower who carry out library functions and support the user needs and satisfaction. To promote the quality of the existing personnel, the authority should consider the following: (See also Section 10.3).

a. Training programme

Librarians should be involved in regular training programmes in new technology services in the library. This can be done through external courses run by companies who provide the equipment as well as by consulting specialists in the field.

#### b. Library education

The library education programme in the Department of Library and Information Science, in PAAET, should be revised to improve the teaching methods and increase IT courses in its curriculum. Library education may be improved by seminars, conferences, exhibitions and exchange visits to well-developed countries.

#### c. Costs

The authority should consider the cost of the training, and education programmes of the existing and future personnel in their plan. They should allocate part of the budget to this issue. The study shows that cost should not be a problem in Kuwait and GCC countries, although it is a problem in non oil-rich Arab countries.

#### 10.3.3 Lack of IT

One of the main findings of this study is that Higher Education libraries in AC in general and in Kuwait in particular are still in the early stages in IT, Arabisation and cooperation and telematics. This is due to many obstacles, as mentioned earlier, such as lack of planning and lack of qualified librarians with relevant skills.

However, the following issues should be considered for the introduction of IT into KU and PAAET libraries :

#### a. Technical problems

Technical problems such as Arabisation, maintenance and documentation are and will be, major factors affecting the introduction of IT in AC in general and in Kuwait specifically. For example, there are still some technical problems in producing a fully Arabised library system. This could be in part due to the Arabic language itself. Most of these systems have been developed in the West and there is a lack of sponsorship and financial support for research and studies in Arabisation. However, there has been recent progress in the development of such systems, as is described in Chapter Three.

Introducing IT needs regular maintenance, updating and alteration because of continued improvements in software and hardware. The long term costs of such maintenance and updating need to be budgeted for. Furthermore, technical leaflets, brochures and manuals should be given consideration in introducing IT. Since most of the documents are in English, translation should also be provided. The introduction of IT will require hardware and software expertise, therefore university libraries and computer centres will need to cooperate closely and coordinate their efforts.

#### b. Financial

This study shows that library authorities in Kuwait believe that lack of finance is not a major obstacle to the introduction of IT into their libraries. Therefore, library budgets for IT should be adjusted to cope with the expenditure

required to introduce IT. The library budget for IT should encompass the following:

1. purchase of the hardware and software required for the new systems
2. training costs for the library personnel
3. maintenance costs
4. updating and alteration costs
5. documentation, leaflets, brochure and translation costs
6. consultation, research and studies cost
7. subscription, (for example, international database online, CD-ROM etc.).

#### c. Cooperation and Networking

Users of university libraries require fast access to information services which are up to-date and accurate. The users need to get information, therefore they need to "make use of national and international interlending and document supply services to acquire materiel not held in their local library" (Tedd, 1995). It must be understood that no individual library can be self-sufficient. Cooperation is the keyword to achieve effective network and telematics. Khalid (1995) stated that the libraries in the Gulf should seize the opportunity and not delay in their decision to network. He further explained:

the climate is right, communication technology, standards and protocols are in place, computer systems and bibliographic databases exist, the next logical step for the Gulf libraries is to create a formal library network.

Kuwait is a small country and has an adequate telecommunication system. Therefore, there is no substantial reason which hampers cooperation and networking between its academic libraries. The authorities need to make decisions, show a willingness to cooperate and to realise the benefit of such cooperation.

#### **10.3.4 Librarians and Users High Expectation**

Surprisingly, this study shows that, although librarians and users have limited background and experience in using IT, they have high expectations from it. These high expectations may have been induced by the media and the fact that those academic staff who have graduated from developed countries have background experience and awareness of possible improvements in library services. In addition, it is possible that users and librarians have become aware of advanced facilities through the services of NSTIC.

It is interesting to note that high expectation among library users is also evident in Nigerian Higher Education libraries. Ononogbo (1994) found that university libraries come under pressure with increasing expectations from users for better and new services. Library users are aware of the benefit of the online and CD-ROM databases and OPAC which may be introduced into their libraries. Manual services are no longer satisfying the rapid growth of Higher Education users in the Third World in general.

The information explosion and developments in IT mean that library users are more aware of these changes and they want the benefits of such facilities in their libraries. However, without proper training and instruction the new systems will be of limited use to users. They need to learn, as Geleijnse (1994) states, what the system can do for them, how to use the system, how to integrate the new library services into their existing work and what they should do if things go wrong.

The Kuwait study shows that staff with little experience in IT or who work with traditional systems have high expectations from IT. They believe that introducing IT will reduce their workloads. This seems to be borne out in practice by the views of library assistants in the IMPEL project (Edwards, et al 1995) who agreed that electronic information does in fact reduce routine workload. This probably reflects the type of work they are engaged in, using IT for bibliographic checking, cataloguing and acquisition which is mostly repetition and routine.

However, the IMPEL study showed that professional staff, computing officers, and library chiefs indicated that for them the workload increases. This is also confirmed by Siddiqui (1994) who found that using CD-ROM services in KFUPM Library has increased the work load of the library staff. It also requires more user education and more staff training. Kanamugire (1994) also adds that introducing CD-ROM services in KFUPM Library leads to more work pressure on library staff, exposes weaknesses in library collections and causes more

demands for improved equipment and services. The Kuwait study, conducted as a part of described research in this thesis, also indicates that there is a significant minority of librarians who believe that introducing IT would expose the weakness of their library collections and that their libraries are not capable of providing adequate user education in IT.

Therefore, librarians in Kuwait should expect that this is likely to be the case in their libraries when they introduce IT. It seems that library heads, qualified librarians and computing officers in the library will have an increase in work loads, especially at the early stages of the implementation.

Introducing IT into libraries may bring with it interest, a challenge, enjoyment and job satisfaction. This may be one of the reasons for the high level of enthusiasm among the librarians and users of IT in Kuwait. The IMPEL project study showed that there was general agreement among librarians that the use of electronic information had increased their job satisfaction and made them more effective in their work. They felt that their work became more interesting despite increased workloads. This is also supported by Palimini (1994) who found that over half of the support staff reported feeling more job satisfaction since the computerisation of their libraries. However, introducing IT may also bring some frustration with it for librarians. The IMPEL results showed that there was agreement among librarians with IT experience, but not total agreement with the statement "I felt frustrated by my lack of expertise".

Automation has, as Geleijnse (1994 a) explained, an impact on job satisfaction, job security, the quality of the job and on cooperation between members of different divisions. This can be positive in that it reduce repetition and provides more variety of work. It may also upgrade the skills of librarians. However, there may also be certain negative aspects to the introduction of automation such as the danger of losing jobs, some tasks may lose their interest and skill and employees may feel under pressure if they are uncertain about the changes taking place.

#### **10.4 Conclusions**

This section presents the main conclusions for Kuwait libraries. Library authorities in Kuwait should consider the following factors in their planning for and implementation of IT:

Official agreements need to be made in and between Higher Education institutions namely, KU and PAAET. This will involve serious professional planning and will need the support of those in top-level authority. The financial implications of implementing IT systems will need to be carefully considered. Training for library staff will be of great importance for the successful introduction of IT. User studies will be necessary and a programme of user education planned.



A staged programme should also be carefully planned. Automation projects fall into three stages: planning, selection and implementation. This is important because of the range of systems available and their functions. If a library authority concentrates on these three stages systematically they are unlikely to go far wrong (Dickmann, 1993). It is clear that any planned programme should examine previous experience and research. This includes the IMPEL project in UK, the Tilburg university experience in Holland, the KFUPM Library in Saudi Arabia and the NSTIC in Kuwait. Furthermore, budgets should be developed and swift investment introduced to achieve the planned goals. In addition, it is crucial to consider the following practical recommendations:

#### **10.4.1 IT and Arabisation**

1. KU and PAAET libraries should install and implement an integrated bilingual, English and Arabic, computer-based library system to cope with the current and future user needs. These systems need not be the same but it would be beneficial if they were compatible so that the systems could be easily linked. The chosen system and its capabilities will depend largely on the market. This system should include the main library operations such as OPAC, computerised circulation, online data base systems, and CD-ROM stations.

2. The library authorities should agree on the most suitable system available for the needs of their libraries and users. There is also a need for national guidelines and standards for

developing or adopting computer-based library and information systems.

#### **10.4.2 Cooperation and Telematics**

1. An official and effective library cooperation agreement should be set up between KU and PAAET. Both institutes should hold regular meetings of the library authorities to discuss problems, and make suggestions and plans to improve their cooperation.

2. Individual college libraries in both KU and PAAET should be first linked together through a network and telematics system, then both combined library systems in KU and PAAET should link together. See the proposed telematics system for these libraries in Figure 10.1. This will enable them to benefit from the fruits of such cooperation and networking, for example resource-sharing.

3. The offices of all academic staff and postgraduates should be provided with terminals linked with the academic libraries through a network system for quick and direct electronic access to library materials, locally or internationally, to support their teaching and research activities.

#### **10.4.3 Library Management**

1. Senior librarians should be representatives on the main official committees in KU and PAAET. This would enable them to take a lead role in the plans, decisions and recommendations of these institutions.

2. IT facilities such as E-mail, FAX and computers should be widely used through the Higher Education libraries' management and administration system in Kuwait. This would help to increase the efficiency of the administration where it is introduced as the result of serious and thorough planning.

3. The study shows that most of the academic libraries in Kuwait are non-purpose built libraries. At the present time, there is a rebuilding process taking place after the war. Therefore, a new plan for purpose-built libraries in KU and PAAET should be considered alongside the changes in the academic environment, especially with consideration of the electronic library era.

4. The status of qualified manpower should be considered seriously in any plan. Library authorities should provide encouragement by increasing salaries in order to promote motivation. They should also upgrade the career structure for local people and try to import well-qualified librarians to support the library users.

#### **10.4.4 Users Education and Training**

1. The survey shows that undergraduate students lack sufficient background in IT and library education. This may be due to a lack of IT and library experience in their early education. Consideration should be given to the introduction of IT and information skills in courses in all High Schools in Kuwait.

2. User education is essential, so that users can utilise IT facilities effectively. Academic libraries should introduce library tours for their users in each semester and provide regular library leaflets to help them to use the library more efficiently. There should be also practical courses for first year student in both KU and PAAET in the use of library and information facilities.

Ongoing training is an important issue which the library should tackle. Training sessions for both students and academic staff should be introduced throughout the year in any new IT facility which is added to the library services.

#### **10.4.5 Library and Information Education**

1. There is a need to improve library manpower skills, basically in the area of IT, Arabisation and telematics. This can be done in several ways.

2. Both institutes should share training courses for librarians. Authorities should encourage and support lectures, seminars and exhibitions related to IT library education from well known specialists, both locally and internationally in order to upgrade librarians' skills and to keep them in touch with the latest developments in technology in information and library systems .

3. The Department of Library and Information Science in the Basic Education College at PAAET should expand and increase IT courses in their syllabuses. Postgraduate studies for M.Sc.

and Ph.D. in information and Library science should be encouraged locally and abroad.

### **10.5 Kuwait Study Applicability for AC**

1. This study shows that Higher Education libraries in AC, in general, are similar regarding their uptake of IT, Arabisation and cooperation and telematics. Kuwaiti libraries reflect the trends identified in the literature and observations on AC libraries in general.
2. Both Kuwait and the vast majority of AC Higher Education libraries are still using traditional manual library systems including the card catalogue method as an access to their library materials. There is a limit use of IT facilities and Arabisation, although most university colleges in Kuwait and AC are teaching and carrying out research using Arabic collections.
3. The study shows that cooperation and telematics among Higher Education libraries in Kuwait and AC are absent. There is, however, a strong feeling among librarians regarding the importance and advantages of introducing cooperation and telematics in their libraries.
4. Both Kuwait and AC academic institutes have a large number of users which is rapidly increasing. This growth demands new and adequate library services. This demands great efficiency from the library since many changes have taken place in

programmes and methods in teaching and research in Higher Education.

5. The Arab League Council through ALESCO should support and invest in user studies in AC in general, sponsor research in Arabisation and should provide guidelines, standards and make recommendations to the AC governments.

The Kuwait study could be extrapolated to certain other AC Higher Education libraries. There are some issues which come out of this study which could be applied to AC in general. These include Arabisation issues, technical difficulties, library education and training. However, because Arab countries are various, there are other issues which could be applied only to those Arab countries which are similar to the situations in Kuwait, especially in educational and economic status such as the GCC countries.

#### **10.6 Suggestions for Further work**

The following are suggestions for further work which follow from this study :

1. A detailed study to establish a plan of action for cooperation and telematics between academic libraries and research and special libraries and information centres in Kuwait.

2. A study to develop an information system in Kuwait, including the establishment of a national library to connect other libraries and information centres in the country.
3. Research to further investigate the problems of the Arabic language and the technical difficulties in implementing Arabised library systems.
4. Conduct a comparative study of information and library education in AC and Kuwait, in comparison to the developed countries to identified possible improvements to such education.
5. Research into the education system in Kuwait to investigate the addition of library and information skills in High Schools.

### **10.7 The Value of this Study**

This study appears to be the first in depth user-study in Kuwait Higher Education libraries. It is the first to study and analyse the user satisfaction, requirements, needs and attitudes towards IT, Arabisation, cooperation and telematics in Kuwait Higher Education libraries.

It assesses and analyses the librarians' and library authorities' opinions and attitudes and identifies the mismatch between the perception and aspiration of users and the policies of library authorities in Kuwait. It identifies and analyses the main factors, thought by librarians and library

authorities to hinder the implementation and introduction of IT, Arabisation, cooperation and telematics and suggests practical solutions for the main issues which need to be considered by the library authorities in Kuwait in their strategic planning.

This research study came after the liberation of Kuwait and the start of the rebuilding process in the Higher Education libraries. It comes at a suitable time to help the authorities in their planning and implementation of IT. On a wider level it examines and evaluates the present situation and future plans for IT, Arabisation, cooperation and telematics in university libraries in the AC in general and it has contributed to identification of the main factors involved in development.

It is possible that the outcomes of this study are more widely applicable to other AC's and it is hoped that this study will increase the awareness of AC authorities as to the importance and viability of IT, Arabisation and telematics in their Higher Education libraries.



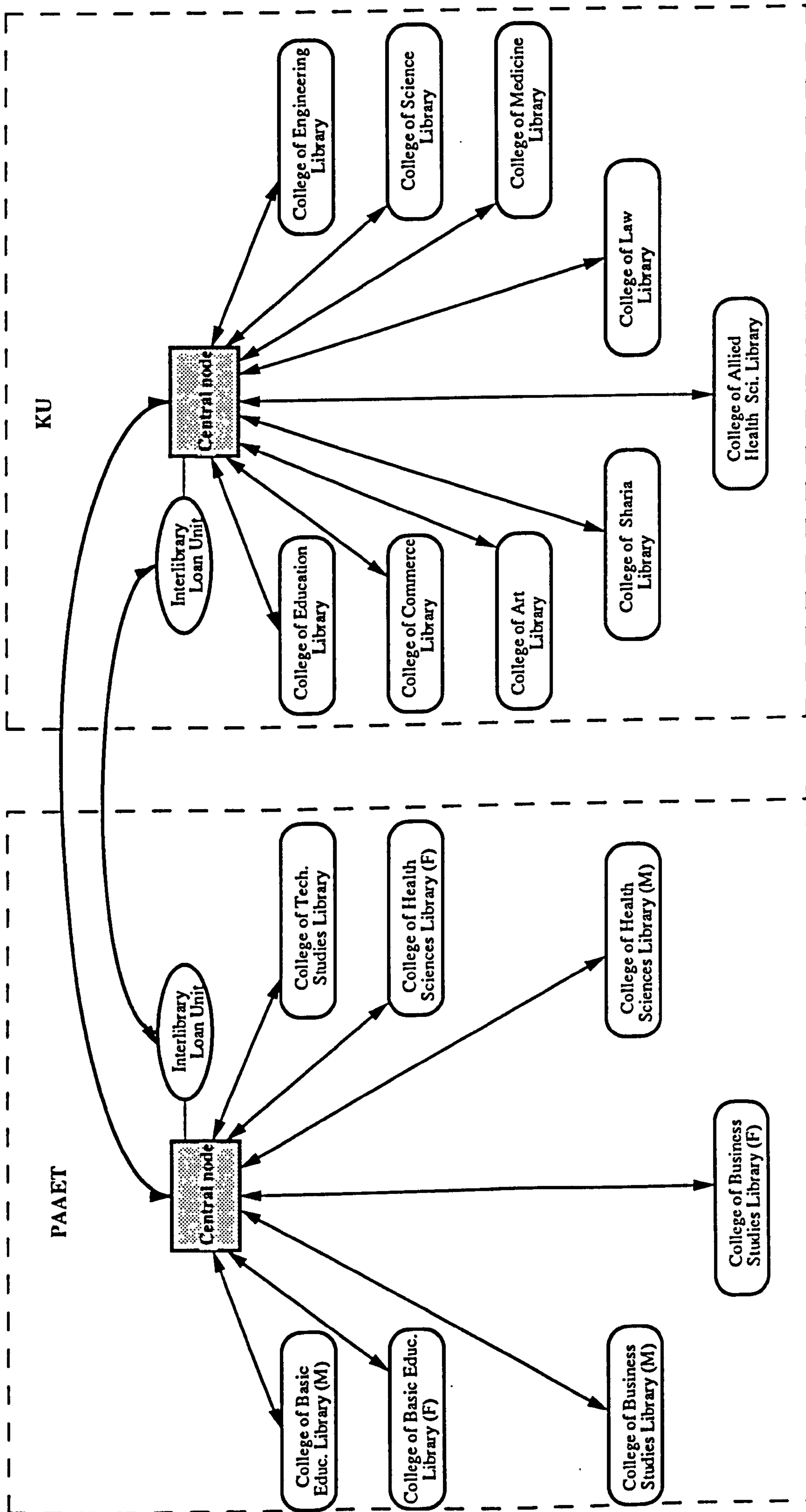


Figure 10.1 : Proposed cooperation and telematic system between KU and PAAET libraries

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**Appendix 1 : Letters**

Professor. Mohammed Aman,  
Dean of School of Library and Information Science,  
University of Wisconsin-Milwaukee, USA.

16 September 1993

Dear Mohammed,

I am writing to you in the hope that you will be able to give me some information, advice and help.

I am a Kuwaiti Ph.D student doing a study on the current state of affairs in Arabisation, library automation, Information technology (IT), and cooperation/networking in the Arab countries (AC), in order to develop a model which would be relevant to library development in post-liberation Kuwait.

According to your experience in this area, it is very appreciated if you stated the most developed library and information centres, in automation and IT, by limiting them to four or five ACs only.

I would be particularly interested in any new developments you may know of which have not yet appeared in the literature. In addition in developments concerning the Alexandrian library, with which you are involved.

I do hope you do not mind my approaching you in this way. Your contribution is appreciated. For the purpose above, please contact:

Khalid Al-Anzi  
School of Computing & Mathematical Science  
Research Unit, Room 2.6, James Went,  
De Montfort University,  
The Gateway,  
Leicester LE1 9BH. UK.

Fax: 0533-541891

Yours sincerely,

Khalid Al-Anzi

Dr. Shawki Salem,  
Information Director,  
Arab Centre for Health Documents and Publications,  
Kuwait

16 September 1993

Dear Shawki,

I am writing to you in the hope that you will be able to give me some information, advice and help.

I am a Kuwaiti Ph.D student doing a study on the current state of affairs in Arabisation, library automation, Information technology (IT), and cooperation/networking in the Arab countries (AC), in order to develop a model which would be relevant to library development in post-liberation Kuwait.

According to your experience in this area, it is very appreciated if you stated the most developed library and information centres, in automation and IT, by limiting them to four or five ACs only.

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Khalid Al-Anzi  
School of Computing & Mathematical Science  
Research Unit, Room 2.6, James Went,  
De Montfort University,  
The Gateway,  
Leicester LE1 9BH.  
United Kingdom.

Fax: 0533-541891

Yours sincerely,

Khalid Al-Anzi

Dr. Ahmed Helal,  
Chief Librarian,  
Essen University Library,  
ESSEN,  
Germany.

16 September 1993

Dear Sir,

Sincere thanks for your great offers of assistance inclosed in your kind letter dated February 15, 1993, to my supervisor, Professor Mel Collier.

As you know I am a Kuwaiti Ph.D student doing a study on the current state of affairs in Arabisation, library automation, Information technology (IT), and cooperation/networking in the Arab countries (AC), in order to develop a model which would be relevant to library development in post-liberation Kuwait.

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Your help is very appreciated. For the purpose above, please contact:

Khalid Al-Anzi  
School of Computing & Mathematical Science  
Research Unit, Room 2.6, James Went,  
De Montfort University,  
The Gateway,  
Leicester LE1 9BH.  
United Kingdom.

Fax: 0533-541891

Yours sincerely,

Khalid Al-Anzi

British Council Library,  
192 Sharia el Nile.  
Agouza,  
Cairo,  
Egypt

16 September 1993

Dear Sir/Madam,

I am writing to you in the hope that you will be able to give me some information.

I am a Ph.D student at De Montfort University in the U. K. My research is on the current state of library automation, Information technology and cooperation/networking in the Arab countries.

My work is supervised by Professor Mel Collier who, as a member of the British Council Libraries Advisory Committee, has suggested that British Council Libraries are well placed to help me with collecting this information.

I wish to identify in each Arab country which libraries or information centres are advanced or most advanced in library automation, IT or networking. I will then contact them to respond to a questionnaire.

Your help will be very much appreciated. I look forward to your reply which should be sent to:

Khalid Al-Anzi  
School of Computing & Mathematical Science  
Research Unit, Room 2.6, James Went,  
De Montfort University,  
The Gateway,  
Leicester LE1 9BH.  
United Kingdom

Fax: 0533-541891

Yours sincerely,  
Khalid Al-Anzi

British Council Library,  
36 rue de Tanger,  
BP 427,  
Rabat,  
Morocco.

16 September 1993

Dear Sir/Madam,

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School of Computing & Mathematical Science  
Research Unit, Room 2.6, James Went,  
De Montfort University,  
The Gateway,  
Leicester LE1 9BH.  
United Kingdom

Fax: 0533-541891

Yours sincerely,  
Khalid Al-Anzi

British Council Library,  
Rainbow Street,  
Jabal Amman,  
PO Box 634, Amman,  
Jordan

16 September 1993

Dear Sir/Madam,

I am writing to you in the hope that you will be able to give me some information.

I am a Ph.D student at De Montfort University in the U. K. My research is on the current state of library automation, Information technology and cooperation/networking in the Arab countries.

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School of Computing & Mathematical Science  
Research Unit, Room 2.6, James Went,  
De Montfort University,  
The Gateway,  
Leicester LE1 9BH.  
United Kingdom

Fax: 0533-541891

Yours sincerely,  
Khalid Al-Anzi



To : Mr. K. Al-Anzi

Date : 26. 6. 93

Dear Khalid

Thank you very much for your interest and visit in our library.

Regarding your enquire for a comprehensive survey and cooperation and other information. We are willing to help your project research in the future

Sincerely yours

الأستاذة / خديجة المحنيزي  
مديرة إدارة المكتبات

Director of PAAET Libraries

National Scientific and Technical  
Information Centre (NSTIC)

To : Mr Khalid Al-Anzi

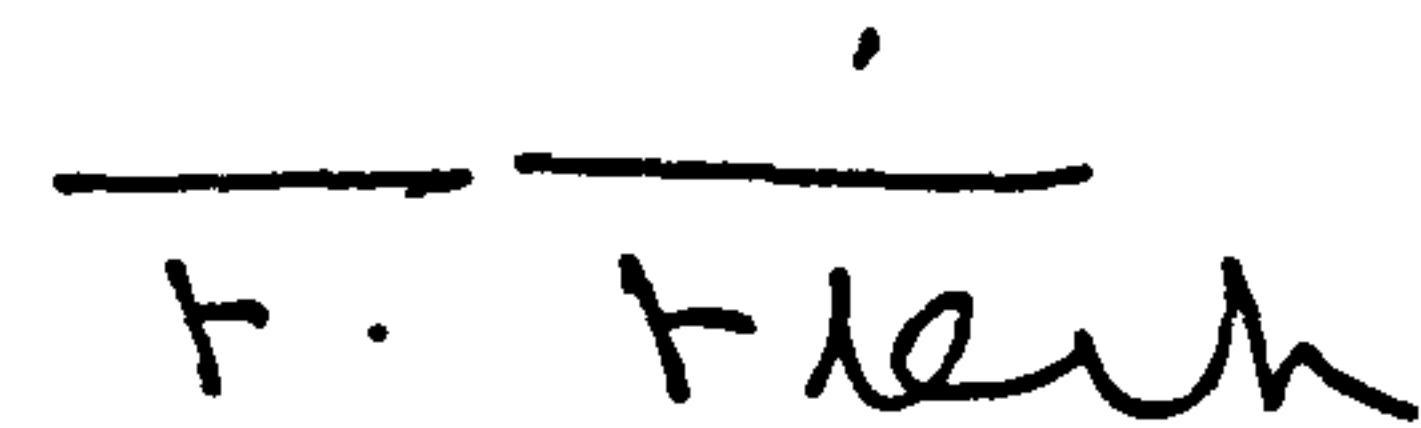
Date : 5.7. 1993

Dear Khalid

Thank you very much for your interest and visit in our library.

Regarding your enquire for a comprehensive survey and, cooperation  
and other information. We are willing to help your project  
research in the future

Sincerely yours



Director, NSTIC/KISR

Kuwait Fund For Arab Countries  
Economic Development  
The Library

To : Khalid AL-anzi

Date : 41/6/1993

Dear Khalid

Thank you very much for your interest and visit in our library.

Regarding your enquire for a comprehensive survey and cooperation  
and other information. We are willing to help your project

research in the future

Sincerely yours



KUWAIT FUND FOR ARAB ECONOMIC DEVELOPMENT  
INFORMATION AND STUDIES DIVISION

ABDULLAH AL-ANSARI

كلية التربية الاساسية

المرجع :  
التاريخ :  
الموافق :  
١٦ / ١٠ / ١٩٩٤

الزميل الطاهر / الزميلة الفاضلة عضو هيئة التدريس المحترم  
السلام عليكم ورحمة الله وبركاته وبعد

يرجى التكرم بالاحاطة علما بان الزميل الاستاذ خالد صغير العنزي  
من قسم علوم المكتبات والمعلومات بالكلية يقوم حاليا باعداد  
رسالة الدكتوراه في تكنولوجيا المعلومات في المكتبات الاكاديمية  
في الكويت .

برجاء التكرم بمساعدته في تطبيق الاستبانة المرفقة على الطلبة  
وذلك لكونه جزء اساسي في هذه الرسالة .

مع خالص الشكر والتقدير

عميد الكلية

د. عبد المحسن الخرافه

هـ.جـ.بـ



**Appendix 2**  
Questionnaire Survey for University  
Libraries in Arab Countries

School of Computing and Mathematical Sciences  
Research Unit, Room 2.6, James Went,  
De Montfort University,  
The Gateway,  
Leicester LE1 9BH.  
UK.

Fax: 0533-541891

Dear Librarian

October 1993

I am a Kuwaiti Ph.D student at the School of Computing and Mathematical Sciences in De Montfort University, in the U. K. My research is on the current state and the future plans of library automation, Information technology and cooperation/ networking in the Arab countries.

I am writing to you in the hope that you will be able to give me some of your time by responding to the attached questionnaire. This questionnaire is designed for some selected university and research libraries and information centers in the Arab countries. It is intended to assess the current status and the future plans of their automation and information technology. In addition to create a library profile for each of them.

Your concern and cooperation are highly appreciated. The data gathered will be confidential and used for research purposes only. In your reply you have only been asked to tick or remark for some questions. However, for some other questions you have been asked to enter or attach some information, data or numbers.

A self-addressed envelope is enclosed for mailing back the completed questionnaire, which is, kindly, required as soon as possible.

Thank you very much for your cooperation

Yours sincerely

Khalid Al-Anzi

**University/Research Library Name** : .....

**Telephone Number** : .....

**Fax Number** : .....

**Address** : .....

: .....

: .....

**Note:**  
*The questionnaire includes a few abbreviations, listed below:*  
*p.a. : Per annum*  
*COM : Computer Output Microfilm (Microform)*  
*LC : Library of Congress*  
*OPAC : Online Public Access Catalogue*

*Tick if you wish a copy of the study results to be sent to you*

# I. Library Profile

*Please tick the relevant box(es) or enter the relevant information, data or numbers*

## 1. Library Head

Name : .....
--------------

## 2. What is the designation of your post ?

Dean	Director	Chief Librarian	Other ( <i>Please specify</i> )

## 3. Qualifications

	BA/B.Sc	MA/M.Sc	Ph.D.	Others ( <i>Please specify</i> )
In Library Science				
Other				

## 4. Management

To whom do you report ? ( <i>Please specify</i> )			
Does your institution have a library committee ?	Yes		No
What is the administrative structure of your library ? <i>Please attach an administration chart.</i>			

## 5. Library Budget

*Please enter annual allocations in local currency under the following headings :*

	Acquisitions	Staff	Automation	Online searches	Interlibrary lending	other
1991						
1992						
1993						
1994						



**5. Library Budget (cont.)**

What percentage of the total university budget does the total library budget represent ?	%
--	---

**6. Library Staff Numbers (Full-Time Equivalent)**

	Professionally qualified	Others	Total
National			
Non-National			

**7. Number of Library Users :**

Faculty staff	Students		Others
	Graduate	Undergraduate	

**8. Library Collections Size**

		Book (Volumes)		Periodical (Titles)	
		Arabic	Non-Arabic	Arabic	Non-Arabic
Present Collection					
What percentage growth is planned p.a over the next three years ?	1994	%	%	%	%
	1995	%	%	%	%
	1996	%	%	%	%

	Central	Branches
9. Number of constituent libraries		

## II. Technical Services

Please tick the relevant box(es)

### 10. Classification

Which classification scheme is used in your library?	Arabic Materials	Non-Arabic Materials
1. Dewey Decimal Classification (DDC)		
2. Modified DDC		
3. Library of Congress Classification (LC)		
4. Other Classifications ( <i>Please specify</i> )		

### 11. Cataloguing

Which Cataloguing scheme is used in your library?					Arabic Materials		Non-Arabic Materials	
1. Anglo American Cataloguing Rules II (AACR 2)								
2. Arabic translation of AACR 2								
3. National Union Catalogue (NUC)								
4. Other Cataloguing ( <i>Please specify</i> )								
Does your library receive catalogue records from outside vendors?	Yes		No		Arabic Materials		Non-Arabic Materials	
					Yes	No	Yes	No
If yes, are these in the form of	cards							
	Computerised records							
	others							
Does your library access a catalogue utility? such as	OCLC							
	RLIN							
	BLAISE							
Others ( <i>Please specify</i> )								

**12. Subject Headings**

*Please tick the relevant box(es)*

	Arabic	Non-Arabic
Which of the following subject headings does your library use ?		
1. LC subject headings		
2. Modified LC		
3. Sears		
4. Al-Khazindar Arabic Subject Heading List (Kuwait)		
5. Swaydan Arabic Subject Headings List (Saudi Arabia).		
6. Other subject headings ( <i>Please specify</i> )		

**13. Catalogue Searching**

Which of the catalogue searching services does your library provide?	Arabic	Non-Arabic
1. Card catalogue		
2. COM book catalogue		
3. OPAC computerised catalogue		
4. Others ( <i>Please specify</i> )		

**14. Serials and Periodical Control**

Does your library use a computerised union list of periodicals ?	Yes	No
1. Produced within the same university or institute		
2. Produced within the country		
3. Produced within the region		

**15. Acquisition**

Does your library have a formal selection policy ?	Yes	No

Who is involved in your library selection procedure ?	Students		Faculty Staff	Library Staff	Others
	Graduate	Undergraduate			

		Arabic	Non-Arabic
From where are your library materials supplied?	Local Vendor		
	Foreign Vendor		

### III. Current Use Of IT

16. Do any functions in your library make use of IT ?

Yes		If yes, please go to question 17	No		If No, please go to question 24
-----	--	----------------------------------	----	--	---------------------------------

17. Which of the library functions is automated?	Not	In part	Fully
1. Library catalogue			
2. Library circulation system.			
3. Library acquisition : Books.			
4. Library acquisition : Periodicals.			

#### 18. Communications

Does the library have access to the following?	Yes	No
Telex		
Fax		
E-mail		
Local Area Network(s) (LANs), please give further inform. if available		
Wide Area Network(s) (WANs), please give further inform. if available		

#### 19. Access to online databases

Does the library have access to the following?	Yes	No
external online databases? <i>Please specify</i>		
external videotext services? <i>Please specify</i>		

#### 20. Micro Computers

		Yes	No
Does the library provide microcomputers(other than for catalogue access) for use by library patrons ?			
How many ?			
What are they used for ?			
Who is using them ? <i>please specify</i>			

## 21. Online Catalogue Access

Is online interactive computer access to the library catalogue by means of:	Yes	No
a Local Area Network (LAN) ?		
a Wide Area Network (WAN) ?		

	Yes	No
22. Does your library receive any Arabic document in machine readable form ? <i>please specify:</i>		
23 Does your library receive any non-Arabic document in machine readable form?		

24. Which of the following, in your opinion, cause dissatisfaction amongst your users?	
1. The required document is not in stock.	
2. The documents they are interested in are on restricted access.	
3. Difficulties in using the catalogue.	
4. Signing and guiding are not effective.	
5. The library opening hours.	
6. Lack of photocopying facilities.	
7. Lack of automation.	
8. Lack of user education.	
9. other reasons ( <i>Please specify</i> ):	

25. Please indicate in your opinion to what extent each of the following is HINDERING the implementation of automation in your library. <i>please mark the following scale of 1 to 5</i>							
Financial Difficulties		1	2	3	4	5	<i>1. Strongly disagree</i> <i>2. Disagree</i> <i>3. Neutral</i> <i>4. Agree</i> <i>5. Strongly agree</i>
Personnel difficulties	Lack of qualified staff	1	2	3	4	5	
	Staff attitude	1	2	3	4	5	
Technical Difficulties		1	2	3	4	5	
Others ( <i>Please specify</i> )		1	2	3	4	5	

#### IV. Arabised System

26. Has your library installed any Arabised System ?	Yes		No		If No Please go to Q29
--	-----	--	----	--	------------------------

27. Which of the following are arabised ? if yes, to what extent are you satisfied (*Please circle where appropriate*)

1. *Very dissatisfied*   2. *Dissatisfied*   3. *Neutral*   4. *Satisfied*   5. *Very satisfied*

	No	Yes					If yes, Please specify the system name
		1	2	3	4	5	
Integrated Systems		1	2	3	4	5	
CD ROM		1	2	3	4	5	
Networking		1	2	3	4	5	
Online access services		1	2	3	4	5	
Others, ( <i>Please specify</i> )		1	2	3	4	5	

28. What are the main problems in using the Arabised system ?    *Please tick the relevant box(es)*

1. Language Problem	
2. Financial Problem	
3. Maintenance	
4. Lack of qualified personnel	
5. User readiness to accept the system	
6. Limited capabilities	
7. Others, ( <i>please specify</i> )	

*Please, go to Question 30*

29. What are the main obstacles in adopting an Arabised system ? *Please tick the relevant box(es)*

1. Language Problem	
2. Financial Problem	
3. Maintenance	
4. Lack of qualified personnel	
5. User readiness to accept the system	
6. Limited capabilities	
7. Others, <i>(please specify)</i>	

## V. Library Policy Towards IT

30. For the following IT based library applications that are not already in place in your library, please indicate whether you intend to introduce them over the next three years *by ticking the relevant box(es)*

	Yes	No	Not decided
Computerised Cataloguing			
Retrospective catalogue conversion			
Computerised book ordering			
Online link to book supplier			
Computerised periodical ordering			
Online link to periodical supplier			
Communication facilities			
Local area network (LAN)			
Wide area network (WAN)			
Join cooperative computerised system			
Acquire integrated library system from commercial supplier			
Introduce online searching facilities (excluding videotext)			
Introduce videotext searching facilities			
Introduce computerised access to library catalogue e.g. OPAC			
Introduce other information technology developments, <i>please specify</i>			
Do you have a plan to cooperate with other libraries in the country			
Do you have a plan to cooperate with other libraries in Arab Countries?			
Do you have a plan to cooperate internationally			
Do you have a plan to install an Arabised system			
Do you think an Arabised system will improve your library services ?			



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Research Unit, Room 2.6, James Went,  
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The Gateway,  
Leicester LE1 9BH.  
UK.

Fax: 0533-541891

Dear Librarian

26th November 1993

I recently (October 26th 1993) sent you a questionnaire relating to the current state and future plans for library automation, IT and networking in Arab countries. This questionnaire is an essential part of Ph D research at De Montfort University Leicester. At the time of writing this letter I have not receive your response.

I do appreciate your valuable time and effort, and I look forward to receiving your response. Once again I would like to assure you of the confidentiality of your answer. Your concern, cooperation and understanding are highly appreciated.

Another copy of the questionnaire and a self-addressed envelope are enclosed for mailing back the completed questionnaire, which is, kindly, required as soon as possible.

If you have already completed and send that questionnaire, please disregard this reminder letter and accept my apology for any inconvenience this letter may has caused.

Thank you very much for your cooperation

Yours Faithfully

Khalid Al-Anzi

### **Appendix 3**

#### **Questionnaire Survey for the Higher Education Libraries in Kuwait**

- Library Profile Questionnaire
- Librarians' Questionnaire
- Academic Staff Questionnaire
- Students' Questionnaire

بسم الله الرحمن الرحيم

استبيان رقم (١) : معلومات عامة عن المكتبة

السيد/ السيدة : أمين المكتبة المسؤول  
تحية طيبة ، وبعد

أنا طالب دكتوراة بجامعة DE MONTFORT UNIVERSITY, UK في بريطانيا،  
والاستبيان المرفق جزء اساسي في هذه الدراسة والتي تبحث أثر تكنولوجيا  
المعلومات في المكتبات الاكاديمية في الكويت.

لذا اكتب اليك أملاً منحي بعض الدقائق من وقتك للاجابة على هذا الاستبيان، والذي  
يهدف الي جمع معلومات عامة عن مكتبك بالإضافة إلى القضايا التالية:  
تكنولوجيا المعلومات، نظام كمبيوتر مُعرب للمكتبات، التعاون و شبكة المعلومات.

مقدراً لك حسن اهتمامك وتعاونك ، ومؤكداً لك سرية المعلومات المجموعة لاغراض  
البحث العلمي. أغلب أسئلة هذا الاستبيان تحتاج منك فقط الى وضع علامة على  
الاجابة المناسبة، والبقية القليلة تتطلب منك ذكر بعض المعلومات المحدودة.  
رجاءً أكمل الاستبيان بأسرع وقت ممكن، وضعه لدى المسئول في مكتبك.

شكراً جزيلاً لتعاونكم،

الباحث

خالد العنزي

قسم علوم المكتبات والمعلومات، كلية التربية الاساسية  
الهيئة العامة للتعليم التطبيقي والتدريب

## I. Questionnaire for Library Profile

KU

PAAET

Library College of : .....

Address : .....

.....

.....

Telephone No. : .....

Fax No. : .....

**Note :**

*KU* : Kuwait University

*PAAET* : Public Authority for Applied Education and Training

*IT* : Information Technology

*Telematics* : This new technical term is used to refer to the use of IT with telecommunications, to deliver computer based information services.

*Boxes located on the right side of the questionnaire pages are for researcher use only*

# I. Library staff, users, collections and budget

*Please tick the relevant box(es) or enter the relevant information, data or numbers*

## 1. Library Staff Number (Full-Time )

	Professionally qualified	Others	Total	
National				
Non-National				

## 2. Number of Potential Library Users :

Academic staff	Students		Others	
	Postgraduate	Undergraduate		

## 3. Library Collections Size

		Book (Volumes)		Periodical (Titles)		
		Arabic	Non-Arabic	Arabic	Non-Arabic	
Present Collection						
What percentage pa growth is planned for over the next three years ?	1995	%	%	%	%	%
	1996	%	%	%	%	%
	1997	%	%	%	%	%

## 4. Library Budget

*Please enter annual allocations in local currency under the following headings :*

	Acquisition	Interlibrary loan	Automation	Online CD	library staff	External Online search	others, please specify	
1994								
1995								
1996								
1997								

**4. Library Budget (cont.)**

What percentage of the total university budget does the library budget represent ?	%	
--	---	--

**II. Technical Services**

**5. Acquisition**

*Please tick the relevant box(es)*

	Yes	No	
Does your library have a formal selection policy ?			

Who is involved in your library selection procedure ?	Students		Academic Staff	Library Staff	Others	
	Postgraduate	Undergraduate				

**6. Classification**

Which classification scheme is used in your library?	Arabic Materials	Non-Arabic Materials	
1. Dewey Decimal Classification (DDC)			
2. Modified DDC			
3. Library of Congress Classification (LC)			
4. Other Classifications ( <i>Please specify</i> )			

**7. Cataloguing**

Which Cataloguing scheme is used in your library?	Arabic Materials	Non-Arabic Materials	
1. Anglo American Cataloguing Rules II (AACR 2)			
2. Arabic translation of AACR 2			
3. National Union Catalogue (NUC)			
4. Other Cataloguing ( <i>Please specify</i> )			

## 8. Subject Headings

Please tick the relevant box(es)

	Arabic	Non-Arabic	
Which of the following subject headings does your library use ?			
1. LC subject headings			
2. Modified LC			
3. Sears			
4. Al-Khazindar Arabic Subject Heading List (Kuwait)			
5. Swaydan Arabic Subject Headings List (Saudi Arabia).			
6. Other subject headings ( <i>Please specify</i> )			

## 9. Catalogue Services

Does the current catalogue provide your users directly, without a need to ask the library staff, with the following services:

Please tick the relevant box

	Yes	No	
1. Tells him/her whether or not the book he is looking for is out on loan			
2. If the book is on loan it tells when it is due back			
3. If the book is on loan he/she can reserve it directly			
4. Allows him/her to find what books he has on loan			
5. Allows him/her to renew the book loan directly			
6. If the book is not in your library it tells in which other college library he can find it			
7. Allows him/her to find a book by key word (e.g a word appearing in the title)			
8. Tells him/her whether your library stocks the periodical he is looking for			
9. Tells him/her what years of periodical are in stock			
10. tells him/her whether a periodical is in microform or in a paper			
11. allows him/her to find periodicals by key words			

### III. The Current Status of IT, Arabisation, Cooperation and Telematics

#### A. Information Technology (IT)

1. *very dissatisfied*
2. *dissatisfied*
3. *Neutral*
4. *satisfied*
5. *very satisfied*

Please tick the relevant box

10. Which of the following library functions are automated in your library	Yes	No	If YES, please rate how satisfied you are by circling the relevant number				
Computerised acquisition			1	2	3	4	5
Computerised cataloguing			1	2	3	4	5
Computerised catalogue searching (OPAC)			1	2	3	4	5
Computerised circulation			1	2	3	4	5
Computerised periodicals control			1	2	3	4	5
11. Is your library equipped with the following IT facilities?							
CD-ROM stations			1	2	3	4	5
Online external database			1	2	3	4	5
Microform machines			1	2	3	4	5
Audio and video systems			1	2	3	4	5
Videotex and teletex systems			1	2	3	4	5
Fax			1	2	3	4	5
Photocopying machines			1	2	3	4	5
Microcomputer facilities			1	2	3	4	5
Others, Please specify			1	2	3	4	5
			1	2	3	4	5
			1	2	3	4	5
			1	2	3	4	5
			1	2	3	4	5



**B. Arabised Library Systems**

- 1. *very dissatisfied*
- 2. *dissatisfied*
- 3. *neutral*
- 4. *satisfied*
- 5. *very satisfied*

Please tick the relevant box

12. Which of the following library functions are Arabised in your library ?	Yes	No	If YES, please rate how satisfied you are by circling the relevant number of the scale below.				
Arabised computerised acquisition			1	2	3	4	
Arabised computerised cataloguing (OPAC)			1	2	3	4	
Arabised computerised catalogue searching			1	2	3	4	
Arabised computerised circulation			1	2	3	4	
Arabised computerised periodicals control			1	2	3	4	
Arabised CD-ROM stations			1	2	3	4	
Arabised Online external database			1	2	3	4	
Microcomputers facilities with Arabised System			1	2	3	4	
Others, Please specify			1	2	3	4	
			1	2	3	4	
			1	2	3	4	

**C. Cooperation and Telematics\***

- 1. *very dissatisfied*
- 2. *dissatisfied*
- 3. *neutral*
- 4. *satisfied*
- 5. *very satisfied*

\* **Telematics** : This new technical term is used to refer to the use of IT with telecommunication, to deliver computer based information services .

13. Does your library have a cooperative telematics with the following :		Yes	No	If yes, please rate how satisfied you are				
other college libraries within your university	OPAC			1	2	3	4	
	CD-ROM			1	2	3	4	
your college departments	OPAC			1	2	3	4	
	CD-ROM			1	2	3	4	
any college libraries in KU/PAAET	OPAC			1	2	3	4	
	CD-ROM			1	2	3	4	
Other, please specify				1	2	3	4	
				1	2	3	4	

1. *very dissatisfied*
2. *dissatisfied*
3. *neutral*
4. *satisfied*
5. *very satisfied*

*Please tick the relevant box*

14. Which of the following activities does your library cooperate with other college libraries within KU/PAAET?	Yes	No	If YES, please rate how satisfied you are by circling the relevant number				
Cooperative acquisition of books			1	2	3	4	
Cooperative acquisition of periodicals			1	2	3	4	
Cooperative acquisition of microforms			1	2	3	4	
Cooperative cataloguing of books			1	2	3	4	
Preparation of a union list of periodicals			1	2	3	4	
Preparation of a union list of microform			1	2	3	4	
Electronic mail			1	2	3	4	
Current awarenesses services			1	2	3	4	
Selective dissemination of information			1	2	3	4	
Indexing and abstracting			1	2	3	4	
Interlibrary loan of books			1	2	3	4	
Interlibrary loan of photocopied materials			1	2	3	4	
Delivery service system (Vehicle to deliver library materials)			1	2	3	4	
Training programmes			1	2	3	4	
Visiting and experience exchange			1	2	3	4	
Joint seminars and conferences			1	2	3	4	
Coordination between library heads			1	2	3	4	
Other activities, please specify			1	2	3	4	
			1	2	3	4	
			1	2	3	4	
			1	2	3	4	
			1	2	3	4	
			1	2	3	4	
			1	2	3	4	

#### IV. Library Policy Towards IT

For the following library facilities and activities in A, B and C that are not already placed in your library, please indicate whether you intend to introduce them over the next three years  
Please tick the relevant box

##### A. Information Technology (IT)

15. Information Technology (IT)	Yes	No	Not decided	
Computerised acquisition				
Computerised cataloguing				
Computerised catalogue searching (OPAC)				
Computerised circulation				
Computerised periodicals control				
CD-ROM stations				
Online external database				
Microform machines				
Audio and video systems				
Videotex and teletex systems				
Fax				
Photocopying machines				
Microcomputer facilities				
Others, Please specify				

##### B. Arabised Library Systems

16. Arabised systems	Yes	No	Not decided	
Arabised computerised acquisition				
Arabised computerised cataloguing (OPAC)				
Arabised computerised catalogue searching				
Arabised computerised circulation				
Arabised computerised periodicals control				
Arabised CD-ROM stations				
Arabised Online external database				
Microcomputer facilities with Arabised System				
Others, Please specify				

**C. Cooperation and Telematics**

17. Cooperation and telematics	Yes	No	Not decided	
Cooperative acquisition of books				
Cooperative acquisition of periodicals				
Cooperative acquisition of microforms				
Cooperative cataloguing of books				
Preparation of a union list of periodicals				
Preparation of a union list of microform				
Electronic mail				
Current awareness services				
Selective dissemination of information				
Indexing and abstracting				
Interlibrary loan of books				
Interlibrary loan of photocopied materials				
Delivery service system (Vehicle to deliver library materials)				
Training programmes				
Visiting and experience exchange				
Joint seminars and conferences				
Coordination between library heads				
Other activities, please specify				

Cooperative telematics with the following :		Yes	No	Not decided	
other college libraries within your university	OPAC				
	CD-ROM				
your college departments	OPAC				
	CD-ROM				
any college libraries in KU/PAAET	OPAC				
	CD-ROM				
Other, please specify					

August, 1994

Dear Librarian,

I am a Kuwaiti Ph.D student at the School of Computing and Mathematical Sciences in De Montfort University, in the U. K. As a part of my research, which is on the impact of IT in academic libraries in Kuwait, a questionnaire survey is needed.

Therefore, I am writing to you in the hope that you will be able to give me some of your time by responding to the attached questionnaire. This questionnaire is designed for academic libraries in Kuwait. It is intended to assess the librarians opinions and attitudes in some aspects with the regard to the following : Information technology ( IT); Arabised library systems; cooperation and telematics.

Your concern and cooperation are highly appreciated. The data gathered will be confidential and used for research purposes only. In your reply you have only been asked to tick or mark for most of the questions. However, for a few other questions you have been asked to enter some information.

Please complete the questionnaire and return it, as soon as possible, to the circulation desk at your college library. I will collect it within one week.

Thank you very much for your cooperation

Yours sincerely

Khalid Al-Anzi

## II. Questionnaire for Librarians

KU

PAAET

Library College of : .....

Address : .....

.....

.....

Telephone No. : .....

Fax No. : .....

**Note :**

*KU* : Kuwait University

*PAAET* : Public Authority for Applied Education and Training

*IT* : Information Technology

*Telematics* : This new technical term is used to refer to the use of IT with telecommunications, to deliver computer based information services.

*Boxes located on the right side of the questionnaire pages are for researcher use only*

# I. Demographic Data

## 1. Post Position

Assistant Librarian	Librarian	Chief Librarian	Other ( Please Specify)	

## 2. Age

Less than 25	26 - 35	36 - 45	46 - 55	Over 55	

## 3. Qualifications

	Diploma	BA/B.Sc	MAM/M.Sc	Ph.D.	Others ( Please Specify)	
In Library Science						
Others						

## 4. Library Experience

Less than 3 years	3 - 6 years	7 - 10 years	Over 10 years	

## II. Librarian's background in IT

5. Please rate your IT background for the following questions :

1. *Never*
2. *Seldom*
3. *Occasionally*
4. *Often*
5. *Always*

Have you been on a training course in computer-based systems in the last three years?		1	2	3	4	5		
Do you use computer-based system in your daily work ?		1	2	3	4	5		
Have you used a library computer-based system in the last three years ?		1	2	3	4	5		
Please indicate your current use of the following	Computer systems	PC	1	2	3	4	5	
		Workstation	1	2	3	4	5	
		Mainframe	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
			1	2	3	4	5	
	Software	Wordprocessor	1	2	3	4	5	
		Spreadsheet	1	2	3	4	5	
		Database	1	2	3	4	5	
		Graphics package	1	2	3	4	5	
		Statistics package	1	2	3	4	5	
		Programming languages	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
			1	2	3	4	5	
	Library Computer-based Systems	OPAC	1	2	3	4	5	
		CD-ROM	1	2	3	4	5	
		Online Databases	1	2	3	4	5	
		Telematics	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
			1	2	3	4	5	



**III. Opinions and Attitudes : Obstacles Hindering IT**

- 1. *Strongly disagree*
- 2. *Disagree*
- 3. *Neutral*
- 4. *Agree*
- 5. *Strongly agree*

**A. Information Technology (IT)**

6. Please indicate, in your opinion, whether you agree or disagree that the following are obstacles to introducing IT in your library.

Please mark the following scale of 1 to 5 by circling the relevant number.

Financial difficulties	1	2	3	4	5	
Lack of qualified librarians with relevant skills	1	2	3	4	5	
Librarian attitudes	1	2	3	4	5	
Technical difficulties	1	2	3	4	5	
Administration Bureaucracy	1	2	3	4	5	
Users readiness to use IT	1	2	3	4	5	
Inadequate library building	1	2	3	4	5	
Lack of library policy	1	2	3	4	5	
Lack of user studies	1	2	3	4	5	
Lack of user education/training in IT	1	2	3	4	5	
Computer-based systems are difficult to use	1	2	3	4	5	
Lack of local support from computer dealers	1	2	3	4	5	
Fear of change among librarians	1	2	3	4	5	
Lack of awareness about the importance of IT among authorities	1	2	3	4	5	
Others, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

**B. Arabised library system**

7. Please indicate, in your opinion, whether you agree or disagree that the following are the main problems in using or adopting an Arabised library system.

Please mark the following scale of 1 to 5 by circling the relevant number.

- 1. *Strongly disagree*
- 2. *Disagree*
- 3. *Neutral*
- 4. *Agree*
- 5. *Strongly agree*

Financial difficulties	1	2	3	4	5	
Lack of qualified librarians with relevant skills	1	2	3	4	5	
Librarian attitudes	1	2	3	4	5	
Technical difficulties	1	2	3	4	5	
Adminstration Bureaucracy	1	2	3	4	5	
Users readiness to use IT	1	2	3	4	5	
Inadequate library building	1	2	3	4	5	
Lack of library policy	1	2	3	4	5	
Lack of user studies	1	2	3	4	5	
Lack of user education/training in IT	1	2	3	4	5	
Computer-based systems are difficult to use	1	2	3	4	5	
Lack of local support from computer dealers	1	2	3	4	5	
Fear of change among librarians	1	2	3	4	5	
Lack of awareness about the importance of IT among authorities	1	2	3	4	5	
Others, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

**C. Cooperation and Telematics :**

8. Please indicate, in your opinion, whether you agree or disagree that the following are the main obstacles to the establishment of cooperation and telematics systems between KU/PAAET libraries.

- 1. *Strongly disagree*
- 2. *Disagree*
- 3. *Neutral*
- 4. *Agree*
- 5. *Strongly agree*

Please mark the following scale of 1 to 5 by circling the relevant number.

Financial difficulties	1	2	3	4	5	
Lack of a qualified and strong library leadership	1	2	3	4	5	
Lack of qualified librarians	1	2	3	4	5	
Lack of coordination	1	2	3	4	5	
Inadequate library resources	1	2	3	4	5	
Poor communication and post system	1	2	3	4	5	
Lack of reference tools	1	2	3	4	5	
Lack of union of list of Arabic subject headings and union of periodicals list	1	2	3	4	5	
Lack of user studies	1	2	3	4	5	
Lack of realisation of the importance of cooperation and telematics among the library authorities	1	2	3	4	5	
Lack of uniform standards of classification and cataloguing	1	2	3	4	5	
Technical problems	1	2	3	4	5	
Administration Bureaucracy	1	2	3	4	5	
Each library prefers to work in its own way individually	1	2	3	4	5	
Lack of bibliographic apparatus	1	2	3	4	5	
Lack of user readiness in using telematics equipment	1	2	3	4	5	
Lack of IT	1	2	3	4	5	
Lack of official agreement for cooperation	1	2	3	4	5	
Lack of library policy	1	2	3	4	5	
Other obstacles , Please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

**IV. Opinions and Attitudes : Importance of IT**

**A. Information Technology (IT)**

9. Please indicate, in your opinion, the importance of the following facilities to improve your library service  
Please rate the following scale of 1 to 5 by circling the relevant number.

- 1. *Not very important*
- 2. *Not important*
- 3. *Neutral*
- 4. *Important*
- 5. *Very important*

computerised acquisition	1	2	3	4	5	
computerised cataloguing	1	2	3	4	5	
computerised cataloguing search (OPAC)	1	2	3	4	5	
computerised circulation	1	2	3	4	5	
CD-ROM stations	1	2	3	4	5	
Online external database	1	2	3	4	5	
Audio and video systems	1	2	3	4	5	
videotex and teletex systems	1	2	3	4	5	
Microform machines	1	2	3	4	5	
photocopying machines	1	2	3	4	5	
Microcomputer facilities	1	2	3	4	5	
Others, please specify	1	2	3	4	5	
	1	2	3	4	5	

10. Do you think, in your opinion, that introducing IT in your library would

- 1. *Strogly disagree*
- 2. *Disagree*
- 3. *Neutral*
- 4. *Agree*
- 5. *Strongly agree*

offer new service in your library	1	2	3	4	5	
remove drudgery from librarians	1	2	3	4	5	
encourage research activities among users	1	2	3	4	5	
help to to overcome the shortage of qualified librarians	1	2	3	4	5	
help to cope with increase number of library materials	1	2	3	4	5	
help to cope with increasing number of library users	1	2	3	4	5	
help to cope with increasing workload	1	2	3	4	5	
help to complete library tasks with accuarcy, more quickly and with increased control	1	2	3	4	5	
help to create more space	1	2	3	4	5	
help to compete with other academic libraries	1	2	3	4	5	
increase workload	1	2	3	4	5	
be difficult to use	1	2	3	4	5	
be high cost	1	2	3	4	5	
not save time or effort	1	2	3	4	5	
exposes weaknesses of library collections	1	2	3	4	5	
others, please specify	1	2	3	4	5	
	1	2	3	4	5	

1. *Strogly disagree*
2. *Disagree*
3. *Neutral*
4. *Agree*
5. *Strongly agree*

11. Which of the following, in your opinion cause dissatisfaction amongst your users

Difficulties in using catalogue		1	2	3	4	5	
The required document is not in stock		1	2	3	4	5	
Lack of photocopying facilities		1	2	3	4	5	
Lack of computer-based library system including the following:	cataloguing search (OPAC)	1	2	3	4	5	
	automated circulation	1	2	3	4	5	
	online database	1	2	3	4	5	
	CD-ROM stations	1	2	3	4	5	
Lack of enough space		1	2	3	4	5	
others, please specify		1	2	3	4	5	
		1	2	3	4	5	
		1	2	3	4	5	

1. *Strogly disagree*
2. *Disagree*
3. *Neutral*
4. *Agree*
5. *Strongly agree*

12. Please, indicate your opinion for the following statements

Electronic library will be the future trend of academic libraries	1	2	3	4	5	
Your library is capable for training users in IT	1	2	3	4	5	
Computer-based systems deserve a high priority in the library budget	1	2	3	4	5	
Your library users are ready for IT	1	2	3	4	5	
You are ready for training and courses to learn new systems in IT	1	2	3	4	5	

### B. For Arabised Library Systems :

1. *Not very important*
2. *Not important*
3. *Neutral*
4. *Important*
5. *Very important*

13. Please indicate, in your opinion, the importance of the following facilities to improve your library service.

*Please mark the following scale of 1 to 5 by circling the relevant number.*

Arabised computerised acquisition	1	2	3	4	5	
Arabised computerised cataloguing	1	2	3	4	5	
Arabised computerised cataloguing search (OPAC)	1	2	3	4	5	
Arabised computerised circulation	1	2	3	4	5	
Arabised CD-ROM stations	1	2	3	4	5	
Arabised Online external database	1	2	3	4	5	
Microcomputers facilities with Arabised system	1	2	3	4	5	
Others, please specify	1	2	3	4	5	
	1	2	3	4	5	

**C. For Cooperation and Telematics:**

- 1. *Strogly disagree*
- 2. *Disagree*
- 3. *Neutral*
- 4. *Agree*
- 5. *Strongly agree*

14. Please indicate your opinion for the following :  
*Please mark the following scale of 1 to 5 by circling the relevant number.*

There should be effective official cooperation/telematics for academic libraries in Kuwait	1	2	3	4	5	
Effective cooperation/telematics would solve proplems in Kuwait academic libraries	1	2	3	4	5	
Participation in a library cooperation/telematics would improve the library services	1	2	3	4	5	
Participation in a library cooperation/telematics would lead to sharing of costs.	1	2	3	4	5	
It is feasible to establish a telematics cooperative for academic libraries in Kuwait	1	2	3	4	5	
you are ready to take training/courses in the new telematics systems	1	2	3	4	5	
Librarians are ready to use telematics facilities	1	2	3	4	5	
Library users are ready to use telematics facilities at the present time	1	2	3	4	5	
Your library has the capability of user education/training for the new telematics	1	2	3	4	5	
The new telematics system will reduce the workload of librarians	1	2	3	4	5	
Cooperative telematics would enhance your library collections	1	2	3	4	5	
There should be a unit for interlibrary loans in KU and PAAET	1	2	3	4	5	
College libraries in KU/PAAET should be linked together	1	2	3	4	5	
Academic libraries in both KU and PAAET should be linked together	1	2	3	4	5	
There should be an official agreement for cooperation/telematics	1	2	3	4	5	
There should be an active policy for cooperation/telematics	1	2	3	4	5	

15. Please rate your satisfaction for the current cooperative activities among KU libraries and PAAET libraries

*Please mark the following scale of 1 to 5 by circling the relevant number.*

Very dissatisfied	Dissatisfied	3. Neutral	Satisfied	Very satisfied	
1	2	3	4	5	

16. Please add any comments regarding this subject :

.....

.....

.....

August, 1994

Dear Academic staff member,

I am a Kuwaiti Ph.D student at the School of Computing and Mathematical Sciences in De Montfort University, in the U. K. As a part of my research, which is on the impact of IT in academic libraries in Kuwait, a questionnaire survey is needed.

Therefore, I am writing to you in the hope that you will be able to give me some of your time by responding to the attached questionnaire. This questionnaire is designed for academic libraries in Kuwait. It is intended to assess the academic staff satisfaction as library users, and also to assess their opinions and attitudes on library services and facilities with regard to the following :  
Information technology ( IT); Arabised library systems; cooperation and telematics.

Your concern and cooperation are highly appreciated. The data gathered will be confidential and used for research purposes only. In your reply you have only been asked to tick or mark for most of the questions. However, for a few questions you have been asked to enter or attach some information, data or numbers.

Please complete the questionnaire and return it, as soon as possible, to the circulation desk at your college library. I will collect it within one week.

Thank you very much for your cooperation

Yours sincerely

Khalid Al-Anzi

### III. Questionnaire for Library Users

KU

PAAET

### *Academic Staff*

Department of : .....

Library College of : .....

**Note :**

*KU* : Kuwait University

*PAAET* : Public Authority for Applied Education and Training

*IT* : Information Technology

*Telematics* : This new technical term is used to refer to the use of IT with telecommunications, to deliver computer based information services.

*Boxes located on the right side of the questionnaire pages are for researcher use only*



# I. Demographic Data

Please tick the relevant box

## 1. Qualification

	B.Sc/B.A	M.Sc./M.A	Ph.D	Others, Please specify	Name of the university where degree etc was granted	
Highest degree earned						

## 2. Specialisation

	Science	Engineering	Art	Education	Commerce	Medicine	Others, Please specify	
Subject area								

## 3. Nationality

Nationality	Kuwaiti	Non-Kuwaiti		
		Arab	Non-Arab	

## 4. Academic Rank

What is your present academic rank	Teacher	Lecturer	Assistant Professor	Associate Professor	Professor	Others, Please specify	

## 5. Teaching experience

Please, specify your teaching experience at academic level.	less than 3 years	3-6 years	7-10 years	over 10 years	

## 6. Publications

	Papers	Books	Others, please specify	
Please specify your number of publications in the last five years.				

## II. User Background in IT

1. *Never*
2. *Seldom*
3. *Occasionally*
4. *Often*
5. *Always*

7. Please rate your IT background for the following questions :

Have you been on a training course in computer-based systems in the last three years?		1	2	3	4	5		
Do you use computer-based system in your daily work ?		1	2	3	4	5		
Have you used a library computer-based system in the last three years ?		1	2	3	4	5		
Please, indicate your current use of the following	Computer systems	PC	1	2	3	4	5	
		Workstation	1	2	3	4	5	
		Mainframe	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
			1	2	3	4	5	
	Software	Wordprocessor	1	2	3	4	5	
		Spreadsheet	1	2	3	4	5	
		Database	1	2	3	4	5	
		Graphics package	1	2	3	4	5	
		Statistics package	1	2	3	4	5	
		Programming languages	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
				1	2	3	4	5
	Library Computer-based Systems	OPAC	1	2	3	4	5	
		CD-ROM	1	2	3	4	5	
		Online Databases	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	

### III. General Library Uses

Please tick the relevant box

8. Which library materials do you use often ?	Journals	Books	Reports	Audio Visual	Others, Please specify	

1. Never
2. Seldom
3. Occasionally
4. Often
5. Always

Please rate the following scale of 1 to 5, by circling the relevant number

9. How often have you been involved in research activities which require you to use online research through external databases?		1	2	3	4	5	
10. How often do you find that new materials related to your work are already available in the library at the time you request them?		1	2	3	4	5	
11. How often does the library provide you with Selective Dissemination of Information (SDI) services?		1	2	3	4	5	
12. How often do you use your academic library?		1	2	3	4	5	
13. How often are you involved in the selection procedures for ?	Collections	1	2	3	4	5	
	IT Planning	1	2	3	4	5	

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly disagree

14. What are the main difficulties in using your library card catalogue?

Please rate the following scale of 1 to 5 by circling the relevant number

It takes quite long time to complete the searching		1	2	3	4	5	
Sometimes cards are missing		1	2	3	4	5	
Some cards have unclear writing		1	2	3	4	5	
It requires one to understand the alphabetic order in both Arabic and English		1	2	3	4	5	
Other difficulties, please specify		1	2	3	4	5	
		1	2	3	4	5	
		1	2	3	4	5	
		1	2	3	4	5	

**Please tick the relevant box**

15. Do you use any of the college libraries ?	Yes	No	If No, Please indicate the reason(s)
Do not need it			
It is not useful			
Do not know how to use it			
Do not know where it is			
Others, please specify			

16. Why do you visit your library

**Please tick the relevant box**

To borrow/return books			
To browse	Current Journals		
	Newspapers		
	Books		
To use card catalogue			
To consult librarians			
To use library collection			
To use photocopiers			
To use audiovisual materials			
To use online search			
To see friends			
Others, Please specify			

#### IV Users Satisfaction

1. *Very dissatisfied*
2. *Dissatisfied*
3. *Neutral*
4. *Satisfied*
5. *Very satisfied*

17. Please rate how satisfied are you with the current following library services in your library

Library materials	Quantity	Books	1	2	3	4	5	
		Periodicals	1	2	3	4	5	
		References	1	2	3	4	5	
		Audio-Visual	1	2	3	4	5	
	Quality	Books	1	2	3	4	5	
		Periodicals	1	2	3	4	5	
		References	1	2	3	4	5	
		Audio-Visuals	1	2	3	4	5	
Materials arrangement	Using card catalogue	1	2	3	4	5		
	Shelf arrangement	1	2	3	4	5		
	Book labelling	1	2	3	4	5		
	Library signing	1	2	3	4	5		
Circulation Services	Borrowing/Return	1	2	3	4	5		
	Short Loan	1	2	3	4	5		
	Reservation	1	2	3	4	5		
	Interloan library	1	2	3	4	5		
Equipments	External Online Dtabases	1	2	3	4	5		
	Photocopy machines	1	2	3	4	5		
	Videotex and teletext systems	1	2	3	4	5		
	Video system	1	2	3	4	5		
	Using CD-ROM	1	2	3	4	5		
Other services	library tour/training courses	1	2	3	4	5		
	Help/advice from library staff	1	2	3	4	5		
	Study space	1	2	3	4	5		
	Library opening hours	1	2	3	4	5		

## V Opinions and Attitudes

### A. Information Technology (IT)

18. Please indicate, in your opinion, the importance of the following facilities to support your teaching and research activities and to improve your library services. Please rate the following scale of 1 to 5 by circling the relevant number

1. Not very important
2. Not important
3. Neutral
4. Important
5. Very important

computerised cataloguing search (OPAC)	1	2	3	4	5	
computerised circulation	1	2	3	4	5	
CD-ROM stations	1	2	3	4	5	
Online external database	1	2	3	4	5	
Audio and video systems	1	2	3	4	5	
videotex and teletex systems	1	2	3	4	5	
Microform machines	1	2	3	4	5	
photocopying machines	1	2	3	4	5	
Microcomputer facilities	1	2	3	4	5	
Other services that you would like to see in your library, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

19. Do you think, in your opinion, that introducing IT in your library would

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

encourage research activities	1	2	3	4	5	
support teaching	1	2	3	4	5	
help to gain research grants	1	2	3	4	5	
help to support the postgraduate programmes	1	2	3	4	5	
help to meet the postgraduate students needs	1	2	3	4	5	
help to create new services	1	2	3	4	5	
help to save more space	1	2	3	4	5	
help to save your time and effort	1	2	3	4	5	
help to encourage your students to use the library more often	1	2	3	4	5	
help to be in touch with research activities in the advanced countries	1	2	3	4	5	
Difficult to use	1	2	3	4	5	
others, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

1. *Strongly disagree*
2. *Disagree*
3. *Neutral*
4. *Agree*
5. *Strongly agree*

20. Please indicate your opinion for the following statements :

The electronic library will be the future trend for academic environment	1	2	3	4	5	
You need a training programme in the use of IT facilities in the library	1	2	3	4	5	
You are willing to join training courses to learn new IT facilities	1	2	3	4	5	
It is important to involve academic staff in planning for IT in the library	1	2	3	4	5	

### B. Arabised Library Systems

1. *Not very important*
2. *Not important*
3. *Neutral*
4. *Important*
5. *Very important*

21. Please indicate, in your opinion, the importance of the following facilities to support your teaching and research activities and to improve your library services.  
Please rate the following scale of 1 to 5 by circling the relevant number

Arabised computerised cataloguing search (OPAC)	1	2	3	4	5	
Arabised computerised circulation	1	2	3	4	5	
Arabised CD-ROM stations	1	2	3	4	5	
Arabised Online external database	1	2	3	4	5	
Microcomputer facilities with Arabised system	1	2	3	4	5	
Others, Please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

1. *Strongly disagree*
2. *Disagree*
3. *Neutral*
4. *Agree*
5. *Strongly agree*

22. Please indicate your opinion for the following statements :

There is a need for an Arabised computer system in your library	1	2	3	4	5	
Arabised system would encourage you to use the library more often	1	2	3	4	5	
Arabised system would be easier for your use than the English system	1	2	3	4	5	

**C. Cooperation and Telematics**

23. Please indicate your opinion for the following :  
Please mark the following scale of 1 to 5 by circling the relevant number.

- 1. *Strongly disagree*
- 2. *Disagree*
- 3. *Neutral*
- 4. *Agree*
- 5. *Strongly agree*

There should be effective official cooperation/telematics for academic libraries in Kuwait	1	2	3	4	5	
Participation in library cooperation/telematics would improve the library services	1	2	3	4	5	
It is feasible to establish a telematics cooperative for academic libraries in Kuwait	1	2	3	4	5	
You are ready to take training/courses in the new telematics systems	1	2	3	4	5	
College libraries in KU/PAAET should be linked together	1	2	3	4	5	
Academic libraries in both KU and PAAET should be linked together	1	2	3	4	5	
A telematic system will save your time and effort	1	2	3	4	5	
A telematic system is difficult to use	1	2	3	4	5	
A telematic system between your library and other colleges libraries in KU/PAAET will improve your research activities	1	2	3	4	5	
A telematic system between your library and other colleges libraries in KU/PAAET will improve your teaching activities	1	2	3	4	5	
A telematic system between your library and other college libraries in KU/ PAAET will improve your research activities	1	2	3	4	5	
A telematic system between your library and other college libraries in KU/ PAAET will improve your teaching activities	1	2	3	4	5	
An online catalogue searching terminal in your office connected with your library will support your research activities	1	2	3	4	5	
An online catalogue searching terminal in your office connected with your library will support your teaching activities	1	2	3	4	5	
A telematics systems are not reliable	1	2	3	4	5	
Others, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	



August, 1994

Dear Student,

I am a Kuwaiti Ph.D student at the School of Computing and Mathematical Sciences in De Montfort University, in the U. K. As a part of my research, which is on the impact of IT in academic libraries in Kuwait, a questionnaire survey is needed.

Therefore, I am writing to you in the hope that you will be able to give me some of your time by responding to the attached questionnaire. This questionnaire is designed for academic libraries in Kuwait. It is intended to assess the students, satisfaction as library users, and also to assess their opinions and attitudes on library services and facilities with regard to the following : Information technology ( IT): Arabised library systems; cooperation and telematics.

Your concern and cooperation are highly appreciated. The data gathered will be confidential and used for research purposes only. In your reply you have only been asked to tick or mark for most of the questions. However, for a few questions you have been asked to enter or attach some information, data or numbers.

Please complete the questionnaire and return it, as soon as possible, to the circulation desk at your college library. I will collect it within one week.

Thank you very much for your cooperation

Yours sincerely

Khalid Al-Anzi

## IV. Questionnaire for Library Users

KU

PAAET

*Student*

Undergraduate

Postgraduate

College of : .....

Department : .....

Major Field : .....

Male

Female

**Note :**

*KU* : Kuwait University

*PAAET* : Public Authority for Applied Education and Training

*IT* : Information Technology

*Telematics* : This new technical term is used to refer to the use of IT with telecommunications, to deliver computer based information services.

# I. Demographic Data

## I. User Background in IT

- 1. *Never*
- 2. *Seldom*
- 3. *Occasionally*
- 4. *Often*
- 5. *Always*

1. Please rate your IT background for the following questions :

Have you been on a training course in computer-based systems in the last three years?		1	2	3	4	5		
Do you use computer-based system in your daily work ?		1	2	3	4	5		
Have you used a library computer-based system in the last three years ?		1	2	3	4	5		
Please, indicate your current use of the following	Computer systems	PC	1	2	3	4	5	
		Workstation	1	2	3	4	5	
		Mainframe	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
			1	2	3	4	5	
	Software	Wordprocessor	1	2	3	4	5	
		Spreadsheet	1	2	3	4	5	
		Database	1	2	3	4	5	
		Graphics package	1	2	3	4	5	
		Statistics package	1	2	3	4	5	
		Programming languages	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
			1	2	3	4	5	
	Library Computer-based Systems	OPAC	1	2	3	4	5	
		CD-ROM	1	2	3	4	5	
		Online Databases	1	2	3	4	5	
		Others, Please specify	1	2	3	4	5	
			1	2	3	4	5	
			1	2	3	4	5	

## II. General Library Uses

Please tick the relevant box

2. Which library materials do you use often ?	Journals	Books	Reports	Audio Visual	Others. Please specify	

1. Never
2. Seldom
3. Occasionally
4. Often
5. Always

Please rate the following scale of 1 to 5, by circulling the relevant number

3. How often have you been involved in research activities which require you to use online research through external databases?		1	2	3	4	5	
4. How often do you find that new materials related to your work are already available in the library at the time you request them?		1	2	3	4	5	
5. How often does the library provide you with Selective Dissemination of Information (SDI) services?		1	2	3	4	5	
6. How often do you use your academic library?		1	2	3	4	5	
7. How often are you involved in the selection procedures for ?	Collections	1	2	3	4	5	
	IT Planning	1	2	3	4	5	

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

8. What are the main difficulties in using your library card catalogue?

Please rate the following scale of 1 to 5 by circling the relevant number

It takes quite long time to complete the searching		1	2	3	4	5	
Sometimes cards are missing		1	2	3	4	5	
Some cards have unclear writing		1	2	3	4	5	
It requires one to understand the alphabetic order in both Arabic and English		1	2	3	4	5	
Other difficulties, please specify		1	2	3	4	5	
		1	2	3	4	5	
		1	2	3	4	5	
		1	2	3	4	5	

Please tick the relevant box

9. Do you use any of the college libraries ?	Yes	No	If No, Please indicate the reason(s)
Do not need it			
It is not useful			
Do not know how to use it			
Do not know where it is			
Other (specify)			

10. Why do you visit your library

Please tick the relevant box

To borrow/return books			
To browse	Current Journals		
	Newspapers		
	Books		
To use card catalogue			
To consult librarians			
To use library collection			
For private study			
To use photocopiers			
To use audiovisual materials			
To use online search			
To see friends			
Others, Please specify			

### III. Users Satisfaction

1. *Very dissatisfied*
2. *Dissatisfied*
3. *Neutral*
4. *Satisfied*
5. *Very satisfied*

11. Please rate how satisfied are you with the current following library services in your library

Library materials	Quantity	Books	1	2	3	4	5	
		Periodicals	1	2	3	4	5	
		References	1	2	3	4	5	
		Audio-Visual	1	2	3	4	5	
	Quality	Books	1	2	3	4	5	
		Periodicals	1	2	3	4	5	
		References	1	2	3	4	5	
		Audio-Visuals	1	2	3	4	5	
Materials arrangement	Using card catalogue	1	2	3	4	5		
	Shelf arrangement	1	2	3	4	5		
	Book labelling	1	2	3	4	5		
	Library signing	1	2	3	4	5		
Circulation Services	Borrowing/Return	1	2	3	4	5		
	Short Loan	1	2	3	4	5		
	Reservation	1	2	3	4	5		
	Interloan library	1	2	3	4	5		
Equipments	External Online Databases	1	2	3	4	5		
	Photocopy machines	1	2	3	4	5		
	Vitdeotex system	1	2	3	4	5		
	Video system	1	2	3	4	5		
	Using CD-ROM	1	2	3	4	5		
Other services	library tour/training courses	1	2	3	4	5		
	Help/advice from library staff	1	2	3	4	5		
	Study space	1	2	3	4	5		
	Library opening hours	1	2	3	4	5		

#### IV. OPINIONS AND ATTITUDES

##### A. Information Technology (IT)

12. Please indicate, in your opinion, the importance of the following facilities to support your teaching and research activities and to improve your library services.

1. Not very important
2. Not important
3. Neutral
4. Important
5. Very important

Please rate the following scale of 1 to 5 by circling the relevant number

computerised cataloguing search (OPAC)	1	2	3	4	5	
computerised circulation	1	2	3	4	5	
CD-ROM stations	1	2	3	4	5	
online external database	1	2	3	4	5	
audio and video systems	1	2	3	4	5	
videotex and teletex systems	1	2	3	4	5	
microform machines	1	2	3	4	5	
photocopying machines	1	2	3	4	5	
microcomputers facilities	1	2	3	4	5	
other services that you would like to see in your library, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

13 Do you think, in your opinion, that introducing IT in your library would

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

encourage research activities	1	2	3	4	5	
support teaching and learning	1	2	3	4	5	
help to gain research grant	1	2	3	4	5	
help to support the postgraduates programmes	1	2	3	4	5	
help to meet the postgraduate students needs	1	2	3	4	5	
offer new services in your library	1	2	3	4	5	
help to save more space	1	2	3	4	5	
help to save your time and effort	1	2	3	4	5	
help to encourage you to use the library more often	1	2	3	4	5	
help to be in touch with research activities in the advance countries	1	2	3	4	5	
Difficult to use	1	2	3	4	5	
others, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

1. *Strongly disagree*
2. *Disagree*
3. *Neutral*
4. *Agree*
5. *Strongly agree*

14. Please indicate your opinion for the following statements :

The electronic library will be the future trend for academic environment	1	2	3	4	5	
You need a training programme in the use of IT facilities in the library	1	2	3	4	5	
You are willing to join training courses to learn new IT facilities	1	2	3	4	5	
It is important to involve students in planning for IT in the library	1	2	3	4	5	

### B. Arabised Library Systems

15. Please indicate, in your opinion, the importance of the following facilities to support your teaching and research activities and to improve your library services.

1. *Not very important*
2. *Not important*
3. *Neutral*
4. *Important*
5. *Very important*

Please rate the following scale of 1 to 5 by circling the relevant number

	1	2	3	4	5	
Arabised computerised cataloguing search (OPAC)	1	2	3	4	5	
Arabised computerised circulation	1	2	3	4	5	
Arabised CD-ROM stations	1	2	3	4	5	
Arabised Online external database	1	2	3	4	5	
Microcomputer facilities with Arabised system	1	2	3	4	5	
Others, Please specify	1	2	3	4	5	
	1	2	3	4	5	

1. *Strongly disagree*
2. *Disagree*
3. *Neutral*
4. *Agree*
5. *Strongly agree*

16. Please indicate your opinion for the following statements :

There is a need for an Arabised computer system in your library	1	2	3	4	5	
Arabised system would encourage you to use the library more often	1	2	3	4	5	
Arabised system would be easier for your use than the English system	1	2	3	4	5	
	1	2	3	4	5	



### C. Cooperation and Telematics

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

17. Please indicate your opinion for the following :  
Please mark the following scale of 1 to 5 by circling the relevant number.

There should be effective official cooperation/telematics for academic libraries in Kuwait	1	2	3	4	5	
Participation in library cooperation/telematics would improve the library services	1	2	3	4	5	
It is feasible to establish a telematics cooperative for academic libraries in Kuwait.	1	2	3	4	5	
You are ready to take training/courses in the new telematics systems	1	2	3	4	5	
College libraries in KU/PAAET should be linked together	1	2	3	4	5	
Academic libraries in both KU and PAAET should be linked together	1	2	3	4	5	
A telematic system will save your time and effort	1	2	3	4	5	
A telematic system is difficult to use	1	2	3	4	5	
A telematic system between your library and other college libraries in KU/PAAET will improve your research activities	1	2	3	4	5	
A telematic system between your library and other college libraries in KU/PAAET will improve your learning activities	1	2	3	4	5	
A telematic system between your library and other college libraries in KU/PAAET will improve your research activities?	1	2	3	4	5	
A telematic system between your library and other college libraries in KU/PAAET will improve your learning activities?	1	2	3	4	5	
An online catalogue searching terminal in your department connected with your library will support your research activities	1	2	3	4	5	
An online catalogue searching terminal in your department connected with your library will support your learning activities	1	2	3	4	5	
A telematic systems are not reliable	1	2	3	4	5	
Others, please specify	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	
	1	2	3	4	5	

بسم الله الرحمن الرحيم

استبيان رقم (٢) : موظفي المكتبة

السيد/ السيدة : موظف المكتبة  
تحية طيبة، وبعد

أنا طالب دكتوراة بجامعة DE MONTFORT UNIVERSITY, UK في بريطانيا،  
والاستبيان المرفق جزء اساسي في هذه الدراسة والتي تبحث أثر تكنولوجيا  
المعلومات في المكتبات الاكاديمية في الكويت.

لذا اكتب اليك أملاً منحي بعض الدقائق من وقتك للجابة على هذا الاستبيان، والذي  
يهدف الي تحديد آراء ومواقف موظفي هذه المكتبات في القضايا التالية:  
تكنولوجيا المعلومات، نظام كمبيوتر معرب للمكتبات، التعاون و شبكة المعلومات.

مقدراً لك حسن اهتمامك وتعاونك، ومؤكداً لك سرية المعلومات المجموعة لاغراض  
البحث العلمي. أغلب أسئلة هذا الاستبيان تحتاج منك فقط الى وضع علامة على  
الاجابة المناسبة، والبقية القليلة تتطلب منك ذكر بعض المعلومات المحدودة.  
رجاءً أكمل الاستبيان بأسرع وقت ممكن، وضعه لدى المسئول في مكتبتك.

شكراً جزيلاً لتعاونكم،

الباحث

خالد العنزي

قسم علوم المكتبات والمعلومات، كلية التربية الاساسية  
الهيئة العامة للتعليم التطبيقي والتدريب

# أستبيان موظفي المكتبة

الهيئة العامة للتعليم  
التطبيقي والتدريب

جامعة الكويت

مكتبة كلية : .....

العنوان : .....

.....

هاتف : .....

فاكس : .....

ملاحظات :

- المربعات الواقعة على يسار صفحات الاستبيان هي خاصة لاستعمال الباحث فقط.

في ما يلي تعريف لمصطلحات واختصارات وردت في الاستبيان :

- تكنولوجيا المعلومات : مصطلح بدأ يستخدم حديثا (وكأشمل من مصطلح Automation

ويعني استخدام الكمبيوتر مع وسائل الاتصالات الالكترونية  
لتخزين وارسال وعرض المعلومات.

- الجامعة : جامعة الكويت.

- الهيئة : الهيئة العامة للتعليم التطبيقي والتدريب.

## أولاً : المعلومات الشخصية :

رجاءً ضع علامة صح ( √ ) في المربع المناسب

### ١- المركز الوظيفي :

	مساعد أمين مكتبة	أمين مكتبة	أمين مكتبة مسؤول	آخر ، فضلاً أذكر

### ٢- العمر :

	أقل من ٢٥ سنة	من ٢٦ - ٣٥	من ٣٦ - ٤٥	من ٤٦ - ٥٥	أكثر من ٥٥

### ٣- المؤهلات :

	دبلوم مكتبات سنتين	بكلوريوس	ماجستير	دكتوراه	أخرى ، فضلاً أذكر
في المكتبات					
علوم أخرى					

### ٤- خبرتك المكتبية :

	أقل من ٢ سنوات	من ٢ - ٦	من ٧ - ١٠	أكثر من ١٠

## ثانياً : خلفية موظفي المكتبات في تكنولوجيا المعلومات :

- ١- ٧ أبياً  
٢- نائراً  
٣- من حين لآخر  
٤- غالباً  
٥- دائماً
- ٥- رجاءً ، بيّن مدى خلفيتك في تكنولوجيا المعلومات حسب الأسئلة التالية :  
فضلاً عَمّ المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥	هل سبق أن كنت في دورة تدريبية على أنظمة الكمبيوتر خلال الثلاث سنوات الأخيرة
١	٢	٣	٤	٥	هل تستخدم نظام كمبيوتر في عملك اليومي
١	٢	٣	٤	٥	هل استخدمت نظام كمبيوتر للمكتبات خلال الثلاث سنوات الأخيرة
١	٢	٣	٤	٥	الكمبيوتر الشخصي PC
١	٢	٣	٤	٥	محطات كمبيوتر (Workstations)
١	٢	٣	٤	٥	مركز الكمبيوتر الرئيسي (Mainframe)
١	٢	٣	٤	٥	أخرى ، فضلاً أذكر
١	٢	٣	٤	٥	معالجة الكلمات (Wordprocessor)
١	٢	٣	٤	٥	جداول إلكترونية (Spreadsheet)
١	٢	٣	٤	٥	قاعدة معلومات (Database)
١	٢	٣	٤	٥	برامج للرسم (Graphics Package)
١	٢	٣	٤	٥	برامج إحصائية (Statistics Package)
١	٢	٣	٤	٥	لغات البرمجة (Programming Languages)
١	٢	٣	٤	٥	أخرى ، فضلاً أذكر
١	٢	٣	٤	٥	الفهارس (OPAC)
١	٢	٣	٤	٥	الأقراص المضغوطة (CD-ROM)
١	٢	٣	٤	٥	الخط المباشر لقواعد المعلومات (Online Databases)
١	٢	٣	٤	٥	شبكة المعلومات (Network)
١	٢	٣	٤	٥	أخرى ، فضلاً أذكر
١	٢	٣	٤	٥	

رجاءً بيّن مدى استخدامك الحالي لما يلي

البرامج

نظام كمبيوتر للمكتبات

## ثالثاً : آراء ومواقف : معوقات تحد من استخدام تكنولوجيا المعلومات

أ : تكنولوجيا المعلومات :

٦- رجاءُ بيّن ، حسب رأيك ، فيما اذا توافق أو لا توافق مع ما يلي كمعوقات تحد من استخدام تكنولوجيا المعلومات في مكتبك .

١- لا أوافق بشدة

٢- لا أوافق

٣- محايد

٤- موافق

٥- موافق بشدة

فضلاً عَلم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

٥	٤	٣	٢	١	صعوبات مالية
٥	٤	٣	٢	١	ندرة في موظفي المكتبات المؤهلين في تكنولوجيا المعلومات
٥	٤	٣	٢	١	مواقف لدى موظفي المكتبة (عدم القبول والرغبة)
٥	٤	٣	٢	١	صعوبات تقنية
٥	٤	٣	٢	١	البيروقراطية الادارية (المركزية وبطء الاجراءات)
٥	٤	٣	٢	١	ندرة في الاستعداد لدى المستخدمين لاستخدام تكنولوجيا المعلومات
٥	٤	٣	٢	١	مبنى المكتبة غير مناسب
٥	٤	٣	٢	١	ندرة في وجود سياسات و لوائح مكتبية
٥	٤	٣	٢	١	قلة في معرفة متطلبات المستخدمين
٥	٤	٣	٢	١	ندرة في تعليم وتدريب المستخدمين في تكنولوجيا المعلومات
٥	٤	٣	٢	١	صعوبة استعمال أنظمة الكمبيوتر
٥	٤	٣	٢	١	ندرة في الدعم من الوكيل المحلي
٥	٤	٣	٢	١	الخوف من التغيير لدى موظفي المكتبة
٥	٤	٣	٢	١	قلة الوعي بأهمية تكنولوجيا المعلومات لدى المسؤولين
٥	٤	٣	٢	١	أسباب أخرى ، فضلاً أذكرها
٥	٤	٣	٢	١	

ب : نظام كمبيوتر مُعرب للمكتبات :

٧- رجاءُ بيّن ، حسب رأيك ، فيما اذا توافق أو لا توافق على اعتبار ما يلي من المعوقات الرئيسية لتبني أو استعمال نظام كمبيوتر مُعرب للمكتبات .

١- لا أوافق بشدة

٢- لا أوافق

٣- مُحايد

٤- موافق

٥- موافق بشدة

فضلاً عَلم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

٥	٤	٣	٢	١	صعوبات مالية
٥	٤	٣	٢	١	ندرة في موظفي المكتبات المؤهلين في تكنولوجيا المعلومات
٥	٤	٣	٢	١	مواقف لدى موظفي المكتبة (عدم القبول والرغبة)
٥	٤	٣	٢	١	صعوبات تقنية
٥	٤	٣	٢	١	البيروقراطية الادارية (المركزية وبطء الاجراءات)
٥	٤	٣	٢	١	ندرة في الاستعداد لدى المستخدمين لاستخدام تكنولوجيا المعلومات
٥	٤	٣	٢	١	مبنى المكتبة غير مناسب
٥	٤	٣	٢	١	ندرة في وجود سياسات و لوائح مكتبية
٥	٤	٣	٢	١	قلة في معرفة متطلبات المستخدمين
٥	٤	٣	٢	١	ندرة في تعليم وتدريب المستخدمين في تكنولوجيا المعلومات
٥	٤	٣	٢	١	صعوبة استعمال أنظمة الكمبيوتر
٥	٤	٣	٢	١	ندرة في الدعم من الوكيل المحلي
٥	٤	٣	٢	١	الخوف من التغيير لدى موظفي المكتبة
٥	٤	٣	٢	١	قلة الوعي بأهمية تكنولوجيا المعلومات لدى المسؤولين
٥	٤	٣	٢	١	أسباب أخرى ، فضلاً أذكرها
٥	٤	٣	٢	١	

بسم الله الرحمن الرحيم

استبيان رقم (٤) : الطلبة

عزيري : الطالب / الطالبة  
تحية طيبة، وبعد

أنا طالب دكتوراة بجامعة DE MONTFORT UNIVERSITY, UK في بريطانيا، والاستبيان المرفق جزء اساسي في هذه الدراسة والتي تبحث أثر تكنولوجيا المعلومات في المكتبات الاكاديمية في الكويت.

لذا اكتب اليك أملاً منحي بعض الدقائق من وقتك للاجابة على هذا الاستبيان، والذي يهدف الي تحديد آراء ومواقف الطلبة مستخدمي هذه المكتبات في القضايا التالية: تكنولوجيا المعلومات، نظام كمبيوتر مُعرب للمكتبات، التعاون و شبكة المعلومات.

مقدراً لك حسن اهتمامك وتعاونك، ومؤكداً لك سرية المعلومات المجموعة لاغراض البحث العلمي. أغلب أسئلة هذا الاستبيان تحتاج منك فقط الى وضع علامة على الاجابة المناسبة، والبقية القليلة تتطلب منك ذكر بعض المعلومات المحدودة. رجاءً أكمل الاستبيان بأسرع وقت ممكن، وضعه لدى المسئول في مكتبتك.

شكراً جزيلاً لتعاونكم،

الباحث

خالد العنزي

قسم علوم المكتبات والمعلومات، كلية التربية الاساسية  
الهيئة العامة للتعليم التطبيقي والتدريب



ج : التعاون وشبكة المعلومات :

٨- رجاءً بيّن، حسب رأيك ، فيما اذا توافق أو لاتوافق على اعتبار ما يلي من المعوقات الرئيسية لقيام تعاون وشبكة معلومات بين المكتبات في جامعة الكويت والهيئة العامة للتعليم التطبيقي والتدريب .

١- لا أوافق بشدة

٢- لا أوافق

٣- محايد

٤- موافق

٥- موافق بشدة

فضلاً علّم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

٥	٤	٣	٢	١	صعوبات مالية
٥	٤	٣	٢	١	ندرة في وجود شخصية مؤهلة وقيادية قوية
٥	٤	٣	٢	١	ندرة في موظفي المكتبات المؤهلين
٥	٤	٣	٢	١	قلة التنسيق
٥	٤	٣	٢	١	عدم كفاءة مصادر المكتبة
٥	٤	٣	٢	١	ضعف نظام الاتصالات والبريد
٥	٤	٣	٢	١	قلة الأدوات المرجعية
٥	٤	٣	٢	١	ندرة في وجود قائمة موحدة لرؤوس الموضوعات العربية وللدوريات
٥	٤	٣	٢	١	ندرة في إجراء دراسات المستفيدين
٥	٤	٣	٢	١	قلة الوعي بأهمية التعاون وشبكة المعلومات لدى المسؤولين في المكتبات
٥	٤	٣	٢	١	ندرة في وجود مقاييس موحدة في الفهرسة والتصنيف
٥	٤	٣	٢	١	مشاكل تقنية
٥	٤	٣	٢	١	البيروقراطية الإدارية (المركزية وبطء الاجراءات)
٥	٤	٣	٢	١	كل مكتبة تفضل ان تعمل بمفردها
٥	٤	٣	٢	١	ندرة الادوات الببليوغرافية
٥	٤	٣	٢	١	ندرة في الاستعداد لدى المستفيدين لاستخدام شبكة المعلومات
٥	٤	٣	٢	١	قله استخدام تكنولوجيا المعلومات
٥	٤	٣	٢	١	ندرة في وجود اتفاق رسمي للتعاون
٥	٤	٣	٢	١	ندرة في وجود سياسات ولوائح مكتبية فعّاله
٥	٤	٣	٢	١	معوقات أخرى ، فضلاً أذكرها
٥	٤	٣	٢	١	
٥	٤	٣	٢	١	

رابعاً : آراء ومواقف : أهمية تكنولوجيا المعلومات

أ : تكنولوجيا المعلومات

٩- رجاءُ بيّن، حسب رأيك ، أهمية تسهيلات تكنولوجيا المعلومات التالية في تحسين خدمات مكتبك

- ١- غير مهم جداً  
٢- غير مهم  
٣- وسط  
٤- مهم  
٥- مهم جداً

فضلاً عَلم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

	٥	٤	٣	٢	١	
						أستخدام الكومبيوتر في التزويد
						أستخدام الكمبيوتر في الفهرسة
						أستخدام الكمبيوتر للبحث في الفهارس (OPAC)
						أستخدام الكمبيوتر في خدمة التداول (Circulation)
						أستخدام الأقراص المضغوطة (CD ROM)
						أستخدام الخط المباشر لقواعد المعلومات (Online)
						أستخدام الوسائل السمعية والبصرية
						أستخدام الفيديو والتليتكس المقروء (Videotex & Teletex)
						أستخدام الات الميكروفورم
						أستخدام الات التصوير
						أستخدام تسهيلات الكمبيوتر (MicroComputers)
						تسهيلات أخرى ، فضلاً أذكرها

١- هل تعتقد ، حسب رأيك ، أن توفر تكنولوجيا المعلومات في مكتبك سوف

١- لا أوافق بشدة

٢- لا أوافق

٣- محايد

٤- موافق

٥- موافق بشدة

١	٢	٣	٤	٥	يوفر خدمات جديدة في مكتبك
١	٢	٣	٤	٥	يزيل العمل الروتيني عن موظفي المكتبة
١	٢	٣	٤	٥	يشجع أنشطة البحث لدى المستفيدين
١	٢	٣	٤	٥	يساعد في سد النقص في الموظفين المؤهلين
١	٢	٣	٤	٥	يساعد في مواجهة الزيادة في مواد المكتبة
١	٢	٣	٤	٥	يساعد في مواجهة الزيادة في عدد المستفيدين
١	٢	٣	٤	٥	يساعد في مواجهة الزيادة في زخم العمل
١	٢	٣	٤	٥	يساعد في إنجاز عمل المكتبة بصورة دقيقة وسريعة وأكثر سيطرةً
١	٢	٣	٤	٥	يساعد في توفير المكان
١	٢	٣	٤	٥	يساعد في التنافس مع المكتبات الجامعية الأخرى
١	٢	٣	٤	٥	تزيد من زخم العمل على موظفي المكتبة
١	٢	٣	٤	٥	تكون صعبة الأستعمال
١	٢	٣	٤	٥	تكون عالية الثمن
١	٢	٣	٤	٥	لا توفر الوقت ولا الجهد
١	٢	٣	٤	٥	تكشف ضعف المجموعات المكتبية
١	٢	٣	٤	٥	أخرى ، فضلاً أذكرها
١	٢	٣	٤	٥	

١١- أياً مما يلي ، في رأيك ، يسبب عدم رضى لدى المستخدمين في مكتبك

١- لا أوافق بشدة

٢- لا أوافق

٣- محايد

٤- موافق

٥- موافق بشدة

فضلاً علّم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

٥	٤	٣	٢	١	صعوبات في استعمال الفهرس
٥	٤	٣	٢	١	الوثيقة المطلوبة (كتاب، مجله، الخ) غير موجوده بالمكتبه
٥	٤	٣	٢	١	قله في تسهيلات التصوير
٥	٤	٣	٢	١	البحث الفهرسي بالكمبيوتر (OPAC)
٥	٤	٣	٢	١	خدمة التداول بالكمبيوتر (Automated Circulation)
٥	٤	٣	٢	١	الخط المباشر بقواعد المعلومات (Online Databases)
٥	٤	٣	٢	١	محطات الاقرص المضغوطه (CD-ROM Stations)
٥	٤	٣	٢	١	قله في السعه المكانيه
٥	٤	٣	٢	١	اسباب اخري، فضلا اذكرها
٥	٤	٣	٢	١	
٥	٤	٣	٢	١	

١٢- رجاء بين رأيك في الجمل التاليه :

٥	٤	٣	٢	١	المكتبه الالكترونيه ستكون الاتجاه العام في المستقبل للبيئه الجامعيه
٥	٤	٣	٢	١	لدى مكتبك القدرة على تدريب المستخدمين على تكنولوجيا المعلومات
٥	٤	٣	٢	١	أنظمة الكمبيوتر تستحق الأولوية في ميزانية المكتبة
٥	٤	٣	٢	١	المستخدمون من مكتبك لديهم إستعداد لاستخدام تكنولوجيا المعلومات
٥	٤	٣	٢	١	أنت على أستعداد لأخذ تدريبات ودورات لتعلم الأنظمة الجديدة في تكنولوجيا المعلومات

ب : نظام كمبيوتر مُعَرَّب للمكتبات

١٣- رجاءً ، بيّن حسب رأيك ، أهمية التسهيلات التالية في تحسين خدمات مكتبتك

- ١- غير مهم جداً  
٢- غير مهم  
٣- وسط  
٤- مهم  
٥- مهم جداً

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

٥	٤	٣	٢	١	أستخدام الكومبيوتر المعرب في التزويد
٥	٤	٣	٢	١	أستخدام الكومبيوتر المعرب في الفهرسة
٥	٤	٣	٢	١	أستخدام الكومبيوتر المعرب للبحث في الفهارس (OPAC)
٥	٤	٣	٢	١	أستخدام الكومبيوتر المعرب في خدمة التداول (Circulation)
٥	٤	٣	٢	١	أستخدام الأقراص المضغوطة المعربة (CD ROM)
٥	٤	٣	٢	١	أستخدام الخط المباشر المعرب لقواعد المعلومات (Online)
٥	٤	٣	٢	١	أستخدام تسهيلات الكومبيوتر المعرب (MicroComputers)
٥	٤	٣	٢	١	تسهيلات أخرى ، فضلاً أذكرها
٥	٤	٣	٢	١	
٥	٤	٣	٢	١	

موظفين -

ج : التعاون وشبكة المعلومات :

- ١- لا أوافق بشدة  
٢- لا أوافق  
٣- محايد  
٤- موافق  
٥- موافق بشدة

١٤- رجاءً ، بيّن رأيك في قيام تعاون وشبكة معلومات بين المكتبات الأكاديمية في الجامعة والهيئة

فضلاً علّم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥	يجب أن يكون هناك (تعاون وشبكة معلومات) رسمي وفعال بين المكتبات الأكاديمية في الكويت
١	٢	٣	٤	٥	وجود (تعاون وشبكة معلومات) فعال سوف يحل عدة مشاكل تواجه المكتبات الأكاديمية في الكويت
١	٢	٣	٤	٥	أشتراك المكتبة في نظام تعاون وشبكة معلومات يحسن خدماتها
١	٢	٣	٤	٥	الأشتراك في نظام تعاون وشبكة معلومات يقود الى انخفاض في التكاليف المادية
١	٢	٣	٤	٥	من الممكن إنشاء تعاون وشبكة معلومات بين المكتبات الأكاديمية في الكويت
١	٢	٣	٤	٥	لديك الاستعداد لأخذ تدريبات ودروس في الأنظمة الحديثة لشبكات المعلومات
١	٢	٣	٤	٥	موظفوا المكتبة لديهم استعداد لاستخدام تسهيلات شبكة المعلومات
١	٢	٣	٤	٥	المستفيدين لديهم الاستعداد لاستخدام تسهيلات شبكة المعلومات في الوقت الحاضر
١	٢	٣	٤	٥	مكتبتك لديها القدرة على تدريب وتعليم المستفيدين على الجديد في شبكات المعلومات
١	٢	٣	٤	٥	النظام الحديث لشبكة المعلومات سيقال من زخم العمل على موظفي المكتبة
١	٢	٣	٤	٥	التعاون و شبكة المعلومات يعزز مجموعات المكتبة
١	٢	٣	٤	٥	يجب ان تكون هناك وحدة للاستعارة عبر المكتبات في كل من الجامعة والهيئة
١	٢	٣	٤	٥	مكتبات الكليات في الجامعة/الهيئة يجب أن تربط مع بعض
١	٢	٣	٤	٥	المكتبات الأكاديمية في كل من الجامعة والهيئة ككل يجب أن تربط مع بعض
١	٢	٣	٤	٥	يجب ان تكون هناك اتفاقية رسمية للتعاون وشبكة المعلومات
١	٢	٣	٤	٥	يجب ان تكون هناك سياسات ولوائح فعالة للتعاون وشبكة المعلومات

١٥- رجاءً بيّن مدى رضاك عن مستوى الأنشطة التعاونية الحالية بين المكتبات في الجامعة والهيئة فضلاً علّم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥
غير راضي جدا	غير راضي	وسط	راضي	راضي جدا

١٦- رجاءً، أذكر ما لديك من ملاحظات حول هذا الموضوع :

.....  
.....  
.....

بسم الله الرحمن الرحيم

استبيان رقم (٣) : هيئة التدريس

الاستاذ/الاستاذة : عضو هيئة التدريس  
تحية طيبة، وبعد

أنا طالب دكتوراة بجامعة DE MONTFORT UNIVERSITY, UK في بريطانيا،  
والاستبيان المرفق جزء أساسي في هذه الدراسة والتي تبحث أثر تكنولوجيا  
المعلومات في المكتبات الأكاديمية في الكويت.

لذا اكتب اليك أملاً منحي بعض الدقائق من وقتك للإجابة على هذا الاستبيان، والذي  
يهدف الي تحديد آراء ومواقف أعضاء هيئة التدريس، مستخدمين هذه المكتبات في  
القضايا التالية:

تكنولوجيا المعلومات، نظام كمبيوتر مُعرب للمكتبات، التعاون و شبكة المعلومات.

مقدراً لك حسن اهتمامك وتعاونك، ومؤكداً لك سرية المعلومات المجموعة لأغراض  
البحث العلمي. أغلب أسئلة هذا الاستبيان تحتاج منك فقط الى وضع علامة على  
الإجابة المناسبة، والبقية القليلة تتطلب منك ذكر بعض المعلومات المحدودة.  
رجاءً أكمل الاستبيان بأسرع وقت ممكن، وضعه لدى المسئول في مكتبتك.

شكراً جزيلاً لتعاونكم،

الباحث

خالد العنزي

قسم علوم المكتبات والمعلومات، كلية التربية الأساسية  
الهيئة العامة للتعليم التطبيقي والتدريب

## أستبيان مستخدمي المكتبة

الهيئة العامة للتعليم  
التطبيقي والتدريب

جامعة الكويت

## هيئة التدريس

القسم العلمي : .....

مكتبة كلية : .....

ملاحظات :

- المربعات الواقعة على يسار صفحات الاستبيان هي خاصة لاستعمال الباحث فقط.

في ما يلي تعريف لمصطلحات واختصارات وردت في الاستبيان :

- تكنولوجيا المعلومات : مصطلح بدأ يستخدم حديثا (وكأشمل من مصطلح Automation) ويعني استخدام الكمبيوتر مع وسائل الاتصالات الالكترونية لتخزين وارسال وعرض المعلومات.

- الجامعة : جامعة الكويت.

- الهيئة : الهيئة العامة للتعليم التطبيقي والتدريب.



أولاً : المعلومات الشخصية :

رجاءً ضع علامة صح ( ✓ ) في المربع المناسب

١- المؤهلات العلمية :

بكالوريوس	ماجستير	دكتوراه	اخرى ، فضلاً أذكر	اسم الجامعة المانحة للشهادة

٢- مجال التخصص :

العلوم	الهندسة	الآداب	التربية	التجارة	الطب	اخرى ، فضلاً أذكر

٣- الجنسية :	كويتي	غير كويتي	
		عربي	غير عربي

٤- المستوى الأكاديمي :	مدرس	محاضر	استاذ مساعد	استاذ مشارك	استاذ	اخرى ، فضلاً أذكر

٥- الخبرة التدريسية:	أقل من ٢ سنوات	من ٢-٦	من ٧-١٠	أكثر من ١٠

٦- الانتاج العلمي (بالعدد)	مقالات علمية	تأليف كتب	اخرى ، فضلاً أذكر

## ثانياً: خلفية هيئة التدريس في تكنولوجيا المعلومات :

١- لا أبداً

٢- نادراً

٧- رجاءً، بين مدى خلفيتك في تكنولوجيا المعلومات حسب الاسئلة التالية : ٣- من حين لآخر

٤- غالباً

٥- دائماً

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥	هل سبق أن كنت في دورة تدريبية على أنظمة الكمبيوتر خلال الثلاث سنوات الأخيرة
١	٢	٣	٤	٥	هل تستخدم نظام كمبيوتر في عملك اليومي
١	٢	٣	٤	٥	هل استخدمت نظام كمبيوتر للمكتبات خلال الثلاث سنوات الأخيرة
١	٢	٣	٤	٥	الكمبيوتر الشخصي PC
١	٢	٣	٤	٥	(Workstations) محطات كمبيوتر
١	٢	٣	٤	٥	(Mainframe) مركز الكمبيوتر الرئيسي
١	٢	٣	٤	٥	أخرى ، فضلاً أذكر
١	٢	٣	٤	٥	
١	٢	٣	٤	٥	(Wordprocessor) معالجة الكلمات
١	٢	٣	٤	٥	(Spreadsheet) جداول الكترونية
١	٢	٣	٤	٥	(Database) قاعدة معلومات
١	٢	٣	٤	٥	(Graphics Package) برامج للرسم
١	٢	٣	٤	٥	(Statistics Package) برامج إحصائية
١	٢	٣	٤	٥	(Programming Languages) لغات البرمجة
١	٢	٣	٤	٥	أخرى ، فضلاً أذكر
١	٢	٣	٤	٥	
١	٢	٣	٤	٥	الفهارس (OPAC)
١	٢	٣	٤	٥	الأقراص المضغوطة (CD-ROM)
١	٢	٣	٤	٥	(Online Databases) الخط المباشر لقواعد المعلومات
١	٢	٣	٤	٥	أخرى ، فضلاً أذكر
١	٢	٣	٤	٥	
١	٢	٣	٤	٥	

رجاءً بين مدى استخدامك الحالي لما يلي

البرامج

نظام كمبيوتر للمكتبات

### ثالثاً : الاستعمال العام للمكتبة :

٨- اي من المواد المكتبية التالية تستخدمها في الغالب؟

رجاءً ضع علامة صح ( √ ) في المربع المناسب

مجلات	كتب	تقارير	وسائل سمعية وبصرية	أخرى ، فضلاً أذكرها

- ١- لا أبداً  
٢- ناسراً  
٣- من حين لآخر  
٤- غالباً  
٥- دائماً

فضلاً عَلم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥	٩- الى اي مدى ترتبط بأنشطة بحثية تتطلب منك استخدام الخط المباشر لقواعد المعلومات الخارجية؟
١	٢	٣	٤	٥	١٠- الى اي مدى تجد المواد المكتبية المرتبطة بتخصصك متوفرة في مكتبك في الوقت الذي تطلبها فيه؟
١	٢	٣	٤	٥	١١- ما مدى تزويدك بخدمة البث الانتقائي للمعلومات من قنل مكتبك؟
١	٢	٣	٤	٥	١٢- ما مدى استخدامك لمكتبك الاكاديمية
١	٢	٣	٤	٥	١٣- الى اي مدى تشترك في اجراءات الاختيار
١	٢	٣	٤	٥	لخطط تكنولوجيا المعلومات

- ١- لا أوافق بشدة  
٢- لا أوافق  
٣- مُحايد  
٤- موافق  
٥- موافق بشدة

١٤- ماهي أهم الصعوبات في استعمال الفهرس البطاقي؟

فضلاً عَلم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥	يستغرق وقت طويل لاجراء البحث فيه
١	٢	٣	٤	٥	احياناً تفقد بعض البطاقات
١	٢	٣	٤	٥	بعض البطاقات غير واضحة الكتابة
١	٢	٣	٤	٥	استعماله يتطلب معرفة الترتيب الهجائي للعربي والانجليزي
١	٢	٣	٤	٥	صعوبات أخرى ، فضلاً أذكرها
١	٢	٣	٤	٥	
١	٢	٣	٤	٥	

رجاءً ضع علامة صح (✓) في المربع المناسب

		لا	نعم	١٥- هل تستعمل أياً من مكتبات الكليات؟
				إذا كانت الإجابة (لا) رجاءً بيّن السبب، بوضع (✓) في المربع المناسب
				لا احتاج إليها
				غير مفيدة
				لا أعرف كيف استخدمها
				لا أعرف أين مكانها
				أسباب أخرى، فضلاً أذكرها

١٦- لماذا تزور مكتبك؟

رجاءً بيّن السبب، بوضع (✓) في المربع المناسب

			استعارة/إرجاع كتب
		المجلات الحديثة	للاطلاع على
		المصحف	
		الكتب	
			لاستعمال الفهرس البطاقي
			لاستشارة موظفي المكتبة
			لاستعمال مصادر المكتبة
			للتصوير
			لاستخدام الوسائل السمعية والبصرية
			للبحث عبر الخط المباشر
			لمقابلة الاصدقاء
			أسباب أخرى، فضلاً أذكرها

رابعاً : رضا المستفيدين

١٧- رجاءً بين مدى رضاك عن خدمات مكتبك الحالية كما يلي :

- ١- غير راضي بشدة  
٢- غير راضي  
٣- وسط  
٤- راضي  
٥- راضي بشدة

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

	٥ ٤ ٣ ٢ ١	الكتب	من حيث الكمية	المواد المكتبية
	٥ ٤ ٣ ٢ ١	المجلات		
	٥ ٤ ٣ ٢ ١	المراجع		
	٥ ٤ ٣ ٢ ١	الوسائل السمعية والبصرية		
	٥ ٤ ٣ ٢ ١	الكتب	من حيث النوعية	
	٥ ٤ ٣ ٢ ١	المجلات		
	٥ ٤ ٣ ٢ ١	المراجع		
	٥ ٤ ٣ ٢ ١	الوسائل السمعية والبصرية		
	٥ ٤ ٣ ٢ ١	أستخدام الفهرس البطاقي	تنظيم المواد امكتبية	
	٥ ٤ ٣ ٢ ١	تنظيم الأرفف		
	٥ ٤ ٣ ٢ ١	ترقيم الكتب		
	٥ ٤ ٣ ٢ ١	إرشادات وعلامات المكتبة		
	٥ ٤ ٣ ٢ ١	إستعارة/أرجاع الكتب	خدمات التداول	
	٥ ٤ ٣ ٢ ١	إستعارة قصيرة		
	٥ ٤ ٣ ٢ ١	حجز الكتب/المجلات		
	٥ ٤ ٣ ٢ ١	إستعارة من مكتبات أخرى		
	٥ ٤ ٣ ٢ ١	External Online Databases قواعد المعلومات الخارجية	مُعدّات	
	٥ ٤ ٣ ٢ ١	آلات التصوير		
	٥ ٤ ٣ ٢ ١	Vidotex System نظام فيديو مقرأ		
	٥ ٤ ٣ ٢ ١	نظام فيديو		
	٥ ٤ ٣ ٢ ١	CD-ROM الأقراص المضغوطة	خدمات أخرى	
	٥ ٤ ٣ ٢ ١	دورات تدريبية وارشادية في المكتبات		
	٥ ٤ ٣ ٢ ١	مساعدة وارشاد من موظفي المكتبة		
	٥ ٤ ٣ ٢ ١	مكان الدراسة/القراءة		
	٥ ٤ ٣ ٢ ١	ساعات عمل المكتبة		

## خامساً : آراء ومواقف : أهمية تكنولوجيا المعلومات

### أ : تكنولوجيا المعلومات

١٨- رجاءُ بيّن، حسب رأيك ، أهمية تسهيلات تكنولوجيا المعلومات التالية في تحسين خدمات مكتبك

- ١- غير مهم جداً  
٢- غير مهم  
٣- وسط  
٤- مهم  
٥- مهم جداً

فضلاً عَمّ المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

٥	٤	٣	٢	١	استخدام الكمبيوتر للبحث في الفهارس (OPAC)
٥	٤	٣	٢	١	استخدام الكمبيوتر في خدمة التداول (Circulation)
٥	٤	٣	٢	١	استخدام الأقراص المضغوطة (CD ROM)
٥	٤	٣	٢	١	استخدام الخط المباشر لقواعد المعلومات (Online)
٥	٤	٣	٢	١	استخدام الوسائل السمعية والبصرية
٥	٤	٣	٢	١	استخدام الفيديو والتليتكس المقروء (Videotex & Teletex)
٥	٤	٣	٢	١	استخدام الآلات الميكرو فورم
٥	٤	٣	٢	١	استخدام الآلات التصوير
٥	٤	٣	٢	١	استخدام تسهيلات الكمبيوتر (MicroComputers)
٥	٤	٣	٢	١	تسهيلات أخرى ، فضلاً أذكرها
٥	٤	٣	٢	١	

- ١- غير موافق بشدة  
٢- غير موافق  
٣- محايد  
٤- موافق  
٥- موافق بشدة

١٩- هل تعتقد ، حسب رأيك ، أن توفر تكنولوجيا المعلومات في مكتبك سوف :

٥	٤	٣	٢	١	يشجع الأنشطة البحثية
٥	٤	٣	٢	١	يدعم التدريس
٥	٤	٣	٢	١	يساعد في الحصول على موارد مالية للبحوث
٥	٤	٣	٢	١	يساعد في دعم برامج الدراسات العليا
٥	٤	٣	٢	١	يساعد في تحقيق احتياجات طلبة الدراسات العليا
٥	٤	٣	٢	١	يوفر خدمات جديدة في مكتبك
٥	٤	٣	٢	١	يساعد في توفير المكان
٥	٤	٣	٢	١	يساعد في توفير وقتك وجهدك
٥	٤	٣	٢	١	يساعد في استخدامك أكثر للمكتبة
٥	٤	٣	٢	١	يساعد في ربطك بالأنشطة البحثية مع الدول المتقدمة
٥	٤	٣	٢	١	تكون صعبة الاستعمال
٥	٤	٣	٢	١	أخرى ، فضلاً أذكرها
٥	٤	٣	٢	١	

- ١- غير موافق بشدة  
٢- غير موافق  
٣- محايد  
٤- موافق  
٥- موافق بشدة

٢٠- رجاءً بيّن رأيك في الجُمْل التالي :

١	٢	٣	٤	٥	المكتبه الالكترونيه ستكون الاتجاه العام في المستقبل للبيئه الاكاديميه
١	٢	٣	٤	٥	أنت تحتاج الى برنامج تدريب في استخدام التسهيلات التي توفرها تكنولوجيا المعلومات
١	٢	٣	٤	٥	لديك الرغبة في المشاركة في برنامج التدريب لتتعلم على استخدام تسهيلات تكنولوجيا المعلومات
١	٢	٣	٤	٥	من المهم اشراك الأستاذة في التخطيط لتكنولوجيا المعلومات في المكتبة

ب : نظام كمبيوتر مُعرب للمكتبات

- ١- غير مهم جداً  
٢- غير مهم  
٣- وسط  
٤- مهم  
٥- مهم جداً

٢١- رجاءً ، بيّن حسب رأيك ، أهمية التسهيلات التالية في تمسين خدمات مكتبك

فضلاً عَلم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥	استخدام الكمبيوتر المعرب للبحث في الفهارس (OPAC)
١	٢	٣	٤	٥	استخدام الكمبيوتر المعرب في خدمة التداول (Circulation)
١	٢	٣	٤	٥	استخدام الأقراص المضغوطة المعربة (CD ROM)
١	٢	٣	٤	٥	استخدام الخط المباشر المعرب لقواعد المعلومات (Online)
١	٢	٣	٤	٥	استخدام تسهيلات الكمبيوتر المعرب (MicroComputers)
١	٢	٣	٤	٥	تسهيلات أخرى ، فضلاً أذكرها
١	٢	٣	٤	٥	
١	٢	٣	٤	٥	

- ١- غير موافق بشدة  
٢- غير موافق  
٣- محايد  
٤- موافق  
٥- موافق بشدة

٢٢- رجاءً بيّن رأيك في الجُمْل التالي :

١	٢	٣	٤	٥	مكتبك بحاجة الى نظام كمبيوتر مُعرب للمكتبات
١	٢	٣	٤	٥	نظام الكمبيوتر المعرب سيشجعك لاستخدام المكتبة أكثر
١	٢	٣	٤	٥	استخدام نظام الكمبيوتر المعرب أسهل عليك من النظام الانجليزي

ج : التعاون وشبكة المعلومات :

٢٢- رجاء ، بيّن رأيك في قيام تعاون وشبكة معلومات بين المكتبات  
الأكاديمية في الجامعة والهيئة

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

- ١- لا أوافق بشدة  
٢- لا أوافق  
٣- محايد  
٤- موافق  
٥- موافق بشدة

١	٢	٣	٤	٥	
١	٢	٣	٤	٥	يجب أن يكون هناك (تعاون وشبكة معلومات) رسمي وفعال بين المكتبات الأكاديمية في الكويت
١	٢	٣	٤	٥	اشتراك المكتبة في نظام تعاون وشبكة معلومات يحسن خدمات المكتبة
١	٢	٣	٤	٥	من الممكن إنشاء تعاون وشبكة معلومات بين المكتبات الأكاديمية في الكويت
١	٢	٣	٤	٥	لديك الاستعداد لأخذ تدريبات ودروس في الأنظمة الحديثة لشبكات المعلومات
١	٢	٣	٤	٥	مكتبات الكليات في الجامعة/الهيئة يجب أن تربط مع بعض
١	٢	٣	٤	٥	المكتبات الأكاديمية في كل من الجامعة والهيئة ككل يجب أن تربط مع بعض
١	٢	٣	٤	٥	نظام شبكة المعلومات سوف يوفر وقتك وجهدك
١	٢	٣	٤	٥	نظام شبكة المعلومات صعب الاستعمال
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك البحثية
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك التدريسية
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك البحثية
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك التدريسية
١	٢	٣	٤	٥	وجود طرف كمبيوتر للبحث المباشر في الفهارس في قسمك العلمي مرتبط بالمكتبة سوف يدعم انشطتك البحثية
١	٢	٣	٤	٥	وجود طرف كمبيوتر للبحث المباشر في الفهارس في قسمك العلمي مرتبط بالمكتبة سوف يدعم انشطتك التدريسية
١	٢	٣	٤	٥	نظام شبكة المعلومات لا يعتمد عليه (not reliable)
١	٢	٣	٤	٥	آراء أخرى، فضلاً أذكرها
١	٢	٣	٤	٥	



بسم الله الرحمن الرحيم

استبيان رقم (٤) : الطلبة

عزيزي : الطالب / الطالبة  
تحية طيبة، وبعد

أنا طالب دكتوراة بجامعة DE MONTFORT UNIVERSITY, UK في بريطانيا،  
والاستبيان المرفق جزء اساسي في هذه الدراسة والتي تبحث أثر تكنولوجيا  
المعلومات في المكتبات الاكاديمية في الكويت.

لذا اكتب اليك أملاً منحي بعض الدقائق من وقتك للاجابة على هذا الاستبيان، والذي  
يهدف الي تحديد آراء ومواقف الطلبة مستخدمي هذه المكتبات في القضايا التالية:  
تكنولوجيا المعلومات، نظام كمبيوتر مُعرب للمكتبات، التعارن و شبكة المعلومات.

مقدراً لك حسن اهتمامك وتعاونك، ومؤكداً لك سرية المعلومات المجموعة لانغراض  
البحث العلمي. أغلب أسئلة هذا الاستبيان تحتاج منك فقط الى وضع علامة على  
الاجابة المناسبة، والبقية القليلة تتطلب منك ذكر بعض المعلومات المحدودة.  
رجاءً أكمل الاستبيان بأسرع وقت ممكن، وضعه لدى المسئول في مكتبتك.

شكراً جزيلاً لتعاونكم،

الباحث

خالد العنزي

قسم علوم المكتبات والمعلومات، كلية التربية الاساسية  
الهيئة العامة للتعليم التطبيقي والتدريب

# أستبيان مستخدمي المكتبة

1 الطلبة

الهيئة العامة

2 جامعة الكويت

دراسات عليا

3 المستوى : دراسات جامعية

4 الكلية : .....

5 التخصص : .....

6 رجاءً ضع علامة صح (✓) في المربع المناسب

أنثى

ذكر

ملاحظات :

- المربعات الواقعة على يسار صفحات الاستبيان هي خاصة لاستعمال الباحث فقط.

في ما يلي تعريف لمصطلحات واختصارات وردت في الاستبيان :

- تكنولوجيا المعلومات : مصطلح بدأ يستخدم حديثاً (وكأشمل من مصطلح Automation ويعني استخدام الكمبيوتر مع وسائل الاتصالات الالكترونية لتخزين وارسال وعرض المعلومات.

- الجامعة : جامعة الكويت.

- الهيئة : الهيئة العامة للتعليم التطبيقي والتدريب.

أولاً : خلفية الطلبة في تكنولوجيا المعلومات :

- ١- رجاء، بيّن مدى خلفيتك في تكنولوجيا المعلومات حسب الأسئلة التالية : ٢- من حين لآخر  
٣- غالباً  
٤- دائماً  
٥- نادراً  
٦- لا أبداً

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

6	١ ٢ ٣ ٤ ٥	هل سبق أن كنت في دورة تدريبية على أنظمة الكمبيوتر خلال الثلاث سنوات الأخيرة	
7	١ ٢ ٣ ٤ ٥	هل تستخدم نظام كمبيوتر في عملك اليومي	
8	١ ٢ ٣ ٤ ٥	هل استخدمت نظام كمبيوتر للمكتبات خلال الثلاث سنوات الأخيرة	
9	١ ٢ ٣ ٤ ٥	الكمبيوتر الشخصي PC	أنظمة كمبيوتر
10	١ ٢ ٣ ٤ ٥	محطات كمبيوتر (Workstations)	
11	١ ٢ ٣ ٤ ٥	مركز الكمبيوتر الرئيسي (Mainframe)	
12	١ ٢ ٣ ٤ ٥	أخرى ، فضلاً أذكر	
13	١ ٢ ٣ ٤ ٥	معالجة الكلمات (Wordprocessor)	البرامج
14	١ ٢ ٣ ٤ ٥	جداول الكترونية (Spreadsheet)	
15	١ ٢ ٣ ٤ ٥	قاعدة معلومات (Database)	
16	١ ٢ ٣ ٤ ٥	برامج للرسم (Graphics Package)	
17	١ ٢ ٣ ٤ ٥	برامج إحصائية (Statistics Package)	
18	١ ٢ ٣ ٤ ٥	لغات البرمجة (Programming Languages)	
19	١ ٢ ٣ ٤ ٥	أخرى ، فضلاً أذكر	
20	١ ٢ ٣ ٤ ٥	الفهارس (OPAC)	نظام كمبيوتر للمكتبات
21	١ ٢ ٣ ٤ ٥	الأقراص المضغوطة (CD-ROM)	
22	١ ٢ ٣ ٤ ٥	الخط المباشر لقواعد المعلومات (Online Databases)	
23	١ ٢ ٣ ٤ ٥	أخرى ، فضلاً أذكر	
	١ ٢ ٣ ٤ ٥		

رجاءً بيّن مدى استخدامك الحالي لما يلي

## ثانياً : الاستعمال العام للمكتبة :

٢- اي من المواد المكتبية لتستخدمها في الغالب؟

رجاءً ضع علامة صح (√) في المربع المناسب

	مجلات	كتب	تقارير	وسائل سمعية وبصرية	أخرى ، فضلاً أذكرها
24					

- ١- لا أبداً  
٢- نادراً  
٣- من حين لآخر  
٤- غالباً  
٥- دائماً

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

25	١	٢	٣	٤	٥	هل ترتبط بأنشطة بحثية تتطلب منك استخدام الخط المباشر لقواعد المعلومات الخارجية؟
26	١	٢	٣	٤	٥	هل تجد المواد المكتبية المرتبطة بتخصصك متوفرة في مكتبتك في الوقت الذي تطلبها فيه؟
27	١	٢	٣	٤	٥	هل تزودك مكتبتك بخدمة البث الانتقائي للمعلومات؟
28	١	٢	٣	٤	٥	هل تستخدم مكتبة الكلية
29	١	٢	٣	٤	٥	هل تشترك في اجراءات الاختيار للمواد المكتبية
30	١	٢	٣	٤	٥	هل تشترك في خطط تكنولوجيا المعلومات للمكتبة

- ١- لا أوافق بشدة  
٢- لا أوافق  
٣- مُحايد  
٤- موافق  
٥- موافق بشدة

٨- ماهي أهم الصعوبات في استعمال الفهرس البطاقي؟

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

31	١	٢	٣	٤	٥	يستغرق وقت طويل لاجراء البحث فيه
32	١	٢	٣	٤	٥	احياناً تُفقد بعض البطاقات
33	١	٢	٣	٤	٥	بعض البطاقات غير واضحة الكتابة
34	١	٢	٣	٤	٥	استعماله يتطلب معرفة الترتيب الهجائي للعربي والانجليزي
35	١	٢	٣	٤	٥	صعوبات أخرى ، فضلاً أذكرها
	١	٢	٣	٤	٥	
	١	٢	٣	٤	٥	

٩- ما مدى استخدامك لمكتبة الكلية؟

رجاءً ضع علامة صح ( ✓ ) في المربع المناسب

36		لا	نعم	هل تحتاج الى استخدام مكتبة الكلية ؟
37				هل مكتبة الكلية مفيدة لك ؟
38				هل تعرف كيف تستخدم المكتبة ؟
39				هل تعرف أين تقع المكتبة ؟
40				هل هناك اسباب اخرى لعدم استخدام المكتبة، فضلاً اذكرها

١٠- لماذا تزور مكتبتك؟

رجاءً بيّن السبب، بوضع ( ✓ ) في المربع المناسب

41			استعارة/إرجاع كتب
42			المجلات الحديثة
43			الصحف
44			الكتب
45			لاستعمال الفهرس البطاقي
46			لاستشارة موظفي المكتبة
47			لاستعمال مصادر المكتبة
48			للدراسة والاستذكار في كتبي الخاصة
49			للتصوير
50			لاستخدام الوسائل السمعية والبصرية
51			للبحث عبر الخط المباشر
52			لمقابلة الاصدقاء
53			أسباب اخرى، فضلاً اذكرها

## ثالثاً : رضا المستفيدين

١١- رجاءُ بيّن مدى رضاك عن خدمات مكتبتك الحالية كمايلي :

- ١- غير راضي بشدة  
٢- غير راضي  
٣- لا أعرف  
٤- راضي  
٥- راضي بشدة

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

	٥	٤	٣	٢	١	الكتب	من حيث الكمية	المواد المكتبية
	٥	٤	٣	٢	١	المجلات		
	٥	٤	٣	٢	١	المراجع		
	٥	٤	٣	٢	١	الوسائل السمعية والبصرية		
	٥	٤	٣	٢	١	الكتب	من حيث النوعية	
	٥	٤	٣	٢	١	المجلات		
	٥	٤	٣	٢	١	المراجع		
	٥	٤	٣	٢	١	الوسائل السمعية والبصرية		
	٥	٤	٣	٢	١	استخدام الفهرس البطاقي	تنظيم المواد امكتبية	
	٥	٤	٣	٢	١	تنظيم الارفف		
	٥	٤	٣	٢	١	ترقيم الكتب		
	٥	٤	٣	٢	١	أرشادات وعلامات المكتبة		
	٥	٤	٣	٢	١	أستعارة/أرجاع الكتب	خدمات التداول	
	٥	٤	٣	٢	١	أستعارة قصيرة		
	٥	٤	٣	٢	١	حجز الكتب/المجلات		
	٥	٤	٣	٢	١	استعارة من مكتبات أخرى		
	٥	٤	٣	٢	١	External Online Databases قواعد المعلومات الخارجية	معدات	
	٥	٤	٣	٢	١	آلات التصوير		
	٥	٤	٣	٢	١	Vidotex System نظام فيديو مقرر		
	٥	٤	٣	٢	١	نظام فيديو		
	٥	٤	٣	٢	١	CD-ROM الأقراص المضغوطة	خدمات أخرى	
	٥	٤	٣	٢	١	دورات تدريبية وأرشادية في المكتبات		
	٥	٤	٣	٢	١	مساعدة وأرشاد من موظفي المكتبة		
	٥	٤	٣	٢	١	مكان الدراسة/القراءة		
	٥	٤	٣	٢	١	ساعات عمل المكتبة		

## رابعاً : آراء ومواقف : أهمية تكنولوجيا المعلومات

### أ : تكنولوجيا المعلومات

- ١- غير مهم جداً  
٢- غير مهم  
٣- وسط  
٤- مهم  
٥- مهم جداً

١٢- رجاءً بيّن، حسب رأيك، أهمية تسهيلات تكنولوجيا المعلومات التالية في تحسين خدمات مكتبك

فضلاً علّم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

٥	٤	٣	٢	١	استخدام الكمبيوتر للبحث في الفهارس (OPAC)
٥	٤	٣	٢	١	استخدام الكمبيوتر في خدمة التداول (Circulation)
٥	٤	٣	٢	١	استخدام الأقراص المضغوطة (CD ROM)
٥	٤	٣	٢	١	استخدام الخط المباشر لقواعد المعلومات (Online)
٥	٤	٣	٢	١	استخدام الوسائل السمعية والبصرية
٥	٤	٣	٢	١	استخدام الفيديو والتليكس المقروء (Vidcotex & Teletex)
٥	٤	٣	٢	١	استخدام آلات الميكروفورم
٥	٤	٣	٢	١	استخدام آلات التصوير
٥	٤	٣	٢	١	استخدام تسهيلات الكمبيوتر (MicroComputers)
٥	٤	٣	٢	١	تسهيلات أخرى، فضلاً أذكرها
٥	٤	٣	٢	١	

- ١- غير موافق بشدة  
٢- غير موافق  
٣- محايد  
٤- موافق  
٥- موافق بشدة

١٣- هل تعتقد، حسب رأيك، أن توفر تكنولوجيا المعلومات في مكتبك سوف:

٥	٤	٣	٢	١	يشجع الأنشطة البحثية
٥	٤	٣	٢	١	يدعم التدريس والتعليم
٥	٤	٣	٢	١	يساعد في الحصول على موارد مالية للبحوث
٥	٤	٣	٢	١	يساعد في دعم برامج الدراسات العليا
٥	٤	٣	٢	١	يساعد في تحقيق احتياجات طلبة الدراسات العليا
٥	٤	٣	٢	١	يوفر خدمات جديدة في مكتبك
٥	٤	٣	٢	١	يساعد في توفير المكان
٥	٤	٣	٢	١	يساعد في توفير وقتك وجهدك
٥	٤	٣	٢	١	يساعد في استخدامك أكثر للمكتبة
٥	٤	٣	٢	١	يساعد في ربطك بالأنشطة البحثية مع الدول المتقدمة
٥	٤	٣	٢	١	تكون صعبة الاستعمال
٥	٤	٣	٢	١	أخرى، فضلاً أذكرها
٥	٤	٣	٢	١	

١٤- رجاءُ بيّن رأيك في الجُمْل التاليه :

- ١- غير موافق بشدة  
٢- غير موافق  
٣- مُحايد  
٤- موافق  
٥- موافق بشدة

١	٢	٣	٤	٥	المكتبه الالكترونيه ستكون الاتجاه العام في المستقبل للبيئه الاكاديميه
١	٢	٣	٤	٥	أنت تحتاج الى برنامج تدريب في استخدام التسهيلات التي توفرها تكنولوجيا المعلومات
١	٢	٣	٤	٥	لديك الرغبة في المشاركة في برنامج التدريب لتتعلم على استخدام تسهيلات تكنولوجيا المعلومات
١	٢	٣	٤	٥	من المهم اشراك الطلبة في التخطيط لتكنولوجيا المعلومات في المكتبة

ب : نظام كمبيوتر مُعَرَّب للمكتبات

١- غير مهم جدا

٢- غير مهم

١٥- رجاءُ ، بيّن حسب رأيك ، أهمية التسهيلات التالية في تحسين خدمات مكتبك ٢- وسط

٤- مهم

فضلاً عَلم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب ٥- مهم جدا

١	٢	٣	٤	٥	استخدام الكمبيوتر المعرب للبحث في الفهارس (OPAC)
١	٢	٣	٤	٥	استخدام الكمبيوتر المعرب في خدمة التداول (Circulation)
١	٢	٣	٤	٥	استخدام الأقراص المضغوطة المعربة (CD ROM)
١	٢	٣	٤	٥	استخدام الخط المباشر المعرب لقواعد المعلومات (Online)
١	٢	٣	٤	٥	استخدام تسهيلات الكمبيوتر المعرب (MicroComputers)
١	٢	٣	٤	٥	تسهيلات أخرى ، فضلاً أذكرها
١	٢	٣	٤	٥	
١	٢	٣	٤	٥	

١- غير موافق بشدة

٢- غير موافق

٣- مُحايد

٤- موافق

٥- موافق بشدة

١٦- رجاءُ بيّن رأيك في الجُمْل التاليه :

١	٢	٣	٤	٥	مكتبك بحاجة الى نظام كمبيوتر مُعَرَّب للمكتبات
١	٢	٣	٤	٥	نظام الكمبيوتر المعرب سيشجعك لاستخدام المكتبة أكثر
١	٢	٣	٤	٥	استخدام نظام الكمبيوتر المعرب أسهل عليك من النظام الانجليزي



ج : التعاون وشبكة المعلومات :

١- لا أوافق بشدة

١٧- رجاءً ، بيّن رأيك في قيام تعاون وشبكة معلومات بين المكتبات الأكاديمية ٢- لا أوافق

٣- محايد

٤- موافق

٥- موافق بشدة

فضلاً علم المقياس من ١ - ٥ التالي بوضع دائرة على الرقم المناسب

١	٢	٣	٤	٥	يجب أن يكون هناك (تعاون وشبكة معلومات) رسمي وفعال بين المكتبات الأكاديمية في الكويت
١	٢	٣	٤	٥	اشتراك المكتبة في نظام تعاون وشبكة معلومات يحسن خدمات المكتبة
١	٢	٣	٤	٥	من الممكن إنشاء تعاون وشبكة معلومات بين المكتبات الأكاديمية في الكويت
١	٢	٣	٤	٥	لديك الاستعداد لأخذ تدريبات ودروس في الأنظمة الحديثة لشبكات المعلومات
١	٢	٣	٤	٥	مكتبات الكليات في الجامعة/الهيئة يجب أن تربط مع بعض
١	٢	٣	٤	٥	المكتبات الأكاديمية في كل من الجامعة والهيئة ككل يجب أن تربط مع بعض
١	٢	٣	٤	٥	نظام شبكة المعلومات سوف يوفر وقتك وجهدك
١	٢	٣	٤	٥	نظام شبكة المعلومات صعب الاستعمال
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبتك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك البحثية
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبتك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك التعليمية
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبتك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك البحثية
١	٢	٣	٤	٥	نظام شبكة المعلومات بين مكتبتك ومكتبات الكليات الأخرى في الجامعة/الهيئة سوف يحسن انشطتك التعليمية
١	٢	٣	٤	٥	وجود طرف كمبيوتر للبحث المباشر في الفهارس في قسمك العلمي مرتبط بالمكتبة سوف يدعم انشطتك البحثية
١	٢	٣	٤	٥	وجود طرف كمبيوتر للبحث المباشر في الفهارس في قسمك العلمي مرتبط بالمكتبة سوف يدعم انشطتك البحثية
١	٢	٣	٤	٥	نظام شبكة المعلومات لايعتمد عليه (not reliable)
١	٢	٣	٤	٥	آراء أخرى، فضلاً اذكرها
١	٢	٣	٤	٥	

## **Appendix 4**

### **Library Authorities' structured Interviews**

## V. Structured Interview

KU

PAAET

Name : .....

Position : .....

Date : .....

Address : .....

: .....

: .....

Telephone No. : .....

Fax No. : .....

**Note :**

*KU* : Kuwait University

*PAAET* : Public Authority for Applied Education and Training

*IT* : Information Technology

*Telematics* : This new technical term is used to refer to the use of IT with telecommunications, to deliver computer based information services.

**V. Interviews with the Library Authority**

**I. Opinions and Attitudes : Current Status**

**A. Information Technology (IT)**

**To what extent in your opinion are you satisfied with the current library system ?**

**Card catalogue**

.....

**Circulation services**

.....

**Audio-visual equipment**

.....

**External on-line database**

.....

**Photocopying machines**

.....

**B. Arabisation**

**Does your current library system use Arabised systems**

.....

.....

.....

.....

**C. Cooperation and Telematics**

**To what extent in your opinion are you satisfied with the current Cooperation and Telematics**

**1. between your college libraries.**

.....

.....

**2. between KU and PAAET**

.....

.....

**II. Opinion and Attitudes : Obstacles**

**A. IT**

**Please indicate which of the following you consider obstacles to introducing IT in your library.**

**Financial difficulties**

.....

**Lack of qualified librarians**

.....

**Librarian attitudes**

.....

**Technical difficulties**

.....

**Administration Bureaucracy**

.....

**User readiness to use new IT**

.....

**non-purpose built libraries**

.....

**Lack of user studies**

.....

**Lack of user education/training**

.....

**computer-based systems are difficult to use**

.....

**Lack of local computer dealers**

.....

**Fear of change among librarians**

.....

**Others, please specify**

.....

.....

.....

.....

**B. Arabised library system**

**Please indicate which of the following you consider main problems in using or adopting an Arabised library system.**

**Financial difficulties**

.....

**Lack of qualified librarians**

.....

**Librarian attitudes**

.....

**Technical difficulties**

.....

**Adminstration Bureaucracy**

.....

**User readiness**

.....

**Inadequate library building design**

.....

**Lack of library policy**

.....

**Lack of user studies**

.....

**Others, Please specify**

.....

.....

.....

.....

**C. Cooperation and Telematics :**

**Please indicate which of the following you consider obstacles to the establishment of cooperation and telematics systems between KU/PAAET libraries.**

**Inadequate financial support**

**Shortage of qualified librarians**

**Lack of coordination**

**Absence of clear rules and regulations within each university library**

**Poor communication and post system**

**Lack of union list of Arabic subject headings and union periodicals list**

**Lack of user studies**

**Bureaucracy within management procedures**

**Each library prefers to work in its own way individually**

**Lack of IT**

**Inadequate delivery system**

**Lack of official agreement for cooperation**

**Lack of library policy**

**Other obstacles , please specify**

**III. Opinion and Attitudes : Importance**

**A. IT**

**Please indicate, in your opinion, the importance of the following facilities to improve your library services**

- 1. Computer-based library system

.....

- 2. CD-ROM Stations

.....

- 3. Online database

.....

- 4. Audio and video systems

.....

- 5. Photocopying machines

.....

- 6. Microcomputer facilities

.....

- 7. Others, please specify

.....

**Do you think, in your opinion, that introducing IT in your library would**

- 1. encourage research activities

.....

- 2. help to cope with increased number of users

.....

- 3. help to overcome the shortage in manpower

.....

- 4. remove drudgery from librarians

.....

- 5. help to cope with increasing workload

.....

- 6. help to complete tasks with accuracy, more quickly and with increased control

.....

- 7. help to save space

.....

- 8. help to compete with other academic libraries

.....



**Please, indicate your opinion of the following statements**

1. The electronic library will be the future trend of academic libraries

.....

2. Your libraries is capable of user education in IT

.....

3. Computer-based systems deserve high priority in the library budget

.....

4. Library users are ready for IT

.....

5. Librarians are ready for training or courses to learn new systems in IT

.....

### **B. Arabisation**

**Please indicate in your opinion the importance of the following facilities to improve your library services**

1. Arabised computer-based library system

.....

2. Arabised CD-ROM Stations

.....

3. Arabised Online external data base

.....

4. Microcomputers facilities with Arabised Systems.

.....

### **C. Cooperation and Telematics**

**Please indicate your opinion of the following**

1. Connecting your college libraries systems by telematics through a central node library will improve your library services

.....

2. Connecting your college libraries systems with KU/PAAET by telematics through a central node library will improve your library services.

.....

3. Which library college in your university would be ideal to be the central node for the cooperation and telematics system

.....

4. Establishing interloan library unit in KU and PAAET is necessary to implement such cooperation

.....

5. Creating a mail and transport system to help implement cooperation is necessary

.....

What do you think of the following :

1. Joint committee for IT  
.....
2. Joint committee to establish a procedure for cooperation  
.....
3. Joint committee for training, providing library skills  
.....
4. Joint committee to exchange expertise  
.....
5. Joint committee to keep in touch with state of art  
.....
6. Official agreement  
.....
7. Unify library standards and regulations  
.....
8. User access to any KU/PAAET library  
.....

What are the factors, in your opinion to be considered for effective cooperation and telematics within KU/PAAET

1. Policy  
.....
2. Attitude  
.....
3. Finance  
.....
4. Awareness  
.....
5. Willingness  
.....
6. Communication  
.....
7. Different rules and regulations  
.....
8. Library Association  
.....
9. Others, please specify  
.....

**Appendix 5**  
Libraries Observation Check-list

## VI. Observations for Library

KU

PAAET

Library College of : .....

Address : .....

.....

.....

Telephone No. : .....

Fax No. : .....

**Note :**

*KU* : Kuwait University

*PAAET* : Public Authority for Applied Education and Training

*IT* : Information Technology

*Telematics* : This new technical term is used to refer to the use of IT with telecommunications, to deliver computer based information services.

## VI. Observations of Library

KU

PAAET

Library college of : .....

### I. Library Building

#### Location

1. Easy to access by the users

.....

2. Close to the college department

.....

#### Design

3. Purpose-built library

.....

4. What it was originally

.....

#### Space

5. User Study

.....

6. Materials

.....

7. Equipment :

.....

### II. Library Services

#### Card catalogue

8. Card conditions

.....

9. Alphabetical order

.....

#### Photocopy machines

10. Number of machines

.....

11. Photocopying procedure

.....

**Library guiding system**

**12. Guidance & Signs**

.....

**13. Library leaflets**

.....

**14. Information/Enquiry desk**

.....

**III. Library Staff**

.....

**15. What sort of work they are busy in?**

.....

**16. Do they help/advise the users**

.....

**IV. Library Users**

**17. Most service(s) they use**

.....

**18. How much time do they spend on particular services, such as:**

- Searching in card catalogue

.....

.....

- Borrowing/returning books

.....

.....

**V. Other observations**

.....

.....

.....

.....

.....

.....

.....

.....

.....