CHAPTER FOUR

DEVELOPMENT OF HIGHER EDUCATION AND UNIVERSITY LIBRARIES IN IRAQ
Chapter 4
Development of Higher Education and
University Libraries In Iraq

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Chapter 4
Development of Higher Education and University Libraries In Iraq

4.1 Introduction

Universities are today, one of the most important scientific institutions in the human history, which have the greatest impact on the lives of people and nations. A university is an educational institution with a group of colleges with teaching students and preparing them to live life as knowledgeable people. Their training in the university in multiple stages from master's to doctorate degrees to meet the requirements of a changing society.

4.2 Education in Iraq

Education in Iraq is governed by Public Education Law No. 57 of 1940. The administration of education is highly centralized in the Ministry of education and is the general responsibility of the minister of education. Public education in Iraq is free at all levels and is wholly financed by the state. Nearly 25 percent of the national budget is set aside for education. The Ministry of Education provides 60 percent; the Ministry of Planning contributes 40 percent of the amount to make up this 25 percent of nation budget for education.
4.3 The education system in Iraq

The education system in Iraq comprises the following of learnin

4.3.1 Pre-school education (nurseries)

Pre-school education is spread over two years: Preliminary and Kindergarten in which children in the age group of 4-5 yrs are accepted.

4.3.2 Elementary learning stage

This stage is spread over six years, covering the age groups of 6-11 years. It is a compulsory stage for all children in the age group concerned. The basic education system, which had been implemented from the beginning of the nineties, comprises a total of nine years of study.

4.3.3 Secondary education stage

This follows the elementary stage, lasting six years, precedes the university stage. It covers the age groups of 12-17 years and spread over two phases:

1. Intermediate education for three year (12-14). It is meant to complement what the pupils have learnt at the elementary stage and is designed to supply the learners with broader information of what he learnt in language and general culture.

2. Preparatory education also for three years (15-17). Its role is to prepare learners for higher education (university) and future life. This period of
specialization where the learners are given to academic training in sciences and arts after the fourth year of secondary. The general preparatory education branches into two which are the scientific and the literary. There is another type of preparatory branch which covers the years of age (15-17). It includes vocational and applied studies in industrial, agricultural and commercial education, preparing a student for vocation and the university education.

4.3.4 University stage

The period of study ranges between 3 and 6 years, from the age of 18 years onward. The students receive their university education in different universities and colleges in the fields of literature, art, medicine, engineering or other areas of specialization. Also special training is given to prepare students for different professions for a two-year period after the preparation phase, to which is added the tertiary studies thus preparing students to the Masters and Doctoral degrees.

4.4 History of higher education in Iraq

4.4.1 Ancient Period

Iraq was known as Mesopotamia - a cradle of civilization, located between the Rivers Tigris and the Euphrates. In the third millennium B.C., Sumerian astronomers living along the River Tigris were the first ones to discover and record that there were roughly 360 days in a year. The missing five days were declared occasional holidays. This number 360 was very convenient since it was divisible by many smaller numbers, so they divided each day into 360 gash, which were later changed by the Babylonians to 24 hours with two levels of subdivisions.
The first of these manuscripts by way of proof dates back to the 3000 B.C. This precedes the alphabet an emergence of writing dating back to 1500 B.C. This writing which prevailed until the first century AD, first appeared in South Iraq. The Sumerians found expression in the Sumerian language appropriate for writing language. Akkadian, was spoken by the Babylonians and the Assyrians. This writing is linked to graphic invented in Mesopotamia before the year 3000 BC, when it was written plainly on a cake of mud, minerals, wax or other materials.

During the reigns of the King Ashurbanipal (668-626 B.C.) and other Assyrian kings the collection of books from around the country was stored in storing places built specially for these in the national capital of Nineveh, Iraq. Each of the collections had plate each codified under titles: science, knowledge and civilization. This had to do with old Iraqi culture and civilization.

4.4.2 Islamic Period

The emergence of universities in Iraq dates back to ancient times. Some sources indicate that the emergence of the Arab scientific institutes in Baghdad, in the age of Abbasiyah State. Research reveals that there were scientific institutes and huge libraries that attracted scientists and science students from various places.

Caliph Haroon Rashid’s House of Wisdom, accelerated its development. There was an institute for the study and interpretation of various philosophical and medical sciences during the reign of Caliph Al-Ma’mun.

During the Abbasid era, Baghdad was the center of a great civilization and empire that extended from central Asia to North Africa and Spain. During the ninth century, there were sixty-three libraries in Baghdad and most of them were open to the public and scholars. In addition, there
were more libraries in such other Iraqi cities as Al-Basra, Al-Kufa, and Al-Mosul. The library of the famous Caliphs Harun Al-Rashid and his son Al-Ma\'Mun, reflect the Arabic and Islamic culture. A medical school with its own library was established in Baghdad in that period.

4.4.3 Modern Period

The idea of a comprehensive university emerged in Iraq in the early national government by King Faisal I, and was promoted directly by him. King Faisal I ordered the formation of a constituent committee for the establishment of Ahlulbait University on 11 January 1922 to include six colleges: religious, medical, engineering, law, and arts. The university begins the working in 1924, but was closed down in 1930.

The Universities contribute in the strategic planning and implementation of higher education in using knowledge for the service of society. Iraqi universities seek to achieve several objectives aimed at the implementation of joint plans and programs of the current university education in order to create qualified cadres with specialized scientific knowledge and use appropriate recruitment methods to select the right kind of personnel for the implementation of the objectives of the universities.

Modern universities in Iraq were established in the second half of the last century, beginning with the University of Baghdad in 1956. During the 1960s, five more universities were established: the university of Technology and the Al-Mustansirya University in Baghdad and the universities in Basra, Mosul and Sulaymania. Further development of higher education in Iraq was characterized by establishment of technical institutes reflecting the ever-growing demand for qualified technician. Iraq has followed a policy aimed at establishing a university in each governorate in response to both the demands
of equity and the growing demand for higher education. Thus 14 new universities were founded in the last 20 years.

4.5 Aims of Higher Education in Iraq

1. Prepare specialists and scientists for serving in the fields of development, production, and building.

2. Emphasize that science is employed in the service of society and humanity.

3. Adopt the culture of peace, freedom, and democracy regardless of political, religion, and ethnic changes.

4. Widen the field of thought and follow up the scientific and technological advances in the world.

5. The universities must adopt the culture and scientific projects that serve humanity.

6. Support the requirement of scientific research and direct it to serve society in all fields.

7. Emphasize the principle of civilized society by opening the field of higher education to those who how wish are qualified, and those who deserve.

8. Employ the ideal procedure to enhance the output level of student & teachers as that forms the real basis of higher education. (1)
4.6 Characteristics of higher education in Iraq

The degree of importance which a nation attaches to its universities reflects the quality of its appreciation and understanding of the role of the university. Universities are recognized as major producers of high-level manpower and consequently, as substantial contributors to the advancement of the economic and social objective of the country.

Government support and encouragement is considerably of high of kind of their sustenance. Among the factors which characterize higher education in a country we have the following:

- The degree to which university function are related to national needs.
- The types of the institution (i.e., liberal arts colleges, technical and scientific institutes, professional schools, etc) the country supports. The standards of admission and graduation.
- The quality of the faculties.
- The quality of teaching and research in the universities, and
- The nature of library recourses, services, facilities and staff.

Other factors which have an important bearing on the character of higher education are the extent to which qualified students can be accommodated, the degree of control, if any, which is exercised by the government and the reputation outside the country of the degrees, diplomas and certificates that are awarded by the nation’s higher educational institutes.

The 7th Conference on higher education in Iraq, held in Baghdad on 22-23 September 2004, includes recommendations about new strategies, and aims for higher education in Iraq. The conference aimed at:

a. Discussion the reality of higher education in Iraq, and various institutes: educational, research, and administrational, through scientific studies.

b. Defining the role and requirements to raising the level of higher education in Iraq in order to serve the society and develop the country.

c. Adopting scientific procedures as follow of carrying out the conference recommendations.

4.7 Strategies of higher education in Iraq

The following strategies are needed to raise the standards of higher education in Iraq:

1. Lift up the heavy cover the ministry practiced on the universities in order to achieve their independence. This definitely depends on a university management that is developed and modern; one that knows what it wants and embodies the marvelous and quick development which is going on at international universities.

2. Set the pillars of institutional policy that save higher education from the caprice of this or that official.
3. Reconsider the current policy of the higher education in a way that ensures reversion to original university standards, the soundness of the scientific level and autonomy of the university and ensure that there is higher evaluation used for the university professionals.

4. Universities should be a center of cultural and intellectual illumination, an important pillar of freedom, democracy, and pluralism. Therefore, we should keep the university aloof from all conflicts whatsoever.

5. The society should bear responsibility for higher education. Therefore, the system of admittance in the central admission and higher studies should be reconsidered; parallel admission should be encouraged as well as other type of support such as fellowships in order to make the output of the higher education more compatible with the need of the country and society.

6. Encourage investment in the universities in order to support their abilities and independence. This could be from foreign investors.

7. Work to make the university more effectively in harmony with its environment, and encourage it to specialize so that universities are not copies of each other.

8. Encourage local and foreign investment in the field of higher education.

9. Open to the world entirely in order to bridge the gap that separates us. This can be done through partnership or in any other manner thought fit.

### 4.8 Law on Higher Education in Iraq

The Revolutionary Command Council enacted a law for Higher Education and Scientific Research (No. 40 of 1988) on 22 March 1988, which included 48 articles and five sections. Law who implemented from the date of publication in the Official Gazette.

Section 1 containing effective objectives contained in 7 articles, discusses the Ministry of Higher Education and Scientific Research and management configurations.

Section 2 on the universities includes 23 articles discusses the Iraqi universities and their status in the ministry, where laws governing the security of the university campus, cultural, and scientific center.

Section 3 Corporation technical educations and includes 5 articles on the provisions governing the appointment functioning, etc of the chairman and administrative configurations.

Section 4 discusses the Iraqi institute of computers and informatics, and its administrative configurations.

Section 5 spread over 13 articles that contain provisions with regard to the members of the educational staff, scientific research centers, and regulations and legislation.

4.9 Iraqi Universities

Institutions of higher education in Iraq consist of 22 universities, including 5 in the north, 9 technical colleges in the center and south of Iraq, and 38 technical colleges including 11 in the north. The total enrollment in Iraq in
2001 to 2002 was 297292 students in central Iraq, 317993 students in the southern Iraq, and 20701 students in the northern Iraq; total number of professors was 14743 of whom 13167 served in the central and southern Iraq and 1576 in northern Iraq.

Bachelor's studies in Iraq require 4 years, except in veterinary medicine, pharmacy and dentistry where they need 5 years, and studies in medicine require 6 years. The master's degree requires 2 to 3 years of study, and doctorate degree from 3 years to 8 years.

The technical institutes of higher education grant diplomas and degrees granted through their short-term and long-term courses. Students are accepted in Iraqi universities on the basis of the general secondary certificate or its equivalent. There is a substantial demand in the faculties of medicine, engineering and science, and the humanities. Every university has a faculty of education, especially for the purpose of producing graduate teachers for secondary schools. The languages used for teaching and instruction are Arabic and English in the central and southern Iraq, and French at the University of Mosul only, and the Kurdish and English languages in the northern Iraq.

The academic year begins in October of each year, and extends to the 30th week. Universities are financed by the State with the exception of private colleges. Table 1 shows Iraqi universities arranged according to years of establishment and their libraries as follows:
Table 1
Establishment of University Library

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the University</th>
<th>Year of Establishment</th>
<th>Year of Libraries Establishment</th>
<th>Years Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baghdad</td>
<td>1956</td>
<td>1959</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Mostansiriya</td>
<td>1963</td>
<td>1963</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Basra</td>
<td>1964</td>
<td>1964</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Mousl</td>
<td>1967</td>
<td>1967</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Salahaddin</td>
<td>1969</td>
<td>1969</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Tecnology</td>
<td>1975</td>
<td>1980</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Kufa</td>
<td>1987</td>
<td>1987</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Anbar</td>
<td>1987</td>
<td>1988</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Qaddissiya</td>
<td>1987</td>
<td>1994</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Nahrain</td>
<td>1988</td>
<td>1990</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Tikrit</td>
<td>1988</td>
<td>1989</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Islamic Science</td>
<td>1989</td>
<td>1989</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>Babel</td>
<td>1991</td>
<td>1991</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>Dohuk</td>
<td>1992</td>
<td>1996</td>
<td>4</td>
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<td>15</td>
<td>Sulaymaniya</td>
<td>1992</td>
<td>1992</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Diyala</td>
<td>1999</td>
<td>1999</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>Thi Qar</td>
<td>2002</td>
<td>2002</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>Wasit</td>
<td>2002</td>
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<td>3</td>
</tr>
<tr>
<td>19</td>
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<td>2002</td>
<td>2004</td>
<td>2</td>
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<tr>
<td>20</td>
<td>Kirkuk</td>
<td>2003</td>
<td>2003</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>Koya</td>
<td>2003</td>
<td>2005</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>Hawler</td>
<td>2006</td>
<td>2006</td>
<td>-</td>
</tr>
</tbody>
</table>
4.9.1 University of Baghdad

The University of Baghdad represents the history of higher education and scientific research in Iraq. It is the first, oldest and largest University established in Iraq, which was started by teaching cadres. One of the popular demands made by important people, was to ask the government of the time to do something concrete to raise awareness and it was due to this persistent demand that the government to study the possibility of setting up an Iraqi University in 1943.

The University of Baghdad was set up in September 1956 under the law of the land and named as "Baghdad University." The first head of Baghdad University who appointed in 1957. This university began to serve as a line between schools and colleges in Iraq. Yet another law passed in 1958 turned Baghdad University into the University of Baghdad which was, by decree, allowed to set up colleges of Arts, Science, Medicine, Engineering Pharmacy, Dental, Agriculture, Veterinary Medicine, Laws, Trades and thus were founded institutes of higher learning attached to the University. Institute of Administrative Sciences, Institute of Languages, Higher Institute of Industrial Engineering, and the Institute of Physical Education.

Another law was made for the University of Baghdad in 1963 which gave it the regulations and the authority for offering instruction required.
Due to the increasing requirements of development in the country the University of Baghdad saw expansion in terms of numbers of students and resurgence in the sciences and the extension of scientific activity to other cities in Iraq. The University of Baghdad established faculties of Medicine, Science, Engineering, Agriculture, Forestry, Pharmacy and Humanities and the Institute of computer in the city of Mosul. It established faculties of education, low and Engineering in city of Basara in early April 1967. These faculties were to form the base for Universities Basra and Mosul.

In 1968 a new law was initiated in August 1969 by the Revolution Command Council to reorganize the Iraqi universities so as to prevent duplication in higher education, and in 1970 the government founded the Ministry of Higher Education for the university organization through Law No. 139 of 1970.

The University College of Law and Politics (formerly), was divided into the Faculty of Law and Political Science, in 1968 as a part of the University of Baghdad. These colleges had been founded in 1908 during the era of the Turkish Wally and were attached to Baghdad University. The College of Education was founded in 1923 as an evening college to prepare teaching cadres to teach in primary schools, and upgrade as nucleus for high scaled teachers. The second College was founded in Iraq in 1967 and was attached to the University of Baghdad. The College of Medicine was founded in 1927, and in 1936 the College of Pharmacy, College of Engineering and all these together then evolved as a university in 1942. The College of Arts and Sciences was established in 1949 and then bifurcated into Arts College and Science College in 1950. This was followed by the establishment of the College of Agriculture and named as Agrarian Institute, an affiliate of the Ministry of Agriculture, at that time but was changed from an Institute to the College. The College of Dental Medicine was opened under the Faculty of Medicine. The Faculty of Veterinary Medicine, which was established in 1955 was affiliated to the Ministry of
Agriculture but was later shifted to be attached to the University of Baghdad in 1958.

February 1955 also saw the founding of the College of Sports Education, it was named as Higher Institute of Sports Education and attached to Baghdad University in 1958. In 1962 witnessed the opening of College of Nursing, which was affiliated to the Ministry of Health, and it was later shifted to the University of Baghdad in 1969. The faculty of Sharia named as Great Imam College of Islamic Studies was founded in 1867 and affiliated to then "Waqf Diwan." It was renamed as The Great Imam College in 1969. It was attached to the Ministry of Higher Education in 1974 and included as College of Jurisprudence Assets in 1976.

The Academy of Fine Arts was founded in 1967, the Faculty of Administration and Economies was founded in 1969 by merging Faculty of Trade and Public Administration with Economics, and Political Science and Management of Business Department as a single unit in a college and this was separated into College of First Education. (Ibn Rushd) for Human Science and College of Second Education (Ibn Al Haytham) for Natural Sciences. The Faculty of Political Science was founded in 1988 after representing it from the Faculty of Law and Politics, and so was founded Girls College and the College of Education for Girls (Physical Education), as well as the College of Education for Girls of scientific disciplines. The College of Languages was established in 1988. Table 2 shows the numbers of Colleges, centers, Departments, professors, and Students in Baghdad University.

Table 2

<table>
<thead>
<tr>
<th>No. of students</th>
<th>No of Professors</th>
<th>No of Departments</th>
<th>No of Centers</th>
<th>No of Colleges</th>
</tr>
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<tbody>
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<td>5755</td>
<td>60380</td>
<td>4391</td>
<td>100</td>
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<td></td>
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<td>66135</td>
</tr>
</tbody>
</table>
4.9.2 University of Mostansiriya

It was founded in 1963 and derived its name from the heritage of Arab civilization, and came to bear the name of Abbasiya Mustansiriya, which was the oldest university in the world. The university began at first as a special university for studies in the evening studies lent was renamed in 1964 as the University College. It began morning studies in 1965 and was later renamed "Mostansiriya University". It moved to its current premises, in the academic year 1974-75 issued through a decree by the Revolution Command Council to convert the Mustansiriya University into a Public University. This came with the formal decision to offer free education. The University and comprises the faculties of Arts, Management, Economics, Science, Law, Politics and Technology.

The Faculty of Law & Policy that offer courses of study in evening moved to Baghdad University in coordination with the Ministry of Higher Education and Scientific Research.

The faculty of technological Engineering also attached to the Technology University which established in 1975. The development continued. Colleges founded include the College of Medicine, in 1975-76, which occupies an independent building today as a teaching hospital for practical applications.

The College of Education, located inside the university campus as in the case of the Faculty of Arts and Sciences was established and began teaching in the academic year 1976-77. The Faculty of Administration and Economy is located outside the university campus. The College of Engineering also has laboratories and scientific centers for students. In 1977 the university decided to establish the Institute of Advanced Studies.
It also established the College of Medicine in Kufa and the Institute of Arabic (language) to teach Arabic to those having no knowledge of Arabic and this was put under the Faculty of Arts. In the academic year 1979-80 College of Jurisprudence in Najaf was attached to the Mostansiriya University, and a Living Language Institute was established in the Faculty of Arts, and this has been recently merged with the Institute of Arabic Language to non-Native speakers as a single center. The University witnessed expansion with new sections in the colleges and these have contributed a great deal to the field of higher studies. The Bachelor’s and Master’s studies began in the departments of physics Arabic language, economics, management, statistics, libraries, psychology. Doctoral studies began in the academic year 1986-87 in departments of Arabic language, history, and economics. A vocational diploma was started in all disciplines in the medical faculty. 1980 law the establishment of the College of Fine Arts in the governorate of Babel, and the establishment of the Institute of Asian and African Studies

The College of Engineering opened in 1985-86, and although the expansion of the university is not quantified, the parallel growth between the quantitative and qualitative expansion of the continuing and escalating the scientific situation to achieve originality in science to the University of Iraqi. The result of the continued support by the university has led to prominent growth in the number of research completed. The number of research projects completed in 1980 was 93 search, and 3 literature, while in 1987 that the number of research projects was 355, and 62 authors.

The development in various scientific areas in graduate studies was only five in 1980. This increased to 66 specialized research projects in 1990. According to the scientific plan, There were 15 post-doctoral and 42 master’s and 9 for Higher Diploma and commitment with the Central trends of the
University. Table 3 shows the numbers of College, Centers, Departments, Professors, and Students in the Mosul University.

Table 3

<table>
<thead>
<tr>
<th>No. of Professors</th>
<th>No. of Departments</th>
<th>No. of Centers</th>
<th>No. of Colleges</th>
<th>No of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
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<td>49</td>
<td>1788</td>
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</table>

4.9.3 University of Basra

The University of Basra was founded in 1964 for the expansion of education in Iraq. Basra University started its official teaching the same year. Four colleges of Science, Arts, Law and Engineering gained complete independence from the University of Baghdad under Law No. 8 of April 1967. In the academic year 1964-65 the colleges of engineering, Arts and Sciences started their activities formally. The College of Medicine was established in the academic year 1966-67. It was renamed as the Medicine institute in 1968 but the name reverted to the College of Medicine under a decision No. 342 of the Revolutionary Command Council.

The College of Agriculture was found in 1971-72 due to the expansion of the university and the requirements of the country. Law and economy, which was attached to the Baghdad University in 1964 as attached the Faculty of Commerce and Economics in Mustansiriyyah University as an institute for evening studies in 1974. The College closed in 1980. Then the Faculty of Law and Policy was opened in the academic year 1985-86, and started functioning in 1986 by accepting the first group of the students. The College of Education was established in 1975 and included the Scientific & Humanities sections and increased to nine sections, and then opened the Faculty of Education of
Sports in 1983-84 with branches of medical science, humanities and sports training.

The university initiated the establishment of libraries and laboratories, and established the Central Library after the establishment of the university in 1964. The college libraries were established as follows:

- Library, Faculty of Arts, and Management & Economy (1974)
- Library, Faculty of Agriculture (1972)
- Library, College of Medicine (1969)
- Library, College of Education in (1975)
- Library, Science Faculty in (1979)
- Library, Faculty of Engineering (1976)
- The Law College Library (1986)

The university has contributed to enhancing the efficiency of all stages of scientific study and opening of postgraduate study, and contributed to the preparation of professionals who graduated from the libraries department at the University of Basra. The first batch of 18 students graduated in 1987-88. Due to the developments in education in the southern region, it was possible for students to get into any specialty of their choice at the highest levels. The number of students rose significantly, and in the academic year 1985-86 there were a total of 11,646 students on rolls. Of these 7751 were males and 3895 female, and there were 120 students in various fields of High studies. The members of the teaching staff were 750. The university opened many specialized scientific centers to conduct research and studies related to the progress and future needs of Iraq, in general the southern region in particular. There included 13 centers established to assist the university to support research, provide literature and issue scientific journals. Table 4 shows the
numbers of Colleges, Centers, Departments, Professors, and Students in Basra University

Table 4

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No. of Students</th>
</tr>
</thead>
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<td>2570</td>
</tr>
</tbody>
</table>

4.9.4 University of Mosul

It was founded in 1967 as the College of Medicine which has been in existence since 1958. It was to from the basis for the founding of Mosul University. The Faculties of Engineering, and Science were established in 1963, and the College of Agriculture and Forestry in 1964. Then came the Humanities foundation for studies in Humanities. It was then affiliated with the University of Baghdad. Through Resolution No. 14 of 1967 on the University of Mosul, the university a new faculty i.e., the Faculty of Arts was added.

The College of Administration and Economy was attached to the University of Mosul in 1974. The College of Sports Education was established in 1975 and it began offering courses of studies in the academic year 1977-78. The Faculty of Dentistry was founded and the began its work in 1982-83. This made the way for the northern region of Iraq to have a university for providing higher education. Due to the need for specialties in other areas in the country the Faculty of Law was opened in 1983-84 and thus the university got Faculties comprising 11 Colleges in addition to many scientific centers, and special institutions associated with the university, as well as educational institutions, services and a Museum. This help extend their services to the
other sectors of the society based on the principle of linking the university communities. Studies in unique disciplines began to the offered in the country in 1988, and thus 17 students were accepted in the Branch of Fumbling Remoteness and the other scientific fields.

The university has continued to the development and progress of the university in a short span of time. The university began implementing the five-year plan for scientific research in 1958. This was the first research plan ever to be implemented in an Iraqi university. Table 5 shows the number of College, Centers, Departments, Professors, and Students in the Mousl University.

Table 5

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No. Students</th>
</tr>
</thead>
<tbody>
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<table>
<thead>
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<th>UG</th>
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</thead>
<tbody>
<tr>
<td>27214</td>
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</tbody>
</table>

4.9.5 University of Salahddin

The University of Salahddin (Sulaymaniya previously) was founded, to fulfill the aspirations of the upcoming generations of Kurdish students and people at large. It was established by law at the beginning of the academic year 1968-69. Teaching began in the universities the same year with the establishment of three colleges are: Agriculture, science, and engineering.

The Faculty of Arts was founded in the academic year 1971-72 and began its activities in the same year. Then came the Faculty of Administration and the Economy, which began its teaching tasks in the academic year 1975-76. The Faculty of Education was also established in 1975-76 but started taking students in 1976-77. The College of Medicine was opened in 1977-78 and began to offer academic programmers immediately. Educational institutions were created to serve the needs of the people in Kurdish region as
well as to upgrade the development in the country. The Faculty of Law was opened in 1985-86 and the become the university soon include seven colleges.

The University of Sulaymaniya was shifted to Erbil in 1981-82, and was renamed as the University of Salahddin. It witnessed significant developments during a short period of time and this was evident from some indicators such as the increasing number of students, and members of the teaching staff, and its dependent institutions.

Educational activity in this university got a boost with the adoption of the plans to accelerate the growth of education, in the area of continuing education and contributed to the opening of scientific centers alongside those in the other universities in Iraq and abroad.

The Social Cultural Center, the Electronic Computer Center and Engineering Advisory Office were soon launched, and this ensured the continuance of support in research and literature for the local students. This university has taken the initiative of cooperation with other universities, for the exchange of expertise and resources so as to ensure better standards. The University provided various services to beneficiaries in all college libraries. It also established a central library with good holdings that sought to serve the university community. Table 6 shows the numbers of College, Centers, Departments, Professors, and Students in the University

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>-</td>
<td>52</td>
<td>1023</td>
<td>18199 PG</td>
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<td>480 UG</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>18679 total</td>
</tr>
</tbody>
</table>
4.9.6 Technology University

Technology University came into existence in 1960-61 as The Higher Industrial Institute by the Ministry of Education with the help of the Special Representative of the United Nations in Iraq. In 1965, the Institute developed into the College of Industrial Engineering, and was attached to the Baghdad University as College of Industry. It was renamed as the College of Technology and Engineering in 1969. The Technology University was shaped out of the recommendations of a committee formed to study the matter, submitted to the Planning Council of the Ministry. It received approval in 1974 and this led to the establishment of the university through a decision No. 268 of the Command Council on 21 February 1975.

Technology University was established with Baghdad Governorate, linking it to the Ministry of Higher Education and Scientific Research. Scientific departments in the College of Technology and Engineering became departments of the Technology University. The other sections were opened according to the development requirements of the country.

1. **Engineering Machinery and Equipment:**

It was established in 1960 is compatible with the founding (Higher Institute of industrial). Prior to the establishment of the Technological University, which aims to prepare engineering staff to work in mechanical engineering disciplines, especially in the field of research and development, including requirements of the community? It grants Bachelor’s degree in Mechanical Engineering sciences in one of the following disciplines:

  Mechanical Engineering, General, Automobile Engineering, Aircraft Engineering, Air-conditioning and Freeze Engineering
Departments grant Masters and PhD. The university has several laboratories with engineering workshops which helps students to make a practical application of the theories they have learnt. These laboratories have been developed and modernized.

2. **Electrical and Electronic Engineering:**

   This was founded in 1960 and renamed as the Department of Electrical and Electronic Engineering in the light of a growing need for electronic engineering. It grants BE in two sections:
   - Electrical Engineering
   - Electronic Engineering and Communications

   The section currently grants ME and PhD. It has fourteen laboratories including those of electric lines, which train students on electrical circuits and components, computer laboratories and electronics laboratories, and laboratories for machines design and an Advanced Communications Laboratory.

3. **Department of Building Engineering and Construction:**

   It was founded in 1960, and offers a five-year study of granting a Bachelor’s degree with training in the fifth year and is considered one of the biggest science departments in the university in terms of the number of teaching staff and students as well as a number of laboratories and classrooms.

   The Departments aims at producing graduate engineers with a Bachelor’s degree in Building Engineering and Construction besides an MA and PhD. It has the following branches:

   Roads and Bridges Engineering, Construction and Management of Construction Projects Engineering, Construction Engineering, Environmental and Health Engineering, Dams and Water Engineering.
The Department also has several laboratories including construction laboratory and concrete laboratory, laboratory of asphalt and cement, and laboratory for testing soil.

4. **The Department of Technological Education:**

It was established in 1960, to prepare technologists, technocrats and trained professionals beginning 1973. The two branches opened were:

- A) Mechanic
- B) Electricity

The section was been renamed as Department of Technological Education in the academic year 1993-94 before which it was known as Department of Industrial Teachers. It includes technology education, designs teaching materials, offers technology education, educational lessons, and aims at preparing engineers in the various sectors involved. The Department grants a Bachelor’s degree though it began with a Higher Diploma in industrial technology education in the academic year 1977-78. It began offering a master's degree began from 1980-81, and a doctoral degree in 1992-93. It launched a diploma of higher learning in computer engineering from the academic year 1999-2000.

5. **The Department of Control Engineering and Systems:**

It was founded in 1975, and various systems engineering, which includes electrical and mechanical systems, and measurements, and application areas in computers control and robots. The Department offers students a BS in Engineering and Control Systems, started offering doctoral study in Control Engineering and Computers in 1995, and a Master’s in Engineering in 1996. The Departments offers specialized courses like:
- Control Engineering
- Computer Engineering

It has modern laboratories, including technical laboratory, research laboratory, and computer laboratory. It trains students in factories within the country and abroad during the summer vacation. This is one of the requirements for completion of study in the university.

6. The Department of Production Engineering and Minerals:

This was founded in 1975. This Department was one of the early Departments established in university and has enjoyed a strong relationship with the public sector. It conducts research, seminars, training courses, and provides consultancy services in engineering. It provides training to personnel within the ministries of industries, the labor sector and electricity as well as general electric industries. The Department has collaborations with many Arab universities including the University of Jordan. It offers the following specialized courses such as:

- Production-Engineering
- Metallurgical Engineering
- Industrial Engineering

It grants Bachelor’s, Master’s and doctoral degree.

7. The Department of Chemical Engineering:

This was founded in 1975 with the aims of providing engineering graduates to petroleum, chemical, food, pharmaceutical and construction industries and grants bachelor’s degree of Chemical Engineering with specializations in:
- Industrial Units
- Refining Oil and Gas Engineering

The Department also launched unit design and industrial production, in 1997. It has produced materials and personnel for the community services. Although a minor department in the beginning, it developed to a stage where it began offering Master’s in 1979, and a doctoral degree in 1987. The laboratory occupies a distinct position in the sciences today.

8. The Department of Architectural Engineering:

It was founded in 1975 and catered to the needs of the country. The Department of Bulldozing Engineering and Construction started constructing itself a new building in the 1978, and moved to it in 1983. It has laboratories for integrated photography, materials, workshop models, and registration Images what distinguishes this Department is that it offers a degree in computer designing after a study for five years and the graduates it produces are brained to design structures using new computer hardware and software.

The Department grants a Bachelor’s degree after five years of study, besides a Master’s and doctoral degrees. It has three specialties on:

- Architecture technology
- Urban Design
- Architectural Design

It has laboratories, like environment laboratory, the computer laboratory and architectural design laboratory.
The Department of Applied Science:

This dates back to the founding of the university in 1960-61, when it was established as the Department of general materials. It has made significant contribution ever since. It was renamed as the Department of Applied Science Section and now offers the following specialized:

- Applied Mathematics
- Applied Physics
- Laser Physics
- Bio-chemical Techniques
- Materials Science

It grants a Bachelor’s, Master’s and doctoral degrees today. Also it offers a new branch "Space and Communications", which grants a Master’s degree today. It has several laboratories including Isotope laboratory, Electrical laboratory, Ceramics laboratory and Semiconductors Laboratory.

The Department of Computer Sciences:

It was founded in 1983 to keep pace with developments in the area of computer science, and train people for employment in various areas of application. It includes four specialties:

- Software
- Computer Security
- Information Systems
- Intelligence Artificial
The Department grants Bachelor’s degree, as well as higher diplomas in computer and data security, and a doctoral degree in computer science. It has seven laboratories specializing in computers, including laboratory networks and the Internet laboratory.

11. **The Department of Computers Engineering and Information Technology:**

It was founded in 1997, in order to keep pace with rapid developments in the areas of information technology, computer, software industries, and areas deriving from it. The Department aims at helping train students for staffing with a high level of scientific and higher qualification in the field of computer engineering, software and information technology. It comprises of two sections:

- IT
- Software Engineering.

The Department grants a Bachelor’s degree but has added Master’s to it from 2001-02. It has laboratories that include minute laboratory, computer networks laboratory, digital electronics laboratory etc. to help complete the study. The Department trains students in institutions within and outside the country to help build their competencies in computers, software engineering and information technology.

12. **The Department of Materials Engineering:**

It was founded in 1999-00, and is one of the modern Departments of the university dealing with engineering competencies in the sciences. It aims at keeping up with rapid industrial development coupled with a network of raw materials, taking into account the preservation of the environment and the
development of engineering materials in various industries. The Department comprises two branches:

- Engineering Materials
- Engineering Reclamation.

The basic objective of the Department is to create a class of engineering personnel, specialized in materials engineering and reclamation at the bachelor's and master's level. The Department plans to develop a doctoral programme in future in important fields of engineering, such as polymers technology, fibers, composite materials engineering, and powder metallurgy. The Department has a number of laboratories including computer laboratory, minerals laboratory, chemistry laboratory, materials laboratory.

The university has in the last 30 years prepared a class of personnel specialized in accelerating development in the country. It has trained students to take up staffing with specializations in all areas of Engineering. It has added a number of sections, scientific centers, professors, and students, in those disciplines wherein there is a need in the country. This is shown in Table 7.

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>7</td>
<td>13</td>
<td>832</td>
<td>13670 1245</td>
</tr>
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<td></td>
<td></td>
<td>14915</td>
</tr>
</tbody>
</table>

This has been made possible due to the adoption of the correct scientific plans in the accepting of Iraqi students, and preparing them to contribute technological inputs in the process of building in Iraq.
It has contributed a lot of to the university in terms of educational programs, provided inputs for the success of the educational process, by providing machinery, equipment and laboratories for research and experiments. It has also provided personnel and resources to all sections of libraries including the central library, and information sources. The university has also worked to support research, publication and issuance of scientific journals.

4.9.7 University of Kufa

The University of Kufa today is an extension of a great cultural inheritance, and was founded on 27 December 1987. It has seven with jurisprudence and medicine opening in link with the Mostansiriya university, and Faculties of law and engineering in Babylon, Faculties of Arts and Education in Najaf, which was halted after the events of 1990, and then resumed work 1990. It is today weeded caring and commitment to the use of tremendous scientific knowledge in specializations in sciences. So it combines in itself scientific harmonization of cultural heritage and human aspiration.

Table 8 shows the numbers of College, Centers, Departments, Professors, and Students in Kufa University.

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
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<tr>
<td>PG</td>
<td>UG</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

115
4.9.8 Anbar University

The University began its teaching in the academic year 1986-87, and since its founding has sought to serve the community. It comprises of following colleges:

1. **College of Engineering**: with sections like
   - Civil Engineering
   - Mechanical Engineering
   - Dams Engineering and Water Resources
   - Electrical Engineering

2. **College of Medicine**

3. **College Of Dentistry**

4. **College of Agriculture**: with sections:
   - Field Crops
   - Soil and Water Resources
   - Section Livestock
   - Horticulture and Gardens Engineering.

5. **College of Science**: with sections like:
   - Chemistry, Physics, Bio-Sciences, and Environmental Pollution

6. **College of Islamic Science**: with sections like:
   - Doctrine and assets of the Hadith
   - Faith and Islamic advocacy

7. **College of Education**:
   consisting of the following sections in Humanities and social sciences. History, Geography, Chemistry, Bio-Science, Physics, Arabic language, English language, Mathematics, Sports Education, Koran, Islamic Education, and Psychological Sciences
8. College for Girls Education:

With sections as follows in Humanities and Social Sciences, Bio-Science, Physics, Arabic language, English language.

9. College of Administration and Economics, Ramadi:

consisting of only two sections: Management and economies.

10. College of Administration and Economics, Fallujah: contains only two Sections: Management, and Economies.

11. College of Arts: with the following sections:

English language, Arabic language History, Geographical, Social Sciences.

12. College of Computer Science: with the following sections:

Information Systems, and Computers Science

13. College of Law, Ramadi

14. College of Law, Fallujah

15. College of Sports Education

Table 9 shows the numbers of colleges, departments, professors and students at the University of Al-Anbar

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
<td>47</td>
<td>596</td>
<td>10531 PG 166 UG 10697</td>
</tr>
</tbody>
</table>

4.9.9 Qadissiya University

The University, founded in 1987 to serve as a symbol of scientific activity, consists of the following colleges:

College of Education with the following sections:

History, Chemistry, Bio-Sciences, Physics, Psychology, Arabic language, English language, and Mathematics.
- College of Medicine
- College of Veterinary Medicine
- College of Management and, Economics: with the following sections
  Business Management, Economics, Statistics, Accountancy, Law, Finance
  and Banking Studies.
- College of Arts with the following sections in the Humanities and Social
  Sciences.
  Arabic language, Psychology, geography, social sciences.
- College of Science includes the following sections
  Computer science, Bio-Sciences, and Mathematics.
- College of Sports Education

Table 10 shows the number of colleges, and centres departments, professors and
students at the University of Qadissiya

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
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</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>13863</td>
</tr>
</tbody>
</table>

4.9.10 Nahrain University

The university was founded in 1988 to prepare scientists in the fields of
science and technology. The University is an active member of the Union of
Arab Universities, and the World Federation of Universities, and the
certificates issued by the university are recognized by UNESCO. It has
scientific and cultural relations with distinct universities, and research centers
within and outside Iraq.

It has the following five colleges
- College of Law
- College of Engineering
- College of Medicine
- College of Science
- College of Political Science
- College of Information Technology

The University awards a Bachelor's degree in four years, however, it awards a Bachelor’s degree in Architecture, Medical Engineering after five years of study. College of Medicine awards Bachelor of Medicine and Surgery in six years. The university awards a Masters degree and PhD. Table 11 shows the numbers of College, Centers, Departments, Professors, and Students in the University.

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
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<td>13</td>
<td>324</td>
<td>188 1241</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>3119</td>
</tr>
</tbody>
</table>

4.9.11 Tikrit University

The Tikrit University, founded in 1988, is one of the modern universities that commenced teaching work in the academic year 1987-88. The university consists of the following colleges:

1. College of Engineering with specializations in:
   - Civil Engineering
   - Mechanical Engineering
   - Chemical Engineering

120
- Electricity Engineering

2. College of Medicine
3. College of Pharmacy
4. College of Dentistry
5. College of Sciences with the following sections
   - Chemistry
   - Bio
   - Sciences
   - Computer Science
   - Mathematics
6. College of Law
7. College of Administration and Economy with the following areas of specialization:
   - Business Management
   - Economics
   - Accountancy
8. College of Education, Samara has the following sections in Humanities and Sciences:
   Bio-Science, History, Arabic language, Chemistry, Koran and Islamic Education
9. College of Education:
   with the following sections History, Geography, Physics, Chemistry, Bio-Sciences, Education, psychology, Koran, Islamic Education, Arabic language, English language, Mathematics, Sports Education
10. College of Education for Girls:
Includes the following sections Bio-Sciences, Chemistry, psychology, History, Arabic language, English Language, Mathematics, Koran and Islamic Education

11. College of Agriculture:

with the following sections Animal Husbandry, Food-sciences, Bio-Technology, Gardening Field crops, and Soil.

Table 12 shows the numbers of College, Centers, Departments, Professors, and Students in the Tikrit University.

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
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<tr>
<td>11</td>
<td>1</td>
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</tr>
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<td></td>
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<td></td>
<td></td>
<td>430</td>
</tr>
</tbody>
</table>

**4.9.12 University of Islamic Science**

The university, founded on 22 November 1989, specialized in Islamic sciences, spread over four faculties and 10 Departments

1. Faculty of Doctrine and its Assets: doctrine and jurisprudence assets
2. Faculty of Islamic thought, Advocacy and the Islamic Faith: Creed and the Islamic Advocacy, and prophetic science.
3. Faculty of Arabic language and the Koranic Sciences: Arabic language, and the Koranic Sciences.
4. Faculty for women: Arabic language, literature and its assets, and the Islamic thought

Table 13 shows the numbers colleges, sections and students in the university.
4.9.13 University of Babel

The University of Babylon was founded by decree No. 19 of 1991 issued by the Revolution Command Council.

College of Technical Education, founded in 1980
College of Law
College of Engineering, founded in 1988
College of Science, founded in 1988

There are four colleges attached to the Babel university, and the colleges opened after seven years are:

College of Education, College of Sports Education in 1993-94
College for Teachers in the academic year 1994-95
Colleges of Management, Economics, Education in 2000-01.
College of Dentistry founded in 2002, aims at preparing dentists and charged with contributing to community service and raise the consciousness about health. It offers a five years degree course. The College of Agriculture was founded by the university Order No. 4674 on 16/6/2004, and approval by the Council of Higher Education and Scientific Research at its ninth usual meeting on 06-07-2004. The College aims at developing agriculture and expansion of Plant and Animal studies in Iraq.

College of Fine Arts was founded in the academic year 1980-81 as the Academy of Fine Arts affiliated to the Mostansiriya University, and was renamed in 1986-87 as the College of Fine Arts, and was attached 1988-89 to the Kufa
University in 1988-89. In 1991, with the founding of the University of Babel it was renamed as the College of Technical Education, and continued to be known by this name until 2004 when it was, yet again as the College of Fine Arts, to include four Departments of sciences (morning and evening): Technical Education, Theatrical Arts, and home Education), as well as Masters and PhD degree. The first group of students graduated from the College in the academic year 1984-85, with 14 graduating from the college. The College aims at raising awareness about works with a view to promoting standards of creativity in the context of the sophisticated art in Iraq.

The College of Medicine was founded in 1993-94 and aims at preparing professionally qualified medical staff and persons for providing medical services in areas like diagnostic, therapeutics and preventive pain and for preparing top medical staff with a master's and doctoral programmes in all medical disciplines. The College of Basic Education was founded in 1994 under the name of teachers College but was renamed to the College of Basic Education in 2004. The College of Management and Economics, University of Babel was founded on 06/07/2005, to offer studies in areas like administrative, financial, monetary and banking management and economies.

The College of Education founded in 1993 aims at preparing staff in science disciplines and research. The most of the Departments offer a: Bachelors, Masters, and doctoral degree programme over a period of four years. The College of Engineering was founded in 1988 is the only college in the densely populated Euphrates East which is recognized for its high standards in education. The College of Law founded in 1988, which was affiliated to the University of Kufa, was deaffiliated from it and affiliated to the Babel University after it was established
The Organization structure
University Of Babel

University President

Interior
Promotions
Presidency
University President

Administrative Assistant

Scientific Assistant

Arts College
Agriculture College
College of Dentistry
Sport Education College
Medicine College
Engeering College
Fine Arts College

Biisc Education College
College of sconce for girls
Administration & Economics
Education College
Science College
Low College
The College of Science, Founded in 1989, has three science Departments: Bio-Science, Chemistry and Physics. The Department of Computer science was opened in it soon thereafter. The first batch of graduates passed out of it four years after its establishment. The College of Science for Girls, founded in 2002, with four Departments: Bio-Sciences, Computer Science, Chemistry, & Physics. The College Sports Education was founded in 1993 to help the needs of increasing demand for personnel in various areas of athletic training and teaching in educational institutions, and to prepare specialized sports staff by offering master's and doctoral degrees.

Table 14 shows the number of Colleges, Centers, Departments, Professors, and Students in the University.

Table 14

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>PG</th>
<th>UG</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>4</td>
<td>39</td>
<td>648</td>
<td>14101</td>
<td>549</td>
<td>14650</td>
</tr>
</tbody>
</table>

4.9.14 University of Dohuk

University of Dohuk was founded on 31 October 1992. In the initial years of its establishment, it included two colleges: College of Medicine and College of Agriculture. There were 48 students in the batch that year in the medical college and 166 students in the college of agriculture. The university now includes:

- College of Administration and Economics
- College of Agriculture
- College of Arts
- College of Basic Education
- College of Education
- College of Engineering
- College of Law and Politics
- College of Medicine
- College of Physical Education
- College of Science
- College of Veterinary Science

The University of Dohuk has several scientific and cultural centers. These centers are either under the University President’s office or under specific colleges. The centers are chaired by either the vice-president for Scientific Affairs or the dean of the college. Each center is governed by the Administrative Council, which comprises of the heads of the centers.

Table 15 shows the number of Colleges, Centers, Departments, Professors, and Students in the University.

4.9.15 Sulemaniya University

It was founded in 1992, in Kurdistan Iraq, with the following colleges and departments:

1. College of Medicine
2. College of Agriculture including section of Gardening, Farm Producing, Soil, Enamels Production.
3. College of Science consist of Department like Biology, Chemistry, Physics, Mathematics, Computer science and Earth science.
4. College of Engineering includes Department of Aquatic Engineering, Architectural Engineering, Civil Engineering.

5. College of Veterinary Science

6. College of Dentistry

7. College of Nursing

8. College of Languages including Departments of Kurdish, Arabic and English Languages

9. College of Humanities and Social Sciences with Departments of Islamic study, Geography, Social Sciences and History

10. College of Commerce

11. College of Law

12. College of Fine Arts

13. College of Sport Education

14. College of Management and Economics

Table 16 shows the number of Colleges, Centers, Departments, Professors, and Students in the University

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>4</td>
<td>42</td>
<td>486</td>
<td>12337</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PG 11939  UG 398</td>
</tr>
</tbody>
</table>
4.9.16 University of Diyala

The University of Diyala was founded in 1999 in response to an urgent need for the establishment of a scientific center. It was established to take care of the great rush of students seeking admission to the University of Baghdad. It has including the following colleges:

- College of Fundamental Education, founded in 1994 with the following Departments:

- College of Education, founded in 1994, comprises of eight Departments each of which offer knowledge in the area of scientific study, research and counseling. It offers a Bachelor’s degree in disciplines Arabic language, English language, History, Geography, bio-sciences computer Sciences, Chemistry, and Psychology

- College of Engineering, one of the monuments of civilization and scientific development in the region, was founded in 1998, and consists of the following Departments.

  - Electronic Engineering (established in 1998 and the first batch graduated in 2002)
  - Engineering Capacity and machines (1998)
  - Communications Engineering (2002)
  - Computer Engineering and Software (2002)

- College of Law was founded in 2002, with the following sections: R & D Studies & Planning, Free Education, Computer, and College Library

- College of Medicine was founded in 2001-02, with Departments like: Anatomy, Chemistry, Computer, Medicine, Pediatrics Inner-Medicine, Community Medicine, Diseases, and Surgery
- College of Physical Education was founded in 2001, with a aim of taking care of the need for competencies in the areas of academic and applied research.

- College of veterinary medicine was founded in 2002. The aim was to train students in specialization within veterinary Sciences and ensure prevention of diseases in animals. It has the following Branches: Veterinary Public Health , internal medicine, Veterinary surgery and obstetrics, diseases, and microbiology

The College offers a five year degree programme wherein students receive education in the basic sciences and specialize in veterinary sciences and applications for a bachelor’s degree in veterinary medicine and surgery

- College of Agriculture was established in 2004, for training students in the field of agriculture and livestock development, and for increasing productivity. The College has two sections: Livestock and Plant

Table 17 shows the number of Colleges, Centers, Departments, Professors, and Students in the University.

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PG</td>
</tr>
<tr>
<td>09</td>
<td>2</td>
<td>33</td>
<td>374</td>
<td>14083</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UG</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>195</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14278</td>
</tr>
</tbody>
</table>

**4.9.17 Thiqar University**

This is one of the centers of scientific studies in the Thi Qar governorate, and was founded in 2002, to address the needs of the community through various activities. The University has six humanities and science colleges.
College of Medicine

College of Medicine was established in 1992, after ten years of constant correspondence, consultation and coordination between the Ministry of Higher Education and Scientific Research. The Ministry of Health issued orders for its establishment in 2002. It started taking in 2003-04. However, due to the war and subsequent events, not all of the facilities could be set up in the university. The College of Medicine was established in January 2003 through a new government decide which required it to decision to resume preparations for the opening of the College on schedule by building it in the vicinity of Nasiriyah General Hospital to take care of the need for training in future.

The college offers a six year Bachelor’s degree. It started taking students in 2004-05 and there was a batch of 50 students taken initially with plans to increase the intake in future.

College of Engineering

The idea of establishing the College of Engineering in Thi Qar university was in the air since 2001. The Faculty of Engineering at the University of Basra and other Iraqi universities with Thi Qar was in correspondence with the Thi Qar governorate on the one hand, and the Ministry of Higher Education and Scientific Research on the other. Soon the idea materialized after orders were passed to start it. An independent University in the province of Thi Qar thus become a reality in 2202. Although it had obtained the approvals from the ministry officials in 2002, it was put in pending until after the war. It received final approval from the ministry through order No.10926 dated 16 December 2003.
College of Sciences

Founded in 2000-01 had 167 students scattered in to four subjects are as: Physics, Chemistry, bio-sciences, and computer science. The College, then had contain at four classrooms, four laboratories, a seminar hall, and one laboratory for each of the specializations, There was scarcity of necessary equipment and materials for the completion of laboratory tests and studies due to war conditions in Iraq at that time. It was affiliated to the University of Basra for two years before it was delinked from it and affiliated to Thi Qar.

The founding of the University of Thiqar, led to marked improvement in the college in terms of the overall number of rooms converted into Halls to 13 for seminars, four of them for computers Section and three each of the other sections. it has a huge laboratory with sections divided equally and distributed into classrooms. These contain the equivalent or 40% of their devices and materials laboratory.

In the academic year 2003-04, the number of students studying in college was 915m with 283 male and 623 female students. There was no change in the classrooms and laboratories. It only added a laboratory to computer sciences , because all other sections taught computers. The number of the students role to 1005 in 2005-06.

College of Arts

The Faculty of Arts was founded in the academic year 1999-2000, and initially included two sections Arabic language, and history. It has stood since then by the Faculties of Education and Science in supporting the educational march of the university. The Department of Law was established in 2001-02 with the purpose of making it the nucleus of the Law Faculty in the near future. The first batch of 70 students graduated from it in 2002-03 in History. The College attended a modest number of professors in the beginning but their number increased to 47 subsequently. It sought help of students, staff
and professors in the faculty of Arts to raise the level of education, and have the way forward for the development of new Iraq.

College of Law was founded in 2005-06 and before that law was offered as a subject in the Faculty of Arts. There are 276 students in different classes in the current academic year. College of Education was established in 1993-94 in ThiQar University. It had four units Arabic language, English language, history and mathematics but it has now a total of six units including biosciences and computer sciences. Master's programme began to be offered in 2002-03. There were 1670 students in the morning shift and 1086 students in the evening shift in the academic year 2003-04.

Table 18 shows the number of Colleges, Centers, Departments, Professors, and Students in the University.

**Table 18**

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>PG</th>
<th>UG</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>14</td>
<td>245</td>
<td>5117</td>
<td>23</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5140</td>
<td></td>
</tr>
</tbody>
</table>

**4.9.18 University of Wasit**

The university was founded in 2002, and is one of the modern universities which started its journey with only three colleges

1. College of Sciences was established with the founding of the university and has two units: Bio-sciences, and Physics.

2. College of Education has the following units: Arabic language, English language, History, Geography, psychology.

3. College of Administration and Economies has the following units: Statistics, Accounting, and Economics Faculties of Arts, law,
engineering and medicine have been developed ad have began accepting students from the current academic year 2005-06

Table 19 shows the number of Colleges, Centers, Departments, Professors, and Students in the University

Table 19

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>13</td>
<td>130</td>
<td>5052/27</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5079</td>
</tr>
</tbody>
</table>

4.9.19 University of Karbala

The University of Karbala, the most important scientific and cultural center, was established in Karbala Governorate in 1996. It has established College of Education, and the College of Administration and Economics. It has developed out of college belonging to the University of Babel. These were followed by the Faculty of Law in 1999, and the Science College in 2001. The number of colleges in Karbala university is four. It derives meaning from the root of the culture of Iraq, which marked the spot of the holy land of Iraq. The College of Medicine was established in 2004 as the nucleus of a medical group in the university. The College of Agriculture was founded in 2005 and a ministerial decree establish the College of Engineering. Thus the university now has six colleges under it.

The College of Education, which grants Bachelor’s and Master’s degrees in bio-sciences, history, Arabic language, and psychology, was established in 1996. The College of Administration & Economics, was started in 1995-96
with three units: Business Management, Economics, financial science and banking. The college will open an accounting section in the future. The College of Science was founded in 2001 with units like bio-sciences, physics, chemistry, computer sciences. The Ministry of Higher Education and Scientific Research issued orders for setting up a to establishment College of Medicine in July 2004. This College has the following branches: Biochemistry, physiology, Anatomy Histology, Microbiology, pharmacology, pathology, public health, Internal Medicine, Pediatrics, Surgery, Gynecology and Obstetrics. College of Agriculture, founded in the academic year 2005-06, includes two units Gardening, and Prevention.

Table 20 show number of colleges, centres, professors, students in the university.

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>2</td>
<td>13</td>
<td>223</td>
<td>4701 PG, 30 UG</td>
</tr>
</tbody>
</table>

4731
The Organization structure Of the Karbala University

University President

Director of the Presidential office

Scientific Assistant

Colleges

Administration Assistant

Education College

Education College

Low College

Administration And Economic

Pharmacy College

Agriculture College

Engineering College

Medicine College
University of Kirkuk was formally founded on 17 January 2003, and includes four tiny colleges which were affiliated earlier with the University of Mosul: law, science, nursing, and education. It currently has seven colleges, once the faculties of medicine, engineering, and agriculture were opened in 2005. It seeks develop other colleges soon, including a college of management and economics in two shifts morning and evening. There are 7350 students on its rolls. The university aims at providing computers and laboratories, seems to serve the community, strengthen the efforts of scientific research, and to Cater to the need for publication in periodicals inside and outside Iraq. The university has the following colleges and units:

1. College of Medicine
2. The College of Engineering with two units: civil engineering, and petroleum engineering.
3. College of Science consists of units like computer sciences, mathematics, bio-sciences, chemistry, physics, and earth sciences.
4. College of Agriculture consists of the following units: Livestock, and production plant
5. College of Education include the following Scientific units: Arabic language, History, English language, Koranic Science, Sports, Education, Kurdish language, Geography, Turkish language,
6. College of Nursing
7. College of Law

Table 21 shows the number of Colleges, Centers, Departments, Professors, and Students in the University
4.9.21 Koya University

It is a young and forward looking University, established in 2003. Koya, an ancient city and cradle of numerous social, religious, scientific and political leaders, was for centuries a focal centre of education and training. With the city's strategic location, economic potential and sophisticated population, Koya has embraced the University.

The University has increasingly focused its efforts aimed at meeting its prime objectives, namely, enabling students to realise their academic potential and promote their personal development. The University has created a wide range of undergraduate and postgraduate study programmes as well as an interactive and socially stimulating environment.

Table 22 shows the number of Colleges, Centers, Departments, Professors, and Students in the University

<table>
<thead>
<tr>
<th>Table 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Colleges</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>5349</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Colleges</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>2374</td>
</tr>
</tbody>
</table>
The University of Kurdistan Hawler (UKH), founded in 2006, is a public university funded by the Kurdistan Regional Government. It is committed to excellence in teaching and research. It offers free education at both undergraduate and postgraduate levels to students from all over Kurdistan. The university is dedicated to inclusiveness, equality and highest standards of integrity in public life. UKH offers a number of postgraduate degrees including M.A., M. Sc. and Ph.D. in several subjects. It currently offers degrees in Economics & Finance, Management & Business Studies, Politics & International Relations, Sociology & Social Policy, Modern History and Information Technology, but in the coming years it will expand to teach humanities and natural sciences as well. The medium of instruction and research is English.

Table 23 shows the number of College, Centers, Departments, Professors, and Students in the University

<table>
<thead>
<tr>
<th>No. of Colleges</th>
<th>No. of Centers</th>
<th>No. of Departments</th>
<th>No. of Professors</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>--</td>
<td>10</td>
<td>212</td>
<td>1472 [111 ]</td>
</tr>
<tr>
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<td></td>
<td>1583</td>
</tr>
</tbody>
</table>
4.10 University Libraries In Iraq: Foundation and Development

University libraries in Iraq emerged in the second century of migration. They have been allocated for research and graduate studies, and are best known as the House of Wisdom. The library has a large number of users, scholars and scientists, leading to the development of the movement of translation and Islamic heritage.

The university libraries in Iraq have passed through several phases of progress development which led to a change in their policy objectives and in accordance with the objectives of higher education in the modern era. Universities libraries have benefited from the developments in Iraq due to the contribution of foreign experts from UNESCO, which has played a prominent role in their advancement, particularly due to UNESCO experts in the field of library science. These experts helped prepare cadres in specialized sessions by holding meetings and conducting in-service training programmers in the library of Baghdad University.

The Development of university libraries in Iraq have led to the establishment of other universities and colleges since mid-1920s. The Baghdad University was established in 1958, and so were the other Iraqi universities and research centers, which led in turn, to their management being but under the Ministry of Higher Education and Scientific Research in 1970.

The Development of the universities in the early 1970s, included planning, setting up educational goals and objectives, and fulfilling the need for university study. It was made possible through the organization of seminars and symposia with the help of UNESCO. University libraries have grown better than other types of libraries in the rest of Iraq because they
benefited from the Experts from UNESCO in the operation of libraries, as well as the establishment of several smaller libraries in Baghdad university since 1958. The Ministry of Higher Education is responsible for the university libraries in Iraq.

4.10.1 Central Library of Baghdad University

The central library of the University of Baghdad, one of the oldest university libraries in Iraq, was founded in 1959 after the University of Baghdad was established in 1958. The Secretariat of the Central Library of the University of Baghdad, has become a center for deposit of Theses & Dissertations (MA and Ph.D.) from all Iraqi universities in accordance with the decision No.6574 on 11-9-1993 by the Ministry of Higher Education and Research. It is now one of the largest university libraries in Iraq in terms of size, and services. The library consists of two buildings, the first specializes in collection of scientific works and is located in the "Al-Jadiriya" district, and second specialize in collection in Humanities and social and is located in the "Al-Waziriya".

The libraries were merged and brought under a single administration called (the general Secretariat of the Central Library in Baghdad University), on the basis of instructions to university libraries contained Article (2) of 1995 which provides for the founding of central library in each university and one linked to the university head. Library adopts open shelving system in all sections, except the section on loan books.
At present the central library is housed in a three-storied modern building with 4 reading hall, 3 stores, and 3 administration offices. The library has divisions and units as follows:

1. Administration section: responsible for the administration of the library, including the following units: General Secretary’s Office, other offices, Accounts, General relations, Services

2. Technical procedures sections: include the following units: Acquisition, Cataloging & Classification, Exchange & Gifts

3. User Services sections: include the following units: Circulation, Reference, Online, Theses, Internet, Periodicals, Special groups (rarities), United Nations documents, Audio-visual, Photocopy

4. Continuous education sections

5. Computer system section

6. Information section

The Library has a good collection. In the "Jadiriyah" district alone, there is a collection of 383,335 works on sciences in traditional form of which there are 373,161 documents including 309,534 books, 3,372 periodicals; 9,216 Reference books; 16,452 Theses & Dissertations; 32,256 UN Documents; and 2,331 Special group (rarities). There are also 10,174 documents in electronic format including 316 e-books, 5,056 e-theses & dissertations; 8 CD ROM, 9 local databases; 4,794 Microfilms.

The Baghdad University has an allocated budget of 59,130,000 Dinars for central library, and 18,500,000 Dinars for purchase of books and journals for library from its own funds for the year 2005-06.

The Library remains open from 8 am to 5 pm on all working days and from 8 am to 8 pm during the annual examination. There has been a change in the
number of hours for which it remains open due to the disturbed conditions in the country. The new schedule is in operation for all official business throughout the state. The membership of the library is open to teachers, research scholars, students, and non-teaching staff, and therefore the total users of the library run to 10766: 3455 students, 6434 researchers, 307 teachers, 570 researcher scholars.

The Secretariat of the Central Library as it is known is one of the great libraries in Iraq, like any scientific institution in the Iraqi state. The management has been responsible for the library in the last 47 years including selection of the staff to day it has a staff that totals 131. The total number of staff in the Central Library of Baghdad University "Jadiriyah district" is 76 and most of them specialists in library sciences & computers

4.10.2 Central Library of Mostansiriya University

Founded in 1963 in a small house near the bridge Saravya it was then moved to a small room in a building of the university. It shifted to a modern building with assistance of the Kolbenkean Institution in 1966, and the library occupied one floor of the building temporarily. A new building was planned and constructed under the supervising many specialists in library science in 1969m these specialists contributed to the development of the library. (9)

The library building consists of two floors, with area a built-up of 1762, 56. Library management, reading room, reference sections, circulation section, and Arabic card catalogs are located on the ground floor. The first floor contains foreign card catalogs, and sections like acquisition section, cataloging & classification section, periodicals section, and Theses & Dissertation section. The library has five thousand volumes as basic collection of books related to the teaching curriculum in the Faculty of Arts and Law, and these were purchased in the memory of the writer Rufail Bati.
The library linked administratively to the chairman of the university directly. There is no special accounts unit in the library, because it is financially dependent on the University in the main. There is an urgent need to develop the Division of accounts and conservation as well as binding and the units for photocopying facilities for the expansion of the administrative structure of the library in the future. Library remain open from 8 am to 2 pm during summer vacation, and from 8 am to 6 pm during examination season.

An automated system is used in the library CDs / ISIS in building internal databases, and convert all the card catalogs to be computerized according to CDs / ISIS system. These included catalogs of books in Arabic and foreign languages, and Master’s and Doctoral theses.

The services that were provided by the library to users, were its internal and external circulation and reference service. Computerized services were provided there through the Automation Section such as Internet services on the Arab and international networks, Online services, CD-ROM services broadcasting of information and selective reproduction service. The library shelving system is open to all library sections except lending section (books).
The Organization structure Of the Central Library of Mostansiriya University

University President

General Secretary

Automation Service section
- On-line
- Internet
- SDI
- Automation Information system

Administration & Financial Section
- Individuals
- Account
- Reception
- Binding & conservation
- Photocopy

Information service section
- Circulation
- Reference
- Periodicals
- Thesis & dissertations

Technical procedures sections
- Acquisition
- Catalog
- Exchange & Gifts
- Cataloging & Classification
4.10.3 Central Library of Basra University

University of Basra a cultural monument in various sciences in 1964. Was founded forty-one years, a Central Library these It was first located in the district in the Shatt al-Arab "Iltanomah"

Over the years, the central library has evolved gradually, and expanded greatly in many sections with the passage of time. The Shatt al-Arab became a war area due to Iraq-Iran war in 1981, and the university buildings were converted into military headquarters and barracks that time. Thus the library moved to the Education College in the Alashar area (teachers Institute now).

After that, the library moved to the Faculty of Arts in Al-Zubair temporarily for several months, with damage to some sources, and moved once again to the same location Al-Zubair into a three-storeyed building with built-up area of 2500 sqm. in 1986 when the then secretary General Professor Abdul Jabbar Abdul Rahman, worked hard to build this ancient library from the time it was founded up to the year 1991.

Central Library is over 27 years old and has branches in colleges and university departments, for providing service to researchers and scholars. With this significant expansion, there was an increase in scientific and administrative cadres, and technical competence in science libraries, the library contain nearly a million of documents related to cultures heritage, books, magazines, periodicals, newspapers, pamphlets, manuscripts, references, theses & dissertations, maps, CD-ROMs, and other sources of information that serve the purposes of education and scientific research. The library has the following sections:
1. Administration sections with the following units: General Secretary’s Office, other offices, computer & Internet, Services, Binding & restoration, and Stores.

2. Technical procedures sections with the following units: Acquisition, Cataloging & Classification, Exchange & Gifts, sub libraries & continuing education.

3. Readers Services sections with the following units: Arabic Circulation, English Circulation, Reference, Theses & Dissertations, Periodicals, United Nations documents, and Audio-visual material.

**4.10.4 Central Library in the Mousl University**

The library was founded in 1967 to provide services to the professors and students in the college under to the University of Mousl, and these included different resource books, Thesis & Dissertation, periodicals, and references.

The library provided the traditional and electronic services to the users. The library started CD-ROM service in 1988 the research section, as well as founded Local Area Network (LAN) in the University of Mousl. The library has the following sections:

1. Technical procedures sections with the following units: Acquisition, Cataloging & Classification, Exchange & Gifts.

2. Users Services sections with the following units: Circulation, Reference, Theses & Dissertations, United Nations documents, Audio-visual, Periodicals and photocopy facilities.

3. Automation system section with the electronic service, Internet, CD-ROM, online and Automation catalogue.
The library remains open from 8 am to 2 pm during the summer holidays, and from 8 am to 8 pm during the term time to serve students in the morning and evening shifts.

4.10.5 Central Library of Technology University

The central library of Technology University was founded in 1980, and is the mother of sub libraries in the scientific departments of the University. Technological University set up in 1975 the procedures necessary to develop the engineering college library, which is the nucleus of the current central library. It has been allocated land in its neighborhood 3.600 sqm in size for a four storied building comprising ten large rooms and soon new facilities of management and service were added in order to enable the Central library of the University to cater to thousands of readers at the same time. The central library has units as follows.

The ground floor houses

1. the references unit and reference services
2. the Cataloging unit and classification
3. the computer unit & computerized index
4. the Periodicals unit
5. the Acquisition unit
6. the Exchange & gifts unit
7. the E-library has 20 computers and uses 17 of them to provide Internet service, and the CD-ROM service to faculty and graduate students in the university.
The first floor has two halls, the first devoted to lending Theses & Dissertations for the students of the Technology University as well as the other universities because the central library is the center that houses a collection of engineering Theses and Dissertation in the country. The other Hall is devoted to reading only.

The second floor has two Halls, the first one is devoted to lending books especially related to building and construction architecture and some books and resources in the areas of knowledge other than engineering. The second Hall includes resources related to the machinery, engineering & equipment, materials engineering, production engineering metals as well as technological education Section / mechanic Branch.

The third floor has two Halls for loan, with the first one of books related to Chemical Engineering, Applied Science and materials engineering and other Hall for books related to electrical engineering, control & systems, software engineering and computer science, as well as technological education.

The library provides services to any one affiliated to the university: professors, staff, students, including Faculty of Al- Rashid, for engineering and the military Sciences, which merged with the Technology University after the events of 9 April 2003.

The library has a closed shelving system closed to beneficiaries like the students involved in primary studies, and open shelving system for professors and graduate students.

The automated system CDS/ISIS previously used in the library system was changed to the WINISIS the system which is easy to use for all materials in the library, wherein card catalogs have been converted to computerized catalogs of books, Theses & Dissertations as well as periodicals and catalog of scientific and technical reports. These catalogs are a part of computerized internal database library.
The Technology University was the first university, to receive recognition from the UNESCO Convention for its contribution to the Arab League in the promoting of WINISIS system for the beneficiary institutions in Iraq.

The services provided by the library to beneficiaries are the internal and external loan service, reference service, and training of beneficiaries’ service. In addition to the traditional services are computerized services such as Internet service limited to the Arab and international networks, Abstracts & Indexing service, Bibliographic services, CD-ROM service.

The Central Library is linked directly to the University president. There is no accounts unit in the library and it is dependent financially on the University and its finances/grants audited by the Accounts section in the University. However, the Secretary-General has been granted broad and non-specific powers with regard to the management of the library.

The library remains open from 8 am to 2 pm during the summer holidays, and from 8 am to 4 pm during the term time in order to serve students in the morning and evening shifts.

**4.10.6 Central Library of Kufa University**

The library was founded in the same year in which the university was founded and that is in 1987. Right from its inception, there were problems of location as it was houses in a building far away from the faculties in the university, shifting to different places, making it difficult for the library to achieve the goals that has been set for it.

The presidency of the University bought a loading of their own for the library and wished see it develop as a centre greased toward achieving the goals of the university in its intellectual movement in scientific research within the country.
4.10.7 Central Library of Qadissiya University

The central library of Qadissiya University was founded in 1994 and the university built its library after seven years. There was a plan until that time to move to new premises. The management consists of a staff of 12, personnel whole helped the university to provide Library sources as well as for building an internal database of periodicals. The library is housed in a two-storied building with the following units: Circulation, Reference, Periodicals, Internet, and stores. There is also Technical procedures sections like Acquisition, Cataloging & Classification, and Exchange & Gift.

4.10.8 Central Library of Nahrian University

Founded in 1990, the university followed the presidency of the republic but in 2003 the university was brought under the Ministry of Higher Education. The library provides services to all personnel of the university including professors, and students

The library used the WINISIS system an automated catalogue after the card catalogue was digitised into an Automated catalogue, it use open shelf system for professors and graduate students and closed shelf system for postgraduate students.

The services provided by the library to beneficiaries entrants consists of internal and external loan, reference service and photocopy to each of the professors, staff and students.
The Organization Structure
Of the Central Library of
Nahrain University

University Council

President

Vice President

Cataloging & Classification

Acquisition

On-line

Library administration

Arabic & English Books

Thesis & Periodicals

References
There is a special accounts unit in the library, because it is subordinated to the University for finances. It is linked directly to the scientific Assistant. The Director of the Library does not have any special powers. The library remains open from 8 am to 5 pm.

The Library plays its role both inside and outside the country, and succeeded in establishing relations with the Jordanian University Library and the University of Science and Technology in Jordan. With the expansion in the number of university faculties and departments, the Library was also expanded to include expansion of service delivery.

The building of the central library is in the university campus. It consists of two buildings, the first one uses only its first floor of the, where the Administration of Library and Internet and Automated Search sections are located. The second building consists of three floors housing the following sections:

- Ground floor houses reading room, references section and all references shelves.
- First floor has Circulation Section and houses books and reading room
- Second floor is used for periodicals, and Theses & Dissertations Sections in a large hall
The library has a good variety of sources as shown in the following flow-chart.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Resources</th>
<th>Arabic</th>
<th>English</th>
<th>Total</th>
</tr>
</thead>
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</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>27280</td>
<td>33285</td>
<td>60565</td>
</tr>
</tbody>
</table>

Library use a closed shelf system, where the employee handling the books to be borrowed or returned as well as arranging the loan cards and arranging books on the shelves, and automated catalog to search for sources for beneficiaries to provide all the bibliographic information for each of the periodicals or book.

**4.10.9 Central Library of Babel University**

The University of Babel was established on 25 April 1991 but the central library building was established in 1976, It was until then affiliated to the Institute of Technology, and after the creation of many universities in the country. A special building was constructed for the Central Library over an area of 1354 sqm inside the university campus and as a part of the university buildings, and consequently led to the opening of many colleges under Babel
University. The building for the three storied central library includes two large halls. Of the two floors, the ground floor houses General Catalogs, Acquisition unit, computer unit, information, printer unit, Cataloging & Classification, Circulation unit, a store for books, two halls for reading, management unit, and the Internet unit.

The first floor houses the periodicals unit, to house the shelves for periodicals and reading room, the Reference Unit includes shelves for references and Reading room. The library provides services to the beneficiaries from 8 am to 3 pm in the Morning shift and 3 pm to 8 pm for the evening shifts. There is no special accounts unit in the Library, and its budget is provided by the University.

4.10.10 Central Library of Wasit University

The Central Library at the University of Wasit was founded in 2005, and developed along with the Treasury books in Baghdad. The library building is in the university campus and consists of three floors that the following sections:

1. The technical procedures sections with the following units: Acquisition, Cataloging & Classification, and Exchange & Gifts.
2. The user services sections include Circulation, Reference, Theses & Dissertation, United Nations documents, Audio-visual, Periodicals, photocopy,
3. The automation system section provides the electronic services, Internet, CD-ROM, online, Automated catalogue.

library remains open from 8 am to 3 pm during the term time to serve all professors, and students in the university.
4.10.11 Central Library of Carbala University

The Central Library was founded in Karbala University in 2004; the new building of the central library is still under construction in the new campus. The current library consists of one floor in the temporary building which is used to house the following sections: management, acquisition, circulation, periodicals, references, and reading room. The library remain open from 8 am to 4 pm. The library uses closed shelving system for loan, and provides library services to professors, and students, traditional circulation, references, periodicals, as well as electronic services in the form of Internet, online, and CD-ROM.

4.11 Library and Information Science Education in Iraq

It was the scientific and cultural renaissance that discriminates by Iraq during the era of the revolution. But with the evolution of Iraq it shows a clear impact on the library and information science which reflected directly or indirectly in interest of books, libraries and studies of library science. While the revolution, the Government was interested in enacting laws and regulations which involves the libraries, librarians and books. In 1968, the government made the association of “Iraqi Librarian’s Federation” and after two years the Mostaisiryah University established branch of libraries. The Iraqi’s authors can deposit five copies of books at the national library after the law made in 1970. A commission of a group of librarian formed during the same year to study the reality of public libraries. It has demanded to form a Librarian Council, which can direct with the highest command in the country. In 1974, some recommendations were made in order to introduce the system for public libraries. A law enacted in 1971 known as “Copyright Protection
Act”. One, who deposits five copies of books at the National Library, can rely on this copyright protection Act legally. After the amendment of “Copyright Protection Act” in 1976, it clearly suggests that the publisher or printer must print the date of publication and the number of copies made.

A positive step made for the developments of public libraries and school libraries in 1974. In connection of that a circular was issued by the Presidency of the Republic in 1977 which enables for exercising specialization of library and work in the library to ensure benefit from the experiences. Revolution Command Council made a resolution in 1978 to develop the study of Bachelor’s degree, in 1979 decided to develop a degree of library science and in 1984 the decision was made to enhance the study to the phase of Master’s degree.

This is not all about the library and librarian in Iraq, but it is the ongoing process of development in the same field and in that process of development several instructions appear from time to time. This profession has grown to the modern profession during last fourteen years with the continuous attention by the National Government.

If we go back to track the evolution of this science in Iraq and put it into other academic studies, we find that the seeds of library activity and the library study in Iraq had begun by UNESCO. Upon the request of the Iraqi Government in 1953, the UNESCO began to send the experts of library science to Iraq. The first experts have organized the sessions to teach knowledge related to library science field for the staff of college libraries, known as “high teacher’s house”, and has also supervised the other library session in 1954 and delivered lectures which were focused on the main themes in library science classification, and references.

The UNESCO invited the Baghdad University in 1956. The Director of the Bernstein University Library laid the foundations for the university libraries
in 1957. UNESCO has set up library courses in Baghdad, Mosul and Basra. It included all the staff of the college’s libraries as well as the libraries administrated by some local bodies.

In 1958, four different librarians of Iraq traveled to USA for training and the creation of library in the University of Baghdad with the help of Ford Foundation. Returning of those librarians, more and more librarians have been taught and after coming to country they started a campaign to start courses for Masters degree in library science with two more training courses within the country itself. This resulted into increased awareness of library in people of the country and establishing an association of librarians. After the resolution in 1968, this association was named as General Federation of Iraqi Librarian, which has had a significant impact on developments of libraries in Iraq.

According to Article (1) of the founding of the Assembly as "the General Federation of Iraqi librarian" will be based in the city of Baghdad, and may establish branches have in the provinces a professional association socio-cultural, According to the Association law, No. (1) for 1960 and where it is in 36 article was the institution had applied to set up and when the General Assembly has approved the institution accept members from Iraqi librarians that number amount 500 members in 1976

The assembly from the time of its inauguration spread the library awareness, and arranges cultural seasons for librarians and other writers of the members of the assembly.

The assembly became member of IFLA, and participated in many training courses for librarian. The assembly has prepared the courses with the help of Ministry of Education, Ministry of Health and Ministry of Local Government. This courses led to the graduation programme, and trained students were work in school libraries, public libraries and hospital library. They made
efforts to raise awareness and the importance of desktop library in the educational process and the relationship between teacher and library. The Ministry of Culture and Information approved assembly to issue magazine entitled “Library Letter”, which contributed to the development of study for the students who obtaining the Masters degree of library science. One of the most important activities of the Assembly is to establishing five conferences as:

1. The first conference was held in 1974 in Baghdad, opened by the Minister of Higher Education and Scientific Research. It invited all librarians, representatives of all university libraries, public libraries, school libraries. In the conference, many researchers presented numerous resolutions which were adopted by them. It has passed the recommendations to set up the second conference in country's governorate.

2. The second conference was held in the University of Basra. The main theme of the conference was importance and need of libraries. The committee was formed to coordinate work between universities and the Higher Commission. The slogan was adopted in conference that is “Library and Arabism Gulf” which give an importance of libraries to Gulf states and its needs to develop.

3. The third library conference was held in Mosul on 1 to 4/11/1976. The slogan of the conference of that time was “Library and National Development”, and it was inaugurated by the president of Mosul University. The conference was attended by a large number of librarians. It also presented many researches and recommendations and as the previous conference it also adopted the suggestions which were described in that conference.

4. The fourth library conference was held at the University of Sulaymaniyah from 23rd October 1977 to 27th October 1977 under the slogan “The Library in Service the National Progressive Thought”. The
following points were decided during the conference in A1-Farabi hall, University of Sulaymaniyah by the assembly.

- The conference will call all officials and library staff to deepen the national awareness of citizens towards library.

- The conference will circulate the enacted Republic presidency No. 454 on 22/5/1977, which will help to implement that recommendation made.

- It will emphasize the implementations of the decisions of previous conference that were not implemented.

- The function of librarian considered as technical profession and not a management profession.

- Conference will call the specialists and the staff engaged in the library development, and uses their studies relied on statistics for use in planning and programming to expand and develop the library services.

- Used the modern techniques in the field of library, like library operations, manuscripts, centers, and documents from audio and visual effects.

- Calling major libraries and scientific institutions to hold seminars and symposia to discuss the obstacles and problems facing the technical sections of the library.

5. The fifth conference of the General Federation of Iraqi librarians was held on 3/11/1979 in Baghdad at the National Library. It was opened by Secretary of the Ministry of Culture and Information. This conference was attended by large numbers of librarians, researchers and writers. The delegates stressed on the need of attention on public and school libraries. Several recommendations has made in view of this but no serious efforts were made for its implementation and therefore, most of these were not implemented.
The “General Federation of Iraqi librarian” has played a major role in the
development of the librarian awareness and to develop the library study in the
country.

Iraq suffers the shortage of librarians until 1970 because of the limited
source of library science degree course in country. That limited course set up
by UNESCO from time to time. The preliminary courses were short and most
of that lacked practical orientation, which is the basis of library workings.

In line with the country’s policy of raising the professionals competent
enough who meet the needs of the library, the firm supports the Revolution
Command. The decision has taken by the university council at its ninth
session on 26/8/1970 that more Library branches should opened in town
which teaches the students in morning and evening. The graduates, after the
study of two years obtaining diploma. The study has great focus on the
practical aspects of the working conditions of library. They also began a
course in the evening for those who worked in library.

The branches also decided to appoint advisor who is doing a
management study. The branches have no professors and most of them were
lecturers until 1975. Amongst them three teachers from the University of
Baghdad were assigned to teach in the Arab Republic of Egypt. Now, the
numbers of persons became doubled with doctoral and Master’s degree in
library and information science.

Everyone has been keen to enhance the study at the Bachelor’s level;
therefore the curriculum has evolved for the interest of the future graduates
students. also demanded the founded the degree of functional entitled
librarian in the offices state of this specialization, has submitted a report to the
Faculty of Arts morning studies, around development the study to Bachelor
degree and according to the following basis
1. The number does not exceed form 30 students in the third year class.
2. The selection of the students should be on merits that they obtained.
3. Given a chance for excelling students in the evening study to participate in the presentation of the morning study by the (50%) approached the presidency of the Mostansiriyah University and the Directorate of registration so.

Based on the above steps the presidency of the university requested to provide a thorough study and thus lifting the study at a library branch to the bachelor stage after diploma on 12/4/1973.

The number of students admitted to the Faculty of Arts in the Mustansiriyah University, have been remarkably increased for the period of academic year 1973-74. The number of students was 460 in the branch out of which 150 students admitted in evening studies and remaining 310 students in morning studies. The branch has achieved success in bringing lecturers and development of the curriculum which place a large part of the study for the practical application. These modification leads to large number of students and graduates in getting countless library jobs in several libraries.

The council of the Faculty of Arts in the Mostansiriya University recommended adoption and take the steps required for resolution, after discussing the details, justifications and vocabulary the curriculum proposed annexed to this record and to compare it with curricula of Cairo University, Faculty of Arts. The University Council approved the reports on 4/9/1973 after some adjustments. Now, the academic term became a three years of study after the diploma course. It also requires applicants who are diploma holders to study in the Bachelor’s degree and not exceeding the number of student 40 annually. The topic was presented to the Board of Trustees for approval.
The Council of Faculty of Arts has received several books which were demanded by the students of branch offices, the General Council of the Iraqis librarians to support the advancement of the study. Its ninth meeting was held on 7/7/1973, approved by the university council. They recorded its first meeting on 4 September 1974 in the Second Paragraph (A). The Council confirms its previous recommendations that urgent need to library specialists holding degree higher than diploma. In this regard, the number of admission of 25 students in the one evening batch was made on the basis of their grades in graduate’s courses.

About this the council has instructed to the branch to present study of two years after diploma instead of three years and was lifted again to the University Council. In context with above fact, University Presidency issued resolution of the Higher Education Council and Scientific Research in No. 6 dated on 18/10/1978. This has been accepted by the Faculty of Arts, with effect from academic year 1979-80. As per the merit of class III students, 22 students were selected for the term.

The study curriculum was re-examined in the light of practical experiences and difficulties faced by the graduate student. The curriculum was underwent many changes during this period, based on the resolution issued by the Revolutionary Command Council in No. 27 on 2/3/1976.

All members of the teaching specialists of libraries, who have large experience of working in the libraries of the University of Baghdad and the Mostansiriyah, formed two committees. The committees were named as “Committee for the study of education affairs” and “committee for the human sciences for universities” with the goals to develop the means of study in the country. The committee discussed the status of the library study and also studies the needs of the country in present and in future.
The preparation of new curricula included as per the following share:

1. National culture at the rate between 12-13% 
2. Material assistance from outside the Department 20-30% 
3. The Specialization (within the Department) remains unit to a total of 100%

It was decided to adopt the quarterly system, instead of the annual system. The Commission raised its report to responsible persons in the Revolution Command Council. The report showed the Departmental goals and means.

The Department summarized of the following basic objectives:

1. Preparing qualified degree holder students to work in the libraries, documentation centers, and information centers. The students were also responsible to spread the awareness in society, in various state institutions and in cultural institutions at various levels.
2. Preparation of specialized graduates to carry out teaching and training library.
3. Preparing research specialists to carry out research in scientific institutes.
4. Advancement of the Iraqi library to enable it to perform its mission fully.
5. Supply of the research work and translated study material to different libraries of Iraq.
6. Arranging vocational training programme related to development of the levels of the study in library and information science.
7. Spreading awareness of library and information science, as well as educating the community people.

8. Adopting the latest methods and techniques in the storage of materials in library. Retrieval of information by foreign universities and institutions has become easy after opening relationship with other state and Arab countries.

9. To teach students how to use the library to obtain the information from it in scientific departments.

The means to achieve up by:

1. Development of branch to the Department and transformation it into a regional institute for the library study and information science.

2. Unification of study materials related to libraries in the one Department of University of Baghdad.

3. Library study offers three levels:

   - Intermediate i.e. Diploma in two years of study which is post-secondary course.

   - Professional i.e. Bachelors and Higher Diploma in one year of college from various disciplines except library graduate.

   - Specialist i.e. Special Diploma for two years of study is equivalent to the Masters degree for the student who is graduates of the library science or the Higher Diploma holders.
4. Hosting lectures of professors and experts to benefit of the scientific community.

5. Cooperation of General Federation of Iraqi libraries with Arab and foreign universities and relevant international organizations. Participation in conferences and symposia inside and outside country and exchange visits with other universities.

6. Making provision of modern equipment and tools to conduct research and studies.

7. The establishment of the branch library for the purpose of training.

8. Publishing library study and research done in theoretical and applied aspects and thus contributing the renaissance of the country.

9. Documentation of field studies carried out in Iraqi libraries for the purpose of development.

10. Counseling the library facilities for the public and government sector to develop libraries and enable them to provide services to affiliates.

11. Contribute to the rehabilitation of staff in libraries and information centers during the service and enlighten the latest developments in this area.

12. Contributing to the legislation part of library regulations and laws as library work pursuant professionally.


Arts College- of Mustansiriyah University offers the Bachelor's degree after study for four years and Masters degree after study for two years. The similar course studied in Mustansiriyah University was used in the University of Basra, Faculty of Arts in the academic year 1984-85 and after one year in University of Mosul.
As we are discussing the evolution of the study in library and information science in Iraq, we must mention that another study was carried out by the University of Baghdad, in 1972 and lasted until 1980. It granted a Higher Diploma in libraries and documentation for graduate students from various disciplines after one academic year of study. The outcome of this study was new library courses established Central Library of Baghdad University in 1967-69. This course was for the staff working in college library of Baghdad University. Another course named a high library course for ten months was designed for the college students who were graduating in the university and this course have established in 1969-71. It has total 18 hours of curriculum study in each semester which was similar as used in a Higher Diploma courses.

The Higher Diploma study was began for science libraries and documented in 1972 in the central library of the University of Baghdad and thereafter moved to a separate building. It was then transferred a Higher Diploma course from the Baghdad University to the Mostansiriyyah University on 25/8/1975 by a memorandum demanding the transfer Higher Diploma from the University of Baghdad to the Mostansiriyyah University to achieve integration and scientific progression study. This has done with university order no. 9792 on 12 June 1977.

The Department has initiated a study to examine the feasibility to develop Master’s degree course in 1980. In that connection members of the Scientific Committee meet several times. With continuing support by the college the new course got approval of the study in 1984 by presidency of university. In academic year 1985-86 the university started the course with the five students, who graduating from bachelor library course.
Participate Members of the teaching staff of the librarians in conferences were held between 1974-1979 in researching, viewing and suggestions and recommendations, and the section since it was contributing to each of conferences, seminars, symposia and committees. Anything related to the development of the profession, both within the country or outside.

University of Baghdad in 1971, a number of university librarians have meeting with Secretary General of the Arab League as chair person and carried out a study on status of university libraries, their problems and what are the correct way of advancement. The Committee has recommended that the highest library directly linked to the university president to solve problems of the libraries in future plans of study adoption.
4.12 Resources in Arabic

1. Al-Khalidi, Imad. the organization and presentation of the contents of scientific research library management journal, vol.11, No 2, 1982


3. Abdul Malik A. R., The Arab universities and Arab society today, the Federation of Arab universities, the General Conference II 7-14, Cairo, 1973, p. 61

4. Abdul Rahman Abdullah, profiles in the history books and libraries, publication and distribution institution , Kuwait, 1978, p. 9-12

5. Ahmed A. Omar, the nature of scientific research and its implications for university libraries, newspaper library, vol 2, No 3-4, 1965, p. 5-16


7. Ahmed Badr, studies in the library and cultures, Cairo, Dar culture for the printing and publishing, 1975, p. 49

8. Ahmed Badr, Introduction in library science and information, Kuwait, the Agency Alsabah, 1980, p. 75

9. Ahmed, Badr, information networks and library services and specialized topics, magazine library and information Arab, ninth year, NO1, May 1986, p. 58-36

10. Al-Alowji, A. Sattar Glimpses of the history books and libraries, Cairo, the Cultural House, 1988, p. 56.

11. Al-Bayati, H. Aboud, the reality of Electronic Computers in Iraq: study submitted to the Scientific Symposium for the Republic newspaper,
February 14, 1994, Baghdad, the National Center for Electronic Computers, p. 3-6


13. Al-dawaji A. Illah, coordinating the work of computer centers in Iraq, the first scientific conference of the Assembly of the Iraqi engineers 1970, Baghdad, the Assembly, 1970, p. 3-5


17. Abdul Karim A., collaboration between university libraries in the country of Iraq, the first national forum for information, Baghdad, scientific documentation center with the Arab League, the Center for Documentation and Information, 1987, p. 5

18. Abdul Rahman, K, Project the Arab Network of information: concepts, plans and programs, the first forum on the Arab Network of information, Tunis: Center for Documentation and Information, 1987, p. 2-3

19. Al-Anani, S, loan between university libraries, management library, vol 14, NO 3, April 1987, p. 128

20. Al-Abaidi, Mason A. K, computerized information services at the Central Library / University of Baghdad, Proceedings of the 11th
Conference of the information about university libraries, Baghdad, Iraqi General Libraries and Information, 1999, p. 85


23. Al-Rawi, Abdul Sattar, Computerized Information Services in Iraqi University Libraries: effectiveness Measurement (Al-Mustansiriya University, PhD theses) 2000


25. AL-Shurbaji, Najib, libraries and information networks, library message, vol 22, NO 4, December 1987, p. 80-86

26. Al-Tamimi, A. F, & Imad A. O., the Internet and computer networks: practical applications, Oman, Dar Alyazuri, 2002


29. Baghdad University, the Central Library, acquisition Records, 2006

30. Baghdad University, Department of students affairs, plan to accept the students in the preliminary studies for the academic year 2005-2006

31. Barry Mahone, information networks: planning and development, the first forum on the Arab Network of information, Tunis, the Center for Documentation and Information, 1987, p. 77-78


35. Fawzi G. Methods of scientific research in the social sciences. - Oman: Dar Wael, 2002

36. Fadel Abdul Ali, the Internet and uses in Iraqi universities: an evaluation study, (University Mstnasrih message MA) 2004, p. 90-105

37. General Company of Information International Network Services


40. Qandilji, A.I. Information Networks and the possibility application in Iraq universities, 1986

41. Qandelji, Amer Ibrahim, information networks and their potential application in the universities of the country : the first scientific conference of the College of Arts Mustansereya Arts Journal (a special number), 1986

42. Gndhilji, Amer I, information networks and the possibility of its application in the country's universities, Mustansiriya Arts magazine, a special issue, 1986, p. 646
43. Gndhilji, Amer I., encyclopedic dictionary of information technology, Oman: DarAlmasira, 2003

44. Gndhilji, Amer I & Al-Janabi, Ala'edeen, Management Information System and Information Technology, Oman: Dar Almasira, 2005, 291-327

45. Gndhilji, Amer I, building a national network of libraries and information centers in Iraq: problems and solutions, Symposium prospects information systems in the twentieth century, Yarmouk University, Irbid 26-30 June 1993, p. 21

46. Ghanimi, Mohammed A. R., The future of computers, Cairo, the Academy Library, 2001, p. 63-85

47. Ghazi H.A. Preparation of scientific research: Alexandria


49. Ghanimi, Muhammad A. R, information networks global and local (Internet and Intranet), a symposium prospects information in the twenty century, in May 1999, Cairo, the Center for Management and Administration, 1999


55. Hane, P.J., The truth about federated searching. Information Today, vol. 20, NO 9, pp24


57. Heshmat Kassem, Information services: the merits and forms. Cairo, Ghraib Library, 1984, p. 105-106

58. Hamid S. Dhiab, University Library Management. Cairo, Dar Ghraib, 1994, p. 69

59. Iraqi site on the Internet, Babil newspaper, NO 1775, Baghdad, 30/4/1997, p. 1

60. Iraq linked to the Internet, AlZawra newspaper, NO 87,4/2/1999, p.1

61. Iraq, the National Center for Electronic Computers: the march of evolution Center, Baghdad, the Center, 1992, p. 7-8

62. Iraq, the National Center for the planning and management development: software applications ready for the special computerized and used in the administration, Baghdad, the Center, 1991, p. 14


64. Jassim, M. J, The Arab Network of information: done and hopefully, Arab 3000, NO 2, September 2005


67. Kaniya, K Salih, Library study in Iraq, the first scientific conference May 4-7, Baghdad, Mustansiriya University, 1987
68. Kazanji, F.Youssef, libraries and Industry library in Iraq, Baghdad, Freedom House printing, 1971, p. 49
69. Kazanji, F. Youssef, libraries in Iraq since ancient times until the present time: Baghdad: House Cultural Affairs, 2002, p. 146
70. Korkees Awad, Mostansiriya University Library in the past and present: Research presented to a symposium of Trustees and managers libraries in Arab universities, Baghdad, 12-15 March 1972
73. Mahmoud, Ahmed A, In a matter of national networks of information in the Arab countries, the first forum on the Arab Network of information, Tunis, the Center for Documentation and Information, 1987, p. 196
74. Mustansiriya University, the Central Library, acquisition records, 2006
75. Mustansiriya University, Graduate Guide for academic year 1987/88, Baghdad, Mustansiriya University, p. 176
76. Ministry of Higher Education and Scientific Research, Studies Department and the Planning and Follow-Up, Department of Statistics, libraries form, 2006
79. Ministry of Higher Education and Scientific Research, Law the Ministry of Higher Education in Iraq, the 1970
80. Ministry of higher education and scientific research, university of Karbala, the student manual ,2005-2006, p. 21 up.

82. Nuri Jaafar, the role of higher education to keep up with scientific and technological progress: the development of scientific research for special educational Mosul University 3-6 May 1986, Mosul University, 1986, p. 140-141

83. Nizar, M. A., A national information network in Iraq, library message, vol 31, NO 3, September 1996, P 60-76

84. Republic of Iraq , Ministry of higher education and scientific research, Office of the studies , planning, and following, acceptance central, directory of universities and institutes in Iraq, 2005/2006

85. Rzoki, Naima H. impediments to the use of information technology to build a Information network between university libraries, research is acceptable for publication in magazine Faculty of Arts

86. Shaaban A. K, information networks: a study of the need and objective and performance, magazine library and information Arabia, the fourth year, NO 2, April 1984, pp 11-12

87. Shawki Salem, an Arab information, authentication informing, vol. 6, NO. 2, 1987, p. 7-34


89. Scientific Documentation Center, a proposed strategic scientific research , information, Baghdad, the Center, 1984

90. Technological University, the Central Library. acquisition, records, 2006

91. The Federation of Arab universities, the General Secretariat, a symposium of Trustees and managers libraries in Arab universities, 12-15 March 1972, Baghdad, p. 3


95. University of Baghdad, Baghdad University Guide, 1985 p 7-9

96. University of Baghdad, Central Library, the central library directory, Baghdad, 2004, p. 28

97. University of Mosul, the annual report of the University for the year 1987/88, Directorate library in Mosul, 1988, p. 37

98. University of Qadisiyah, Guide of central library, 2005


100. UNESCO, The report of the Director General on the cultural and educational institutions in Iraq, the United Nations for Educational, Scientific and Cultural Organization, 2003

Foreign Reference

1. Andrew, S. Computer networks, TANENBAUM, New Delhi, 1998, pp1-14


13. Bruce, C. 'When enough is enough: or how should research students delimit the scope of their literature review?', in Challenging the Conventional Wisdom in Higher Education: Selected Contributions Presented at the Ninteenth Annual National Conference and Twenty-First Birthday Celebration of the Higher Education Research and Development Society of Australasia Inc., HERDSA, University of New South Wales, Sydney, Australia. 1993, pp. 435-439.


39. Francis, A.T, Regional Information Networks thrust Area for INFLIBNET to establish Integrated Information System in India, CALIBER-97, Patiala, 6-8 March, 1997, p102


46. Gopinath, M.A. Information access through networks, CALIBER, Feb 10-12, 1996, p 95-96

47. http://www.ebsco.com
68. http://www.library.yale.edu/consortia/statement.html
74. Indira Gandhi, MLIS-E2 Research Methodology, Design of research, Block 2, pp 5-18
77. Jirjees, J.M. Personal Communication, Sana'a, Yemen (25 May 1997)
78. Joshi, S.C. University libraries and national development, New Delhi, Global Vision, 2005, p 11


83. Kent, Allen, Encyclopedia of library and information science, New York, 1972, p 63-64


85. KAUL, H.K. Library Network: An India Experience, Delhi, Virgo, 1992, p 35


87. KAUL, H.K. Library Networks An Indian Experience, New Delhi, VIRGO PUBLICATION, 1992, PP 94-117


95. Kumar, A. research methodology in social science, SARUP & SONS, New Delhi, 2002, pp13-26


104. Konnur, P.V. and Ragavan, S.S (2007) Bangalore university Academic Library Network (BALNET), International CALIBER-2007, Pan jab University, Chandigarh, 8-10 February,


110. Lynda, M.B. Library and Information science new research methods, Library Trends: Jun, 22, 2006 in file:// C\ Documents and Settings\SPACE\

111. Iyer, V. K. Networking and the future of libraries, Delhi, Rajat, 1999, p 7


121. Muskal, F, (2000) Guidelines for the Literature Review Paper University, fthe Pacific, ,
http://jarl.cs.uop.edu/education/muskal/lit.html

122. Manisha Dawra, Encyclopedia of Modern library and information science, New Delhi, 2003, vol. 1, p 3-4


124. McCracken, Peter, OPAC Reborn (net connect), Library Journal, July, 2004


[http://dsir.nic.in/vsdsir/divistion/nissat/nisobj.html]


128. New Oxford Dictionary


131. Preparing libraries for the 21st century: Seminar papers of 40th ILA Conference, Delhi, ILA, 1995


136. Part Four: Writing the Literature Review, University Writing Center (UWC), University of Central Florida


190


144. Saint-Germain M.A Research Methods Application relevant research techniques to problems in public policy and administration, in file: //Documents and Settings\SPACE\


146. Sanwar Lat Jat, N.P.Agwarwal, M.S.Poonia, Research Methodology, New Delhi, Indus Valley Publications, 2005, p-1

147. Sagar, P.V. Networking in Library Science, New Delhi, SONALI PUBLICATIONS, 2005, pp221


149. Stan, Schatt, Understanding Local Area Networks, 3rd ed, 1992, SAMS Publishing India


153. Sadeh, T & Walker, J. Library Portals toward the semantic Web, New Library World, vol 104, NO 1/2, pp11-19


156. Stevens, Norman "A Historical Perspective on the concept of Networks", London: Neal Schumun Published, 1980, pp 37-38


158. Sujatha, G. Resource sharing and networking of university libraries, Delhi, Ess Ess. 1999, p 9-10

159. Sujatha, G. Resource sharing and networking of university libraries, Delhi, Ess Ess. 1999, p 4-5


161. Taylor, Dena The literature review: a few tips on conducting it, University of oronto

http://www.utoronto.ca/writing/litrev.html


170. Wilson, Tom "on user studies and information needs" journal of Documentation, 1981, vol.37, No.1, pp3-15


