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ASSESSMENT OF THE UNDERGRADUATE LIBRARY AND INFORMATION SCIENCE PROGRAM IN THE COLLEGE OF BASIC EDUCATION IN THE STATE OF KUWAIT THROUGH THE DEVELOPMENT AND APPLICATION OF GLOBAL STANDARDS: A CASE STUDY

By

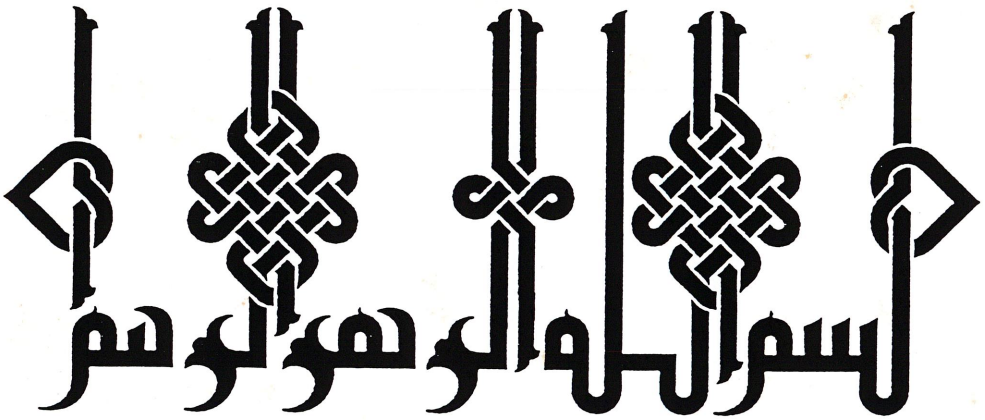
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A Dissertation submitted to the School of
Library and Information Studies
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

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In the name of Allah, Most Gracious, Most Merciful

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This dissertation is dedicated to my mother,
my wife Nouryah, my sister Hanan,
to my children, Hussain, Maria,
Ahmad, Sara, and Mohammad,
and to the memory of my father Sayed Fakher

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ASSESSMENT OF THE UNDERGRADUATE LIBRARY AND INFORMATION SCIENCE PROGRAM IN THE COLLEGE OF BASIC EDUCATION IN THE STATE OF KUWAIT THROUGH THE DEVELOPMENT AND APPLICATION OF GLOBAL STANDARDS: A CASE STUDY

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Major Professor: F. William Summers, Ph.D.

The purpose of the first stage of this study was to formulate global standards for undergraduate library and information science programs in the developing countries. This was accomplished by surveying an international panel of 64 individuals in 39 countries who were expert in education for library and information specialists. Fifty (78%) usable questionnaires from 34 countries were returned.

The questionnaires contained 147 proposed statements grouped in 14 standards covering locus, goals, general and specific objectives, administration, financial support, physical facilities, library, faculty, staff, curriculum, continuing education, admission of students, and completion requirements. Of the 147 statements, 123 (83.7%) obtained a mean score of 4.0 or higher, allowing them to be accepted as standards.

These standards were then used in the second stage of the study to determine the current status of the

Library and Information Science program at the College of Basic Education in Kuwait, the adequacy of the library and information science curriculum in that program, and how the program deals with new developments in the field.

A case study methodology was selected for the second stage. Research data were collected on site through document examination, interviews, and observation.

According to the study findings, the Library and Information Science program met only two of the 14 standards: Locus and Completion Requirements. The number and content of the courses in the curriculum were not sufficient to graduate qualified librarians. The curriculum lacks topics that deal with specialization and information technology. The curriculum content is old and out of date and does not conform to the modern approach to library and information sciences.

CHAPTER 1

INTRODUCTION

Kuwait is a small Arab country located in southwestern Asia. The country occupies 6,880 square miles. It is bordered on the east by the Arabian (Persian) Gulf, on the south by Saudi Arabia, and on the west and north by Iraq. It is one of the world's leading petroleum producers. Kuwait has one of the highest per-capita incomes in the world. Al-Shigy (1994) has reported that the total population of the country is 1,772,000; 671,000 of these (38%) are Kuwaitis, and 1,101,000 are non-Kuwaitis (p. 2).

The Iraqi invasion of Kuwait, which lasted seven months--from August 2, 1990, to February 26, 1991--dealt a terrible blow to the entire infrastructure of the country, particularly to the education, library, information, and other cultural systems. The Iraqi forces killed and tortured many people and destroyed or stole much property. They set fire to hundreds of oil wells. The damage and destruction affected houses, government and commercial buildings, schools, hospitals, water and electricity plants, museums, recreational centers, markets, research centers, and other facilities. The

invaders destroyed, burned, or bombed anything they could not loot or transfer to Iraq (Aman, 1992a). The Iraqi occupation of Kuwait was a vicious aggression against education and culture, especially the library and information insfrastructure in Kuwait (Salam, 1992).

After the Iraqi withdrawal, Kuwait was faced with the awesome prospect of rebuilding what had been destroyed. The rebuilding process, terrible as it was, has presented opportunities to create stronger institutions than the ones that existed before the occupation. One such opportunity lies with the education of librarians in the country.

The higher education system in Kuwait is a shared responsibility between two governing institutions: Kuwait University (KU) and the Public Authority for Applied Education and Training (PAAET). Both agencies are controlled and financed by the Ministry of Higher Education.

Kuwait University was established in 1966. Currently it has nine colleges offering undergraduate programs. Four of these offer master's degrees in science, arts, medicine, and engineering. The university offers no doctoral program. The master's program proposed for library and information science has been delayed until September 1996.

The Public Authority for Applied Education and Training was established on December 28, 1982. It comprises four colleges and seven training institutes. The four are the Colleges of Health Science, Business Studies, Technology Studies, and Basic Education. Because of the prohibition against coeducation, each college has two separate campuses--one for men and another for women. Since the establishment of the PAAET, 45,000 students have graduated from the authority's colleges and training institutes (Al-Moduf, 1995).

In Kuwait, the only library education program presently in existence was introduced in 1977 as a department of the Kuwait Teacher Institute (now the College of Basic Education [CBE]). The program was two years in length and was designed to prepare high school graduates to be assistant librarians. It graduated 657 assistant librarians before 1986 when it was upgraded and merged with the Department of Educational Technology to award a bachelor's degree in libraries and educational technology. The specifications of this program are described in Chapter V.

The direct impact of the Iraqi aggression on education for library and information science in Kuwait is the almost total destruction of the Library and Information Science Department at both the Shamia and Idailiah campuses. Laboratories, training facilities, equipment, and

resource centers were looted or destroyed. The faculty and staff offices, furniture, and files were stolen or damaged beyond use. The department also lost highly qualified members of the faculty and some students who were taken by the Iraqis as prisoners of war and have never been released. The remaining students in the department lost an entire academic year. Years of work and progress were lost in a few months. It will take time, money, and will to rebuild what was destroyed during the invasion to bring it to the level it enjoyed in August 1, 1990 (Abdel-Motey & Al-Hmood, 1992).

Major companies in the world participated in the recovery process after Kuwait's liberation on February 26, 1991. The country's rebuilding covered all the important sectors, such as the oil industry, telecommunications, health, education, and the information sectors. Reconstruction has begun in all areas of the library and information field, many of which consulted UNESCO, the International Federation of Library Associations (IFLA), the British Council, and other agencies. All libraries and information centers in Kuwait are once again open and in operation.

The current and future plans for library and information centers in Kuwait will depend on the availability of adequate and sufficient numbers of library personnel,

with the knowledge, tools, and skills to fill the empty library positions and to provide efficient library and information services.

There is a great need in Kuwait now for library personnel with computer knowledge and experience. This area has been identified by head librarians, directors, and top management officials as "urgently needed in Kuwait and includes computer applications, online searching, and CD-ROM technical services, information services, and collection management" (Al-Ansari, 1992, p. 163).

We now live in what has been called the "information society." People need information to meet a wide range of personal, educational, economic, and recreational needs. The quantity of information produced is expanding rapidly, and enormous strides are being made in storing, organizing, and accessing this information. People must be able to locate, access, use, and evaluate the information they need effectively (American Library Association Presidential Committee on Information Literacy, 1989, pp. 1-5).

To function effectively in an information society, people must have education that includes higher order intellectual skills such as analytical, inferential, evaluative, and problem-solving abilities (Liesener, 1985, pp. 11-12). Today, a major challenge facing the educational systems in most countries of the world is how

to meet these demands for higher quality education within increasingly severe national financial constraints. Chapman and Carrier (1990) noted that many countries have to look for new financial resources, accept quality and equity deterioration, and/or increase the efficiency with which educational resources are used (p. 3).

The information explosion is having a profound effect on libraries. They must either adapt or become extinct in this new environment, and their adaptation will be reflected in the education of librarians. "Because we live in an information age, libraries and library science education are inextricably linked, not only in the consistency of their objectives but also in their very survival" (Vondran, 1989, p. 27). Corbin (1988) noted that "one of the responsibilities of schools of library and information science in an age of information technology must be to maintain a fresh and relevant curriculum that reflects the latest concepts and use of information technology in the libraries which will employ its graduates" (p. 79).

Lack of properly educated and trained professional and non-professional library staff is a major problem in Kuwait. A number of researchers and consultants who visited the country between the 1970s and early 1990s agree on this problem (Abdel-Motey & Al-Hmood, 1993;

Aman, Conaway, & Pitkin, 1993; Al-Ansari, 1992; Aman, 1992c; Aman, Fong, & Dimitroff, 1992; Aman & Zehery, 1977; Parker, 1975; Sullivan & Brennen, 1984; Zehery, 1975). Even though the country has had library education programs since 1977, it still lacks sufficient numbers of professional and paraprofessional library staff (Abdel-Motey & Al-Hmood, 1993, pp. 17-18). Kuwait's shortage of library and information workers is projected to increase sharply by 1997, when the demand for these workers is expected to reach 2,353 (Al-Ansari, 1992). "The number of graduates produced by the Library and Information Science Department falls far short of meeting the country's current and future manpower shortages" (Al-Ansari, 1992, p. 155).

Al-Ansari also found that the Library and Information Science Department, in addition to not producing enough librarians, is not producing well-qualified library and information professionals for the country. "Graduates of the Library and Information Science Department in Kuwait are perceived as not being well prepared for their responsibilities in the actual work place" (Al-Ansari, 1992, p. 169). According to the 1992 UNESCO report, "the curriculum does not include enough depth and breadth to graduate students capable of dealing with new developments and practices in the information age" (Aman, 1992c, p. 31).

Abdel-Motey and Al-Hmood (1993) analyzed the need for librarians in Kuwait as well as the current education program for librarians. They found that the program in the Library and Information Science Department cannot provide enough graduates to fill all the current job positions needed for library and information centers in Kuwait. Also, they found many deficiencies in the program (Abdel-Motey & Al-Hmood, 1993, p. 18). "The program has been criticized for accepting poorly prepared and unmotivated students as well as graduating poorly prepared students" (Aman, Fong, & Dimitroff, 1992, p. 5).

There are currently no standards for examining, evaluating, and/or determining the quality of undergraduate library and information science programs in the developing countries. As a step in rectifying this lack, the researcher, through this study, will propose global standards for undergraduate library and information science programs in developing countries

Statement of the Problem

As a result of the rebuilding process after liberation, the Kuwaiti government made a clear decision to replace as many of the foreign work force as possible with Kuwaiti nationals. In response to the government's decision, the Library and Information Science Department was asked to expand its program to serve not only the

needs of public and school libraries but all other types of library and information centers as well. Libraries and information centers in Kuwait are experiencing an era of transition in moving from manual to computerized information systems. The need for library personnel with a wide range of computer knowledge and experience is increasing daily.

The library and information science education program in Kuwait is under scrutiny and receiving criticism. The program is not meeting the country's need for qualified library and information professionals because it is perceived as preparing its students poorly for work in the real world (Al-Ansari, 1992; Aman, 1992c). A study is needed to determine whether the perception is accurate and if so, what are the causes for the program's shortcomings.

The purpose of this study is to add to the currently inadequate knowledge about the state of Kuwaiti librarianship. Specific purposes are these:

1. To determine the current status of the undergraduate library and information science program in Kuwait in terms of locus, goals, objectives, administration, financial support, physical facilities, library, academic staff, non-academic staff, curriculum, continuing education, students, and completion require-

ments, based on the standards to be proposed in this study.

2. To examine and evaluate the curriculum of the library and information science program in Kuwait, to define its strengths or weaknesses, and to assess the range of the curriculum, especially concerning new developments in the field.

Also the study intends to provide a methodological contribution in formulating global standards for undergraduate library and information science education. The proposed standards consist of a set of statements and variables that were identified as important for determining the quality and quantity of undergraduate library and information education programs. These were selected by an international panel of 64 experts in education for library and information specialties from 39 countries. Data from the survey instrument (the proposed standards) were used for the second stage of the research--an in-depth case study of the Library and Information Science Department in Kuwait.

Objectives of the Study

The study has the following objectives:

1. To survey the current status of the library and information science program at the College of Basic Education in Kuwait.

2. To determine the depth and breadth of the library and information science curriculum.

3. To determine how well the library and information science curriculum deals with new developments in the field.

4. To suggest, on the basis of the findings, recommendations for developing a library education program and its curriculum in Kuwait, with attention to the existing program

Significance of the Study

To date, no comprehensive research has been done regarding the library education program or its curriculum in Kuwait. Therefore, the results of this study will provide information to support the following:

1. To develop a better understanding of the current status of the library and information science program in Kuwait.

2. To provide the fundamental data for future planning and development of library education programs in Kuwait.

3. To provide valuable factual information for educators, government planners, and other decision makers to improve the existing library education program in Kuwait.

4. To upgrade the quality and quantity of offer-

ings in the library and information curriculum.

5. To increase student enrollment.

6. To produce an adequate number of educated and qualified graduates.

7. To improve, expand, and intensify the curriculum of the program in reflect new developments in the field.

8. To provide baseline information to researchers for future studies on library education in Kuwait.

Another major significance of this study is that it will provide an international perspective on formulating global standards for undergraduate library and information science programs in the developing countries. The proposed standards are important for several reasons:

1. To define the qualitative and quantitative standards for excellent library education programs around the world.

2. To help the library profession establish accreditation guidelines for undergraduate library and information programs in the developing countries.

3. To help the library community examine and evaluate any undergraduate library education program from an international perspective.

4. To provide baseline data to researchers for future comparative studies about undergraduate library education programs around the world.

Research Questions

The study was guided by the following research questions:

1. What is the current status of the undergraduate library and information science program in the state of Kuwait in terms of locus, goals, objectives, administration, financial support, physical facilities, library, academic staff, non-academic staff, curriculum, continuing education, students and completion requirements, based on the proposed standards?

2. How adequate is the curriculum for the present? Does it have weaknesses ? If so, what is their nature?

3. To what extent does the curriculum reflect new developments in the information age?

4. What kinds of courses should be added to the curriculum in the near future (1 to 5 years)?

Assumptions

In this study, the following assumptions are made:

1. Library educators in the Department of Library and Information Science in Kuwait are willing to improve the quality of library education.

2. There will be no major political or economic problems that will seriously intervene in the decision for future developments in the library education program

in Kuwait.

3. The proposed standards are adequate to measure the quality of the undergraduate library and information science program in the College of Basic Education in Kuwait.

4. Participants in the study will be cooperative, accurate, and honest.

5. If the library and information science program is to be relevant in the information age, it must improve and expand to reflect new developments.

6. The supply of professional librarians and experts in Kuwait will be sufficient in number to develop the needed curriculum.

Limitation of the Study

The study will be limited to the undergraduate library and information science program in the College of Basic Education in Kuwait; therefore, the results should not be generalized to library schools outside that country or other programs within Kuwait.

Definitions

For the purpose of this study, the following definitions will be used:

Adequate--a measure of the library school program as being fully sufficient in numbers of faculty, staff, and students, able to graduate enough well-qualified library

and information personnel for the needs of the country. Graduates of the program are well prepared for their responsibilities in the actual workplace, able to satisfy specific requirements of the institutions that will employ them.

Developing Countries--those countries in which large segments of the economy are still comparatively undeveloped and the majority of the population is very poor. The countries' economics are based upon exports of raw materials, and the countries' infrastructures (transportation, social services, educational system, etc.) are inadequate for their needs (Osmanczyk, 1990, p. 233).

Department of Library and Information Science--a department in the College of Basic Education (CBE) in Kuwait. It provides undergraduate courses in library and information science and it is attended by full-time students. It is sometimes referred to as the Department.

Proposed standards--a set of statements and variables to be used as a guide to determine the quality and quantity for undergraduate library and information science programs in the developing countries.

Case study--a research method concerned with everything significant in the history of the development of the case. Semi-structured interviews, documentation, and observation will be used to obtain information necessary

to support conclusions and recommendations.

Curriculum--"Curriculum is the planned interaction of students with instructional content, instructional resources, and instructional process for the attainment of a predetermined educational objective" (Davies, 1986, p. 373).

New developments--the most noticeable impact of the information age on the workplace. This is primarily in the area of information technology, such as online searching and CD-ROM, computer applications, communications systems that enhance and support distant access, networks, and expert systems.

CHAPTER II

REVIEW OF LITERATURE

There is little literature on library and information science education in Kuwait and the Arab world that is translated into both English and Arabic. For this reason the review of literature section will be divided into two parts: (a) library education studies in the developing countries and (b) library education studies in Kuwait.

Library Education Studies in the Developing Countries

Third World countries were labeled "underdeveloped" until the United Nations (UN) deemed it appropriate to change that term to "developing" (World Bank, 1979). Developing countries, also known as the Third World or less developed countries (LDC), have been defined by the United Nations as those in which large segments of the economy are still comparatively undeveloped and the majority of the people are very poor. The least developed countries were defined by the United Nations General Assembly as those that have a shortage of food, few sources of power, a gross national product of $100 a year or less, and literacy rates of 20 percent or lower. Under other UN criteria, most developing countries have economics based

on the export of raw materials to industrial nations in exchange for manufactured goods, and their infrastructure--educational system, transportation, social services, technology--are inadequate for the country's needs (Osmanczyk, 1990, p. 223).

Developing countries number about 120 and contain more than 50% of the world's population (Thompson, 1993). They represent varying cultures, politics, economics, and levels of industrialization, as well as natural resources (Davies, 1985, p. 247).

Despite their diversity, developing countries have many characteristics in common--short life expectancies, high infant mortality rates, low literacy rates, low per capita incomes, high population growth rates, inefficient and antiquated telecommunications systems, poor educational facilities, high unemployment rates, and a limited supply of capital and expertise. They also have an agriculturally based economy rather than one based on industry; their socioeconomic foundations are still tied to colonial powers (Vallejo, 1988, pp. 144-145).

The oil-producing countries of the Middle East, including the Arabian Gulf states of which Kuwait is a part, are considered developing countries. Unlike most other countries of the Third World, these countries have a low density of population and a high per capita

income. In spite of this, the average life expectancy of the people in these countries is no greater than that of other developing countries and the literacy rate is actually lower than in some. The oil-rich countries have failed to translate their wealth into human development.

Librarianship and library education are direct reflections of a country's historical, cultural, social, and economic traditions. Education authorities in developing countries are becoming increasingly aware of the importance of libraries in the economic and cultural development of states, and are beginning to realize the need to plan library development and to train a sufficient number of librarians. Over the last two decades there has been remarkable growth in the number of schools of librarianship and library training programs in developing countries. These programs have been greatly influenced by British, French, and American systems of library education (Sharif, 1977).

Obi (1974) summarized the objectives of library education in developing countries as follows:

1. To train sufficient indigenous manpower at the para-professional, professional, and specialist professional levels to staff a superior regional network of essential library and information science centers and services.

2. To train sufficient indigenous professional library, archive and information scientists as leaders to develop the above networks of centers.
3. To stimulate and effectively carry out research into library, archive, and information science and identify information science problems facing the profession in the regions.
4. To provide continuing education for practicing professionals in order that their professional competence may keep abreast of new developments.
5. To unite professional theory and practice into a coherent and connected whole through skillful teaching methods.
6. To integrate professional concepts with the social, political, economic and cultural forces of the environment.
7. To publish original professional literature, textbooks, and teaching materials specifically concerned with the professional problems of the regions.
8. To foster a strong, respected, indigenous profession imbued with a professional philosophy and trained in professional skills relevant to

> the needs of the region; thus, ipso facto, to create a strong professional association which can formulate and maintain professional standards. (p. 238)

Obi (1974) identified the following characteristics of library education in developing countries:

1. Librarianship in developing countries is certainly not dormant, yet it is handicapped above all by a lack of sufficiently trained and dedicated personnel. The establishment of a carefully planned library school should go far in removing this handicap.
2. There is a great necessity for developing effective machinery for accreditation and certification which can result in reasonable order, efficiency and rational relationships among various types and levels of training.
3. There is a great trend in international attempts to develop training centers to either neglect the teaching of particular methods totally or to go out of the way to give emphasis to only a particular scheme.
4. One of the problems which developing countries have not been able to solve so far is the shortage of relevant textbooks and teaching materials.

5. The lack of properly qualified teachers has historically been a problem in library education of developing countries.
6. Training abroad plays a major role in the development of librarianship in developing countries.
7. In most developing countries, library education is strongly influenced by European and American library education systems.
8. All the schools are attached to or associated with universities, and, for the most part, they award semi-professional and professional qualifications. (p. 239)

Aina (1994) surveyed the library and information science educators in eleven African countries to learn their qualifications, teaching and library/information work experience, nationality, experience with computer technology in their work, and journals that they consulted in the course of their work. A questionnaire was mailed to 123 library and information science educators in 20 library and information science schools. Ninety-four (76%) of the educators completed the questionnaire.

The findings indicate that library and information science educators in Africa had impressive qualifications--60% had master's degrees and 29% had doctorates.

Fifty-eight of the respondents (62%) had degrees in other disciplines in addition to library and information science qualifications. The majority of the respondents had teaching experiences of more than five years--forty-one of the respondents (49%) had taught between six and twenty years. Thirty-eight (40%) of the respondents mentioned International Information and Library Review as a journal they frequently consulted. Fifty-three (56%) of the respondents had no knowledge whatsoever of computer technology.

Beilke and Thompson (1987) sent questionnaires to the directors of 435 library and information science education programs in 98 countries, excluding the United States and Canada, to examine guidelines, regulations, and methods used to improve library and information science education and to indicate recent improvements in this field. Ninety-five of the 435 questionnaires were returned with information that could be used in the study; these represented 95 educational programs in 36 countries.

Of these 95 programs, 87% prepared students in both library and information science (LIS), 12% prepared students in only information science, and 1% prepared students in only library science. Fifty-two percent of the programs offered both undergraduate and graduate studies, 30% offered only graduate studies, and 18%

offered only undergraduate studies.

The findings showed that LIS educational programs used similar procedures to improve their programs including revision of courses, addition of new courses, and addition of new equipment. The 95 programs also shared common methods to ensure the quality of their programs. These methods include utilizing accreditation officials, government examinations, professional organization examinations, external and internal examinations in addition to various advisory committees and consultative arrangements.

Finally, when queried as to which topics are favored for future international surveys of LIS educational programs, two topics of greatest interest to the respondents were information science (22%) and curriculum developments (18%). The third most popular area of interest was training methods (14%).

Mueller (1991) examined education for librarianship in Brazil. Her study was based on the assumption that the adequacy and quality of library and information services to any environment are conditioned by the views and attitudes held by their librarians, most of which are acquired during the librarians' professional education. The researcher surveyed nine of the thirty schools in Brazil that offered undergraduate library programs.

Mueller also briefly examined six new post-graduate library schools, specifically regarding their contributions to research activities. Several weaknesses were found in the education programs for librarianship in Brazil: a lack of attention to the environment, lack of diversification in levels of education, lack of theoretical bases, lack of interest in developing investigatory and critical attitudes in students, and lack of research activities by faculty members. Based on her findings, Mueller suggested that the structure, contents, and teaching methods should be changed in the Brazilian programs.

Liu (1992) used comparative analysis to discuss the similarities and differences in origin, evolution, scale, structure, curriculum, faculty, and students in library and information science education between China and the United States.

> Both the golden age of China's library education in the 1980s and the disastrous great cultural revolution clearly show that China's political situation has a greater influence on its library education than does the U.S. political situation on American library education. On the other hand, it seems that the impact of financial resources and the job market for librarians on American library education is more influential than on China's. (pp. 116-117)

Library education in China and the U. S. have obvious differences in structure: most universities in the United States offer graduate programs while universities in China offer undergraduate studies.

Hu (1990) surveyed the current state of library and information science development in China, as reflected in a variety of formal and informal training programs that have been introduced in educational institutions in recent years. He used the establishment of a new department of library and information science at Sichuan University as a case study and surveyed the curriculum now in use. Hu found that the area of library and information science in China still suffers from some of the pressing problems that are common to all developing countries, of which the shortage in human and material resources and financial stringency are perhaps the most serious. He estimated that between 70% and 80% of all library personnel had not yet had the opportunity to receive any formal library training.

The four-year bachelor's degree program in library and information science at Sichuan University is divided into eight semesters of 18 weeks each. To graduate a student must accumulate 144 credits, 112 of which are from required courses and 32 are electives. The required courses include political theory, physical education, foreign languages, advanced mathematics, classical Chinese, natural sciences, humanities, foundations of library science, an introduction to information science, bibliography, classification of books, library bibliogra-

phy, western language cataloging, library management, information retrieval and consultation, computer programming, library automation, information analysis and research, subject heading methods, collection and readers' services, history of Chinese books, ancient book management, library modernization techniques, a practicum, a junior year term paper and thesis. (p. 190)

Ning and Lan (1990) examined the development of library and information science education in China since 1949 and described the characteristics of library education in China today, the problems it faces, and the direction of its development. Library and information science education in China still does not measure up to the advanced levels of some other countries. Major problems are a lack of instructors, inadequate finances, and inadequate teaching materials and equipment. Also, the rate of development of library education is outpaced by the rate of the development of the society as a whole. Ning and Lan suggested the following as necessary for upgrading the Chinese system:

1. Preparation of a long-term plan to continue the multifaceted library and information science education system of China.
2. Coordination of efforts to improve and equalize the quality of library and information science education.

3 Cultivation of awareness of characteristics that are distinctively Chinese.

4. Expansion of international exchange. (pp. 168-169)

China's Society of Library Science organized a national symposium in 1985 to discuss the curriculum for library and information personnel. Most delegates agreed that education for library and information personnel should include at least ten courses in the following: introduction to library and information science; classification and subject headings; cataloging books, both in Chinese and western languages; bibliography; reference materials and services; information storage and retrieval; library management; collection development and user services; library automation; and computerized information retrieval systems (Weiming, 1989, pp. 269-270).

Wieming (1989) described contemporary developments in professional education for library and information personnel in China over the last ten years. Looking at three areas of change in librarianship over the past century--library values, library technology, and library science--he concluded that library technology--the handling of physical items such as paper, cardboard, microforms, magnetic, optical or other recording media--is the most dynamic of the three. Library science should in-

clude the following: information retrieval theory, information gathering behavior, user studies, historical studies of books and of communication, analysis and description of bibliographical control in general, and the understanding of the nature and workings of libraries and related information services. The three previously mentioned areas of change will have significant impact on library and information science education during the next century.

Weiming quoted Buckland (1986) when defining the curriculum of the future:

1. The role of information in society and of library services;
2 The needs, information gathering behavior and institutional contexts of groups to be served--e.g., students, researchers, children, the aged;
3. The theory and practice of information retrieval--cataloging, classification, indexing, bibliography, etc,; and
4. The managerial, political, and technological means most likely to be useful in developing and providing good library services. (Weiming, 1989, p. 272)

Weiming and several Chinese colleagues proposed that three levels of library and information personnel with

different education programs be required in China:

1. Senior librarians and library managers with post-graduate qualifications in library and information science;
2. Intermediate-level professional librarians and information specialists with undergraduate level professional training.
3. Library technicians with secondary level or various types of in-service training to carry out basic routine operations in library and information services and to be of assistance to professional librarians. (p. 273)

Although China has 60 institutions that have been offering professional library and information science programs at various levels, the demand for well-qualified librarians and information specialists is immense.

Um (1987) compared the education for professional librarians in Japan, Korea, and Taiwan. The study was intended to determine the similarities and differences in the educational systems for librarians in the three countries. These countries share similar cultural backgrounds and have adopted the same American educational system for librarians. Therefore, they should also share similarities in problems, trends, and future prospects. The study verified this hypothesis through comparisons of

the objectives of library education, teaching staff, students, curriculum, facilities, relationships with outside libraries and the incorporation of information science. The findings showed that Japan, Korea, and Taiwan share considerable similarities in their library education and that the differences identified are closely related to national circumstances and interests of each country. Also, the three countries share many of the same common trends, problems, and future prospects for library education.

Nandhivajrin (1977) focused on the quality of teaching and methods of instruction in Thailand's library schools during the 1973-1974 academic year. Questionnaires were sent to all library school faculty members, senior students majoring in library science, and graduate students in library schools. Sixty percent of the questionnaires were returned with viable information. The researcher found a relationship between the faculty's course load and teacher effectiveness. Faculty members perceived themselves as weak in the areas of research, publication, and professional activities. Lectures, field trips, and student projects were the most commonly employed teaching techniques in the library schools in Thailand. The teaching methods used varied depending upon the type of course being taught. The researcher recommended that the library school faculty be required

to continually revise and update course outlines and reading lists. Other suggestions were to provide additional time, funds, and other incentives to the library school faculty for self-development, research and publication and to improve teaching performance. The researcher felt that newer approaches and teaching styles should be incorporated into the existing teaching techniques.

Sangpichitara (1979) explored the modern development of libraries and library education in Thailand. Data were gathered with historical and documented description methods along with personal interviews. The researcher found major problems facing libraries and library education in Thailand, such as inadequate financial support, inadequate instructional staff, few employment opportunities, inadequate book collections, lack of an interlibrary network, and heavy faculty teaching loads. There were relatively few resources in the Thai language, in spite of the difficulty of reading English materials, and teaching processes were undermined by poor instructional resources.

Chantrasa (1974) studied the current state of library education in Thailand and developed standards for its future improvement. Several methods were used to collect data for this study, including documentary exami-

education, each covering 25% of the requirements. In addition to the bachelor's degree program, a new master's degree program in information science was started at the Addis Ababa University during the 1989-1990 academic year, with full assistance from UNESCO and IDRC.

Ur Rehman (1994) scrutinized faculty evaluation criteria of six library education programs in Pakistan using the following variables: academic qualifications, professional experience, research and publication in order to examine faculty preparedness. Two separate questionnaires were used, one to collect data about the six departments from the department heads, and one to collect biobibliographic profiles of faculty from individual instructors. Eighty-eight percent of the questionnaires were returned.

Analysis of the information obtained from the respondents revealed that the size of the faculty was inadequate in these schools. Five of the six schools did not have a single member of their faculty with a doctorate or advanced degree. The absence of relevant professional experience among the faculty was another weakness that was identified. Research and publication productivity was also very low, as 15 out of 37 faculty members had not produced a single publication, despite having an average of 6.5 years of service in the area of library

science. Recommendations included a proposal to provide opportunities for doctoral study, creating additional positions, improving recruitment policies, and sharpening research and publication skills of the faculty through specialized programs.

Aina (1993) reviewed the library school curriculum in ten African countries in order to determine what proportion of their courses were relevant to the emerging library and information science market. The review looked at a standard list of topics ranging from information technology to journalism. Data used for this study were collected manly from the current prospectuses ("catalogs") of the library schools. These data were supplemented with visits, interviews, and direct observation of each site. The findings indicated that a substantial proportion of the institutions in Africa have incorporated courses that are appropriate to the emerging market in their curricula. At least 50% of the institutions offered courses in computer technology, indexing and abstracting, information products and services, the information user, and records and information management.

Ahmad (1992) described the present courses of library education and training at different levels in Bangladesh and made several recommendations to improve the programs: (a) expand library education at all levels; (b) require students to master fundamental core courses

before taking specialized subjects; (c) train librarians in both conventional library techniques and modern technological skills; (d) develop library school curricula that bear some relation to the modern world.

Khurshid (1969) developed a common set of standards for library education in Burma, Ceylon, India, and Pakistan. He traced the origins of library education in these countries to identify the factors that led to the inauguration of the first program, to describe later courses, and to determine whether the developments in these countries were parallel to one another. He also identified, described, and compared the present structures and systems of library education programs. The researcher used historical reviews to trace the earlier foundations of library education programs in these countries and a descriptive survey method to describe the current status of library education in this area, and for formulating standards. The researcher found that there were thirty library schools in India and four in Pakistan. Burma and Ceylon had no graduate library programs.

In most of these schools Khurshid found financial strains, inadequate resources, and poor facilities. The curricula were not balanced and there were few elective courses. The schools employed a large number of part-time faculty and the leadership roles of the library

schools were filled by university librarians. Admission requirements were not uniform. However, the researcher also found proposed standards were qualitative and quite similar to those used in the United States, the United Kingdom, and Latin America.

Nweke (1989) examined the fundamental responsibilities of the Maiduguri library school in Nigeria. The school's information technology resources and their maintenance and care are also discussed. The findings indicate that the information technology resources of the library school are limited by financial constraints. Most of the information technology available in the school is in the form of hardware; there is no software collection. Audiovisual materials, such as slides, microfilms, 16 mm film, and overhead projector transparencies used in the Maiduguri library school are either on loan from another university or provided as required by instructors or from other sources. No staff member has the technical knowledge required for the care and maintenance of the school's information technology.

Recommendations made by the researcher include developing plans for the school to improve its information technology resources by providing funds specially for the acquisition of information technology, providing the academic staff with training in information technology, and including courses in information technology in

the school's curriculum.

Lankage (1989) described the development of library education in Sri Lanka beginning in 1961. He found several problems facing library education in Sri Lanka: the available space is inadequate, the library equipment and facilities fall below the recommended standards for a library school, there is a lack of qualified faculty members and qualified professionals from which to pull practical knowledge. UNESCO and the British council agreed to supply an expert in library and information science to develop library education programs in the country.

Furbeyre (1978) compared professional library education in Southeast Asia. This comparative study was based on the hypothesis that there are significant similarities in the educational programs among existing library schools in Southeast Asia. The researcher used Danton's theoretical concept of comparison as the basis for a methodological model to examine the characteristics of graduate library programs. The researcher also used factor analysis to investigate the factors responsible for variations in the data.

The main finding of the study was that the hypothesis could not be accepted as accurate as the differences found among the library schools were significant. The

study determined that library education emerged as part of the cultural-educational pattern, and the stage of library education development attained by Southeast Asian countries varied according to the inter-relationships of education and culture, standards, and the geographical and democratic characteristics of each country. Eleven library schools in the region offered professional library programs with varying degrees of similarities and differences. The study showed that the general level of development of a country was highly correlated with the education and culture of that country. The study also found that problems and needs of the library schools' communities were similar in certain areas, but issues of immediate concern reflected local interests and conditions. The similarities and differences in the characteristics of library education strongly suggested that professional library programs do not conform to the same mold.

Obi (1974) examined the curriculum of library schools in seven sub-Saharan African countries in terms of historical development, objectives, and future plans. The researcher used both primary and secondary sources to gather the needed data. The researcher surveyed the development of library education in both the United Kingdom and the United States from 1820 through 1970, then reviewed library schools in developing countries in

general and in the sub-Saharan countries in particular. Obi developed a model curriculum for the education of librarians, archivists, and documentalists of the 1980s. Reflected in the curriculum are the interdisciplinary nature of the profession, the value of both print and nonprint sources of information, Africa's oral tradition, and the impact of new technology.

Miski (1993) presented a UNESCO document intended to provide a basis for discussion at a meeting of experts on the education of information specialists in the Arab region. This meeting was held in Rabat, Morocco, in May 1993 by the Ecole des Sciences de I'information (School of Information Science, Rabat-Instituts), with support from UNESCO, IFLA, and the British Council. This study was based on a survey conducted in the Arab countries to provide background information. The objective was to discuss the changes that have taken place in the education of library and information specialists during the last twenty years, and to formulate recommendations for future actions.

The first part of the study presented the state of education and training in library and information science in the Arab countries. The second part discussed changes and possible tendencies that are taking place and which should be taken into consideration when planning the

future. A questionnaire was mailed to twenty schools; however, only nine responses were received. Some of these were internally inconsistent, inaccurate and/or even out of date. The findings indicated that literature on the subject is scarce, no longer current, and of poor quality.

There are thirty-three schools in the Arab countries that provide studies in librarianship and information studies at various levels. Most programs appeared to be traditionally based on librarianship, although there were a few programs in information science. Experts from the Arab region agree that important progress had occurred in the education of library and information specialists in most Arab countries. They emphasized the need to increase regional cooperation between the Arab countries in areas of education and research. The development of teaching materials and the exchange of faculty members and students were mentioned as means to reinforce inter-institutional cooperation. The experts also accepted a project for the creation of a regional association for schools of library and information science.

Chaudhry (1988) surveyed the information science curricula in the graduate library science programs in Asia. He also investigated the extent of the information science component in the education for librarianship in the region. A survey instrument was sent to 42 graduate

programs in 13 Asian countries requesting information about their curricula, such as department catalogs, syllabi, prospecti, or any other source that might give information about the course contents. Information was collected from 25 graduate library schools from ten Asian countries. Out of 25 library schools, eight have the words "information science" in their names. Nine schools award a master's degree in library science. Most of the schools offer both graduate and undergraduate programs. A total of 98 information science courses were offered by 25 graduate library schools in ten Asian countries during the previous three academic years. The maximum number of information science courses was nine and were offered by the schools that have specialized information science programs. The minimum number of courses was two, offered by each of the schools, while the average number of courses offered in information science in Asian schools is 3.92. The majority of these courses (80 of 98) are required. The subjects of these courses fall into the following categories: information storage and retrieval, information systems and programs, library automation, communication and information theory, and systems analysis.

Jawkar (1992) investigated the viability of a single library education program for the education of teacher-

librarians in developing countries. The results of this study were compared with the outcome of a similar survey done for the education of teacher-librarians in Iran. Questionnaires were sent to 55 library educators and practicing school librarians in 29 different developing countries. Thirty-five questionnaires were returned, representing 19 countries.

The findings of this and the Iranian survey are very similar. Both sets of respondents considered the same areas of competency regarding knowledge of library and information science as important, with the exception of counseling psychology. Competencies such as cataloging and classification, acquisition and selection, child and adolescent psychology, general reference sources and referral services, children's and young adults' literature, and school librarianship were listed among the eight most needed skills as determined by the respondents in both surveys. This indicated similarities of interest and needs in various developing countries (Jowkar, 1992, p. 278) A similar observation was made for the areas of skills and attitudes in both studies. Among the four most important skills the respondents felt were needed were teaching library skills to students, communication with other school libraries and outside information centers, cooperation with teachers for the success of curricular programs and library promotion. Another

similarity between the two studies concerns the category of attitudes. Willingness to help and cooperation were the most important attitudes listed in each study.

The differences between the studies involved the order of importance given to each competency. This is due to the technological advances and economic conditions in each country. Based on the findings of the study the researcher concluded that a single library education program for the education of librarians in developing countries is possible.

Hariri and Davoodifar (1988) studied library and information science education in Iran in order to present data that may be helpful to curriculum planners when designing new programs in continuing library and information science education. The specific objectives of this study were the following:

1. to give an overview of continuing education programs in library and information science in Iran with a particular emphasis on specialized courses;

2. to assess the effectiveness of the short courses conducted by the Iranian Documentation Center during the years 1982-1986;

3. to make recommendations concerning the future development of similar programs. (p. 22)

To obtain data for the study a questionnaire was designed and provided to participants in both introductory and advanced programs of study. The response rate was

60%. Fifty-one percent of the respondents held bachelor's degrees while 42% had master's degrees. Half of the respondents were currently working in documentation centers and special libraries.

Based on the findings, the researcher concluded that the overall result of the program has been satisfactory and that such programs and courses could effectively fill the gaps in the existing formal education process for librarians in Iran. The motivating factors for participants to attend the programs was to increase their work productivity (90%) and to update their knowledge of library and information science (73%). The researchers recommended that advanced programs be designed to address specialized subjects, such as computer applications and database utilization.

Saidi (1977) identified and described factors that affect the development of education for librarianship in Iran. He also examined the relationship between library growth and the evolution of library education, gathering data for the study with questionnaires, interviews, reviews of documents, and examinations of archival and other primary sources.

The study results indicated that libraries and books have been historically well respected in Iran, while little attention has been given to library education.

The first library training courses were sponsored by UNESCO and the University of Tehran in the 1950s. In 1966 the first library school was founded in Iran. The researcher also found several factors affecting the slow development of library education programs, such as an indifferent academic environment, economic and political instability, social and educational backwardness, and a lack of appreciation for the professional roles of librarians.

In examining library education in Jordan, Younis (1992) found that it falls under three main categories: short-training courses offered by the Jordan Library Association (JLA), the Ministry of Education, and the University of Jordan; a sub-professional post-secondary or intermediate diploma offered at the community college; and professional education at the post-graduate level. Libraries in Jordan are in transition from traditional librarianship practices to advanced library and information functions and practices. Thus, more libraries are implementing computer systems in their daily functions. The JLA is organizing more specialized courses on computerization and library software packages. Library schools are incorporating present trends in library and information science into their curricula. Library education programs at the community college level have also changed to include more advanced courses. The post-graduate

curriculum now includes courses on advanced topics in library automation and information science and technology. Among the advanced courses are topics such as storage and retrieval, on-line services and networks, electronic publishing, database and CD-Rom, view data systems, reference services and library and information center management (pp. 39-40).

Bouazza and Nimer (1986) attempted to trace the major steps in the development of library education in Tunisia and Jordan in order to analyze the main problems handicapping library education. Their hypothesis was that library education has evolved in a similar pattern and has been faced by identical problems in countries with similar cultures and economies despite their geographical location. The comparative discussion of aspects of the development of library education in Tunisia and Jordan and of problems that negatively affect its improvement seemed to confirm the hypothesis. They concluded that library education in countries with similar cultures and economies evolved in a similar manner and that the countries faced similar problems. Negative effects in both countries were a lack of full-time, qualified instructors, a lack of native professional librarians, a lack of recognition, appreciation and understanding of library education, limited financial

resources, a lack of professional literature in Arabic and French, and a lack of teaching materials. The researchers also found that part-time lecturers in the two countries lacked professional experience and had little knowledge of the practical realities of librarianship. The curricula were not well-defined in terms of objectives and content. In addition, the curricula of library education programs were in fact traditional, out of date, and did not conform to the modern approach to library services. Books and journals in the field of library science published in the Arab region are often inadequate in quality and out of date, and are unrelated to the specific needs of libraries in other Arab countries.

Sharif (1977) compared and evaluated the present structures of library education programs in the Arab states in order to suggest general guidelines for improvement of library education programs in the region. This study investigated the problems affecting the development of both the professional and sub-professional levels of library education in terms of objectives, curriculum, degree requirements, teaching methods, staff and physical facilities in the Arab countries. This descriptive research revealed that the development of library education in the Arab region was affected by the lack of curricula designed to educate individuals in how to address and solve specific problems in the region.

Development of the program was also affected by the lack of cooperative activity to establish the necessary objectives for the educational programs in library and information science, the absence of library standards for the improvement of library services at various levels, inadequate personnel for teaching and research, too little teaching and reading materials in the native language of the region, the absence of library associations, and the general ignorance of the governmental and public sector concerning the problems that hinder the development of adequate library education programs. The researcher proposed guidelines for improving library education programs and regional and national cooperative arrangements.

Alsereihy (1993) identified the continuing library education practices and preferences of university librarians and librarians in major research centers of Saudi Arabia in order to determine the role of the library and information science departments of Saudi universities in continuing library education. The researcher surveyed representatives of the four existing library and information science departments in the Saudi universities and found that they currently have no role in providing continuing education programs to librarians in the universities or in major research libraries in the

country. On the other hand, the researcher found that library education is well established in Saudi Arabia with the services of four library and information science departments that award bachelor's degrees and provide some graduate studies (pp. 166-168).

Ashoor and Chaudhry (1990) described the development of library and information science education in Saudi Arabia from the establishment of the first department of library science at King Abdul Aziz University in the early 1970s to the opening of a new department at Um al-Qura University in 1985. Library and information science courses offered at the undergraduate level by all four library schools in Saudi Arabia were divided into six categories:

1. Foundations of library and information science (introduction to libraries, history of books, communications and librarianship and society, etc.)
2. Information science and services (reference, bibliographies, etc.)
3. Technical services (cataloging, classification, indexing and abstracting, serials, acquisition, collection building, etc.)
4. Library administration (principles and techniques of management and types of libraries)
5. Information technology (automation, computer

application and information packages, information storage and retrieval, etc.)

6. Advanced and specialized courses (special topics in librarianship, competency courses like research methods and statistics and specialized courses such as Islamic libraries, library buildings, libraries for the handicapped, manuscripts, etc.)

A total of 165 library and information science courses were offered in the undergraduate programs at the four library schools in Saudi Arabia (pp. 150).

Mangia (1990) identified the factors that help to account for the lack of research activities in library schools in India. These factors included:

1. the small size of teaching faculty in library schools;
2. the absence of research qualifications as an essential requirement for employment;
3. the lack of research qualifications among library and information science faculty members;
4. the non-availability of financial support in the form of fellowships, research grants, etc; and
5. the lack of proper library facilities. (p. 96)

Writing about the quality of professional education in library and information science, Zili (1988) concluded:

> We are required to train our staff to be realistic as well as creative and they should be familiar with our national conditions as well as with modern theories, techniques and methods. The are especially required to have great ambition and excellent ability to combine theory with practice, to combine conventional work with modern technology and to open up new paths towards the modernization of the library and information projects of our country, therefore, we must pay attention to the combination of the curriculum and research or study of Chinese library and information services. We must enhance the relations between teaching and social practice, and thus enhance the students' adaptability and their ability to remold or improve Chinese library and information services. (p. 38)

An effective professional curriculum in librarianship that addresses the changing needs of the profession should stress the following competencies:

1. Confidence. The curriculum must reinforce the student's capacity to attempt to solve problems and use skills in different environments.
2. Adaptability. Students must be taught to recognize the limits of their own knowledge and to develop an orientation to lifelong learning as an adult learner.
3. Technical comfortability. Students will not learn a new technology in order to be expert with it but to be comfortable in its use.

Students are oriented toward appropriate applications of technology.

4. Proactive professional behaviors. Students learn to take risks in the classroom so that they can later take risks in practice.
5. Process skills. These skills are to be distinguished from specific content. Foremost among these are people skills and analytical skills. Lastly, project skills rather than operational skills are emphasized. (Vondran, 1989, p. 34)

Library schools should also recruit students who have the capacity to develop these competencies.

On the international level, several organizations have played a major role in education and training. For library and information science they have been active in spreading library and information science education, sharing expertise with the less developed countries and in developing education and training for library and information professionals.

These international organizations include bodies such as the United Nations Education, Scientific, and Cultural Organization (UNESCO); the International Federation of Library Associations (IFLA); and the International Federation for Information and Documentation (FID) (Large, 1991; David, 1987; Saracevic, Braga,

& Afolayan, 1984).

Since its foundation in 1945, UNESCO has devoted considerable attention to the need for establishing effective library and information services in developing countries. In particular, UNESCO has played a crucial role in the development of library and information science education programs in developing countries to the extent that without their involvement there would be little education at all. UNESCO has been involved with spreading awareness of the importance of library and information science education, has provided support for starting programs and for faculty development, and has organized courses and conferences on educational issues. (Saracevic, Braga, & Afolayan, 1985). UNESCO's objectives have been pursued by a variety of means: fellowships, scholarships and travel grants, facilitation of the exchange of teaching personnel, organization of international courses and seminars, establishment of new library schools, furnishing expert advice and the production of textbooks, reference and teaching materials (Keresztesi, 1982, p. 351). Training and education for librarians has been a primary priority of UNESCO. UNESCO has pursued this goal through its General Information Program (PGI), which was established in 1976, and through the United Nations Intergovernmental Systems of Informa-

tion in Science and Technology (UNISIST) established in 1973. Included in the numerous PGI publications related to educational topics are a guide for building a basic collection in library and information science schools (Parker, 1984), a guide for teachers for education and training of users of scientific and technical information (Evans, 1977), and guidelines of the organization of training courses in scientific and technical information (Atherton, 1975).

UNESCO has encouraged cooperative international curriculum development. It has also organized regional seminars for curriculum development in various parts of the world, including Latin America, West Africa, and Southeast Asia. It has published a number of reports concerning curriculum matters, such as a modular curriculum in information studies and a model curriculum for the training of specialists in document preservation and restoration (Large, 1991). UNESCO has turned its attention to individual subject areas, such as marketing and on-line searching by publishing Guidelines for Teachers of Information Retrieval (Savard, 1988) and Guidelines for Teachers of Information Retrieval (Wood, 1988).

UNESCO also has realized regional programs such as the Regional Post-graduate Program in Information Science in the Philippines, helped set up the School of Information Science in Morocco, and helped the Institute of

Scientific and Technical Information in Beijing, China, with curriculum development (Large, 1991).

Since the foundation of IFLA in 1929, it has intensified its activities in the field of professional education. The IFLA section of library schools and other training divisions proposed standards for library schools at an international level in 1976. The development of "Guidelines of Equivalence and Reciprocity of Professional Qualifications" was its next important project. In order to determine the professional qualifications worldwide, IFLA surveyed library and information science education worldwide and published its findings in the "International Guide of Library and Information Science Education" in 1985 that provided information on more than 500 professional educational programs. IFLA also published a new reference work entitled "World Guide to Educational Programs in Libraries, Archives and Information/Documentation," which provided more information on the contents of the educational programs.

IFLA has also organized several international workshops and seminars of various aspects of education and training since 1977. These seminars addressed a broad array of subjects of particular relevance to educators and resulted in the development of guidelines for teaching specialized topics, such as "Library management,

preservation and conservation research, and technology" (p. 230). Other seminars were concerned with the special needs of developing countries in various regions, such as in Africa, China, and Southeast Asia. IFLA cooperated with other organizations, such as FID and UNESCO, in organizing and sponsoring these programs in order to find common denominators for educational issues and to share expertise (Fang & Nauta, 1991). FID is a nongovernmental organization with emphasis on documentation. It served as a primary international forum for discussion of educational issues among those concerned with education of information professionals and brought together participants from developed and developing countries (Saracevic, Braga, & Afolayan, 1985).

UNESCO has devoted considerable attention to the need to establish effective library and information services, especially in developing countries. Library education should reflect the conditions existing in the developing countries now and in the coming years. There should be training in both the traditional core subjects and in the new field of information technology. To meet the needs of the larger libraries that are now computerized or are in the stages of computerization or even planning to computerize, the curriculum should offer courses in information technologies, information systems design, development, operation and maintenance, informa-

tion systems planning and management, information storage and retrieval processes, abstracting and indexing, information generation, communication, and user study (Vallejo, 1986, p. 15).

Library Education Studies in Kuwait

In the Arab world, the field of library and information science is still in its infancy in comparison to library education in the United States, which celebrated its centennial in 1987. Library education was not introduced to the countries of the Arab world until the establishment of the department of library and documentation at Cairo University in Egypt in the early 1950s. Other library education programs appeared later in Sudan (1966), Iraq (1970), Morocco (1974), Libya (1976), Tunisia (1964), and Jordan (1966) (Hamade, 1994, p. 139; Sharif, 1977, pp. 123-128; Bouazza & Nimer, 1986).

The Arabian Gulf countries include Kuwait, Qatar, Saudi Arabia, Bahrain, the United Arab Emirates, and Oman. Since the discovery of oil in the Arabian Gulf in the 1940s these countries have experienced dramatic changes in their social, economic, and educational conditions. One of these changes has been the establishment of universities in the regions in the late 1960s and 1970s.

The first library education program in the Arabian

Gulf countries was established in Saudi Arabia. The department of library and information science, which is an integral part of the Faculty of Arts at the King Abdul-Aziz University, was established in 1973. In 1974 the second library education program in Saudi Arabia was opened at the Immam Mohammed University (Sharif, 1977). New library science departments are being established in other universities in the Arabian Gulf states. Qatar and Oman were among the latest countries to introduce library education at the college level (Aman, 1992b). The Faculty of the Humanities offers librarianship and archives courses as a minor in the department of history and librarianship at Qatar University. During the 1980-1981 academic year approximately 97 students were enrolled in this department (Aman & Khalifa, 1983). The department of library science and documentation in the Sultan Qaboos University in Oman was established in 1987. There are five faculty members and over 50 graduates of the department (AL-Mufaraji, 1992).

Hamade (1994) indicated that the main characteristics of library science departments in the Arab World are as follows:

1. Library education is taught at the undergraduate level leading to the bachelor's degree which is considered in the Arab World as the

main criterion for professional careers. Masters' and doctoral programs are offered in very few countries of the Arab World.

2. Library education is taught independently in most of these departments with the exception of Qatar and Bahrain where it is taught at the department of history and Kuwait where it is taught at the teacher's institute. (Hamade, 1994, p. 140)

In Kuwait, the first program in the field of library and Information Science was established in 1977. It was a two-year program designed to prepare high school graduates to be assistant librarians. The library program was introduced in the newly established department of library science at the Kuwait teacher's institute of the Public Authority for Applied Education and Training. The program was upgraded to a four-year system in 1986. The new department was housed at the College of Basic Education which replaced the teacher's institute. The department of library and information science is the only program in the country to educate and train library and information professionals (Abdel-Motey & AL-Hmood, 1992). The library education program produced approximately 400 assistant librarians before 1986. Because of the prohibition on coeducation, the program has separate branches for male and female students (AL-Ansari, 1992).

The impact of the Iraqi aggression on the education for library and information specialists at the College of Basic Education in Kuwait was as follows:

1. All the library collections were moved to Iraq during the invasion.
2. The library building and interiors were completely destroyed and all its equipment, furniture, computers, and air conditioning units were looted.
3. The department of library and information science lost highly qualified faculty members during or after the invasion.
4. Training facilities, laboratories, and resource centers of the department of library and information science at both the Shamia and Idailiah campuses were looted or destroyed.
5. The department files were completely damaged, destroyed, or stolen.
6. The students lost the entire 1990-1991 academic year (Abdel-Motey & AL-Hmood, 1992).

The library education program at the College of Basic Education has suffered severe scrutiny and received criticism from library professionals and communities. The library education program has been criticized for not being a program of top quality. The quality of the

students enrolled in the program is also poor. The program has been criticized for accepting and graduating poorly prepared and unmotivated students (Aman, Fong, & Dimitroff, 1992).

The library education program in Kuwait is very traditional, highly conservative, and has few faculty. According to Aman (1992c), one only needs to survey the resources, equipment and expertise available to these programs to discern that the program is outdated. The curriculum does not contain the necessary breadth or depth to prepare students for dealing with the new developments and practices of the information age (p. 31).

The library education program in the Department of Library and Information Science cannot provide enough graduates to satisfy the existing employment needs of the library and information centers in the country (Abdel-Motey & Al-Hmood, 1993). The program is not meeting the country's needs for qualified library and information professionals or librarians (Al-Ansari, 1992).

Al-Ansari (1992) studied the current status of library and information workers in Kuwait after the Iraqi invasion in order to project future manpower requirements through 1997 and to propose recommendations for the future. Data were collected with questionnaires provided to 1,193 library and information workers in 39 government

and private institutions in Kuwait, 74% of whom responded, and with interviews conducted with 59 key management officials, head librarians, and directors of libraries and information centers.

The findings of the study indicated that the current supply of library and information workers in Kuwait is inadequate regarding the number of workers and their skill levels. The demand for information workers is expected to reach 2,353 by June 1997, while the supply will reach only 1,263 by that time, a shortage of 1,019 (Al-Ansari, 1992, p. 150).

It was noted that, while the academic qualifications of the current workers in library and information centers were below international standards, almost 53% of the respondents desired to continue their library and information science education and obtain bachelor's degrees. The researcher also discovered that as a result of the rebuilding process after the liberation of Kuwait from Iraq, there exists an increased demand for library and information workers with computer experience. Of the respondents who participated in the study, only a small proportion of them reported having computer skills. Almost 87% reported having no skills related to microfilm, research and writing, on-line searching, and indexing and abstracting (p. 154).

Abdel-Motey and Al-Hmood (1993) repeated Al-Ansari's 1992 study with a smaller sample. They studied the current status of library and information workers in Kuwait to determine the future needs of manpower requirements within the next five years. They used a questionnaire and interviews to collect the needed data from three types of libraries. A questionnaire was sent to individuals in 572 school libraries, 22 public libraries, and 14 academic libraries. Their findings are similar to those of Al-Ansari. The two studies agree that the current number of library and information workers in Kuwait is small and that shortages presently exist and will continue into the future. Abdel-Motey and Al-Hmood also found that there will be a demand through 1997 for 348 librarians with bachelor's degrees in library and information science and a need for 325 assistant librarians with a two-year diploma in library science. The two studies agree that the number of graduates produced by the department of library and information science at the College of Basic Education in Kuwait will fall far short of meeting the country's current and future needs in this area.

Johnson (1994) described the state of library education and training in Kuwait since the establishment of the first library education program in 1977 at the Public Authority for Applied Education and Training and the need

to rebuild the process after the liberation of Kuwait on February 26, 1991. Johnson also discussed the planning which began in 1988 for the creation of a graduate program in library and information science at Kuwait University. Instruction was planned to begin in 1990, with a two-year interdisciplinary program of library and information studies, but was disrupted by the Iraqi invasion and occupation. Current plans for a graduate program in librarianship and information studies will continue to be delayed until September 1996.

Experts from the Arab World who attended the meeting on education of information specialists in the Arab region held in May 1993 in Rabat, Morocco, discussed the problems currently facing library education in the Arab region. The admission of unqualified students and finding ways to increase student enrollment are major issues. The absence of specialized Arabic language library and information science publications and a lack of dissemination of published documents are also problems. There is a lack of regional library journals and a shortage of faculty members with the qualifications and experience required for teaching. Didactic teaching methods and a failure to develop critical thinking means that the schools may be producing library and information specialists who are not able to adapt to their rapidly changing

professional environment. There is a need for the library and information school to educate and train graduates who can advance the profession (Miski, 1993).

Participants suggested solutions to these problems. A small working group met and identified a series of broad recommendations and specific suggestions for action that were addressed to each individual library and information science school in the Arab region. Miski outlined these solutions as follows:

1. Improving and maintaining the professional knowledge and teaching skills of the teaching staff by seeking appropriate candidates, by regularly reviewing their needs for continuing development, and by providing adequate education and training when necessary.
2. Carrying out high-quality research on the basis of determined research targets and priorities for each Arab country and for the Arab region as a whole, and publishing and disseminating the results.
3. Encouraging publishing of teaching materials in Arabic, and establishing a regional clearinghouse for unpublished or hard-to-obtain literature and materials.
4. Organizing a conference on equivalency of degrees and reciprocity of qualifications in

the Arab region.

5. Publishing an Arabic bulletin of regional news about LIS education and training. (p. 61)

Aman (1992c) visited Kuwait at the request of the Ministry of Education and UNESCO to review the damage done to schools and public libraries by the Iraqi invasion and to design a master plan for rebuilding these libraries and information centers. Aman described the role of the department of library and information science at the College of Basic Education in improving the education of school and public librarians. He made several recommendations in his study to rectify the situation at the department of library and information science, including the following:

1. The present undergraduate Department of Library Science should establish more rigorous admission standards and requirements which can guarantee that only the very best and brightest will be admitted to the Department.

2. Whenever possible admission should be tied to the results of interview requirements to ensure the proper selection of students admitted to the program. The negative image of the program and its graduates can be improved, if the Department improves and enforces high standards for admission.

3. Because it is the only department in the country and Kuwait University is dragging its feet to introduce a graduate program in library and information science, the undergraduate Department has the responsibility and duty to change its programs from emphasis on school and public librarianship to cover all types of library and information work and information and media

technology.

4. The Department of Library Science should establish an advisory board which can consist of leading librarians, information, computer and publishing professionals who can contribute ideas that will improve the academic programs of the department.

5. Members of the advisory board should provide input into how the curriculum of the Department of Library Science should be improved to meet the requirements of a changing library and information profession in Kuwait.

6. The advisory board will provide a good vehicle for the Department of Library Science to express its views to the library and information community in Kuwait and the frustrations that its graduates face when employed in archaic and underdeveloped libraries that cannot challenge them and their education.

7. Members of the advisory board should, on behalf the Department, lobby key government officials for increased levels of funding for the Department and the acquisition of new equipment to be used by faculty and students.

8. The advisory board should work with the Department to conceive, produce, market and offer continuing education programs and workshops which can benefit the lot of librarians and information specialists in Kuwait.

9. The Department of Library Science should encourage qualified practicing librarians to join its part-time faculty to teach advanced level courses within their areas of expertise. By being members of the part-time faculty of the Department, these practicing professionals will be able to bring their knowledge and expertise to the department and to serve as liaisons between it and the profession.

10. The Department should publish a newsletter which can explain to the rest of the professional community in Kuwait what the Department is doing, the progress it is making, its demands and expectations and the problems it faces in recruitment, training, or placement of

its graduates.

11. As the only academic program in Kuwait with responsibility for educating future librarians and information professionals for the State, the Department of Library Science should be in a better position to exert vigorous leadership in the library and information profession in Kuwait. To accomplish these objectives, the Department of Library Science should be in a better position to exert vigorous leadership in the library and information profession in Ku wait. To accomplish these objectives, the Department should receive additional funds for its operation and the hiring of additional and highly competent faculty. (Aman, 1992c, pp. 31-32)

A team of consultants from the University of Wisconsin-Milwaukee School of Library and Information Science proposed a plan of action for the Department of Library and Information Science (DLIS) in the College of Basic Education in Kuwait. The plan recommended a multilevel undergraduate program of library and information science education. A curriculum for both the four-year bachelor of library and information science degree program and the two-year library technical assistant program was designed. The proposed curriculum will provide students with appropriate preparation through a variety of advanced library and information science and information technology courses. The recommendations also emphasize specialization in one of the following areas: public, school, or academic libraries; special librarianship; and records and information management.

Another recommended plan of action was designed for the Department of Library and Information Science goals, objectives, faculty, students, staff, administration and governance, and physical resources and facilities. The team recommended three lists for the library collection, serial subscriptions, and computer software and hardware that can be used in the proposed program at the DLIS (Aman, Fong, & Dimitroff, 1992).

CHAPTER III

METHODOLOGY

Stage 1: Establishing Global Standards for Library and Information Science Programs

Identifying the Proposed Standards

No standards were found in the professional or research literature that could be used to provide guidelines for determining the quality and quantity of undergraduate library and information science education programs in the developing countries. Therefore, the researcher examined professional and research literature to compile a set of proposed standards. The following sources were searched:

1. Standards and criteria in higher education
2. Organization and administration of colleges and universities
3. Planning and evaluation of education
4. Standards for accreditation
5. Accreditation of library education
6. Issues in education for librarianship
7. Quality of library schools
8. Criteria for excellent library education programs

Only statements and variables that were potentially applicable to undergraduate library and information science education programs internationally were included in the proposed standards.

Survey Instrument

The proposed standards were then incorporated into a survey instrument by the investigator. The instrument was presented to an international panel of experts on education for library and information specialties to obtain their professional judgments on the statements as valid guidelines for library and information science programs. Appendix B contains a copy of the proposed standards with directions for completing the survey. The members of the international panel were asked to indicate their agreement or disagreement with each statement using a five-point Likert-type scale ranging from strongly disagree to strongly agree.

Selection of Evaluators

Selection of the individuals asked to evaluate the proposed standards was based on their meeting at least one of the following criteria:

1. The individuals had written in English about education for library and information specialties in their own country or a country in which they have lived

and worked. The writing had been published within the last four years in a book with international focus or in a professional library journal with an international orientation. The rationale was that writers who published in international professional publications also read these publications and are more aware of international developments in library and information education.

2. The current chairperson and secretary of the International Federation of Library Associations (IFLA), division of education and research, was asked to be an evaluator. Also asked were individuals in the IFLA section on education and training or the IFLA professional board. People with such experience would be expected to be knowledgeable about library education in more than one country.

3. Others requested to serve as evaluators were all current or previous IFLA board members with the IFLA division of education and research in the section on education and training as well as members of the IFLA professional board. A second qualifier was that they have demonstrated their knowledge and experience through writing about library and information science education in any language, with publication in books and/or library journals within the last four years. This qualification suggests that they are knowledgeable about library educa-

tion in their own country.

4. Also included were any individuals highly recommended by a member of the researcher's dissertation advisory committee or by a knowledgeable and experienced person in library education in their country.

If several people from a particular country met these criteria, only two were randomly selected to be members of the international panel. There was one exception: the United Kingdom. If more than six persons from that country met these criteria, the decision was made to include six of them, randomly selected. The United Kingdom has a large number of institutions offering undergraduate degrees in library and information science; their personnel are very active in professional associations and publish extensively in the professional literature, justifying this exception.

The selection process for the international panel resulted in a group of 64 persons, including six IFLA members, from 39 countries around the world. Appendix A provides a list of persons selected on the basis of these criteria. Singh (1993) used an international panel to validate standards for global school media programs.

Pretest of the Instrument

It is an accepted tenet of survey research methodology that all instruments should be pretested in an envi-

ronment similar to that in which the study will be conducted (Busha & Harter, 1980, p. 58). The survey instrument was pretested to increase its validity and reliability before being mailed to the actual participants. It was pretested by a selected group of 10 library school faculty members in colleges and universities in the United States and Canada who were not included in the main study and who had knowledge and expertise in both education for library and information specialties and international librarianship. Their selection was based on the 1993/1994 directory issue of the Journal of Education for Library and Information Science or on a recommendation by the resarcher's dissertation advisory committee. The pre-tested panel members were requested to provide feedback on the content of the instrument which was used to revise the survey.

Data Collection: Administration of the Survey

In order to collect the data for the first part of the study, the pre-tested instrument (the questionnaire containing the proposed standards), a cover letter, a self-addressed envelope, and $1.00 U.S. to cover the postage were mailed to the panel of international experts identified. For the purpose of follow-up, each instrument was coded according to the panelist's name and country. In order to achieve maximum response, a follow-

up technique was used. Six weeks after the mailing of the instrument, a follow-up letter, accompanied by another questionnaire was sent to non-respondents, as response rate can be greatly improved through the use of follow-up procedures (Bailey, 1994).

Panel members were also encouraged to recommend and suggest other statements for each standard. These were to be included in the standards if they were suggested by at least 25% of those who responded. Singh (1993) used 25% as a guide in his study to validate standards for global school media programs. However, none of the statements suggested by panel members met the 25% criterion. Appendix C presents panelists' responses to the proposed standards, including statements suggested by panel members.

Data Analysis

Participants were asked to rate each statement and variable of the proposed standards on a five-point scale; statements and variables with a mean score of 4.0 and above were to be considered generally accepted in the standards, based on the respondents' professional judgment. The data collected from the panel were entered on a Microsoft Excel 5.0 spreadsheet so that basic statistics of mean and standard deviation could be calculated.

Stage 2: Case Study of the Undergraduate Library and Information Science Program in the College of Basic Education in Kuwait

Purpose of the Case Study

The purpose of this case study was to determine the current status of the undergraduate library and information science program in the College of Basic Studies in Kuwait, based on the 14 standards that were developed in the first part of the research. The researcher also intended to examine and evaluate the curriculum of this program, particularly in relation to new developments in the field. This phase of the research provided answers to the research questions of the study, stated earlier.

Rationale for Using the Case Study

The case study method was selected as the appropriate research technique with which to conduct the second part of this investigation. This design was selected because it employs multiple sources of evidence. The case study permits the researcher to make an in-depth study of a limited number of cases, concentrating on specific factors as the focus of a study. Katz (1953) indicated the case study is helpful in obtaining descriptive information about ongoing processes, and is better suited to the study of a single community, group, or organization (p. 57). Guba and Lincoln (1982) claim that

the case study provides the "thick description" so important to naturalistic evaluation (p. 375).

Isaac (1971) said that "compared to a survey which tends to examine a small number of variables across a large sample of units, the case study tends to examine a small number of units across a large number of variables" (p. 21). Isaac and Michael (1981) pointed out that the scope of the case study may encompass an entire life cycle of a social unit or "only a selected segment; it may concentrate upon specific factors" (p. 48).

Robert K. Yin (1989) wrote a guide to case study research methodology as an introduction for beginning researchers stating that this method is best for research that answers questions about "how" or "why" an event happened. He said the "recency of the phenomenon is important," arguing that the case study approach was best suited for answering how and why questions where control over behavioral events was not possible and the phenomenon to be studied was a contemporary one (Yin, 1989, p. 17). Therefore, the case study method seemed ideally suited to the conditions and aims of this research.

A case study enables the researcher to use multiple sources of information, such as document examination, semi-structured interviews, and direct observation. The purpose of using a variety of data sources and collection

methods is to capture as many facts of the experience as possible. Also, the variety of methods provides data and information that define a larger reality than could be achieved by depending on only one method (Yin, 1989, pp. 84-92).

Case Study Population

In discussing case studies and population size and sample, Yin (1989) declared that

> case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a "sample," and the investigator's goal is to expand and generalize theories (analytic generalization) and not enumerate frequencies (statistical generalization). (p. 21)

Thus, the case study focused on the Department of Library and Information Science (DLIS) in the College of Basic Education (CBE) instead of a sample because of the small size of the population. The population consisted of the DLIS head, assistant head, and all full-time faculty members, all nonacademic staff, and all library science library staff. Part-time jobs were not considered because such positions are very rare in the College of Basic Education. In addition, the manager of the Admissions Bureau of the Public Authority for Education and Training (PAAET), the Director of Continuing Education of the PAAET, and the CBE directors of both men's and

women's admissions offices were also included in the population.

Data Collection Methods

The primary techniques of data collection for this part were on-site (a) document examination, (b) semi-structured, open-ended interviews, and (c) direct observation.

Document examination. Documents that were examined were PAAET and CBE bulletins and guidelines, library and information science catalogs, curriculum guide, syllabus and course descriptions, curriculum committee reports, annual and general reports, program materials, organizational records, long-range plans, enrollment and budgetary figures, newsletters, pamphlets, and other documents that were publicly available at DLIS, CBE, and PAAET. Of particular value were any private or unpublished documents that offered otherwise unavailable information about the current status of the library education program, the adequacy of the curriculum at present, and how the curriculum reflects new developments in the information age.

Interview methodology. The interview provides one of the most important sources of case study information (Yin, 1989). Interviews were conducted with the DLIS

head, assistant heads, faculty members, staff, and LIS library staff. The manager of the Admissions Bureau and the Director of Continuing Education, both of the PAAET, and the directors of admissions of both the men's and women's programs of the CBE were also interviewed. The purpose of the semi-structured interviews was to gather information on the current status of the Library and Information Science program at the CBE as well as to determine the adequacy of the LIS curriculum at present, how the curriculum deals with new developments in the field, and what kinds of courses should be added.

Semi-structured questions were developed from the research questions posed in this study and from concepts expressed in the documents and records examined. The semi-structured interview methods provided the researcher with both the objectivity of structured questions and detailed information provided through unstructured questions designed to probe and clarify responses (Borg & Gall, 1983). Unstructured open-ended questions emerged during discussions with persons being interviewed at the case study sites (Patton, 1990). The unstructured format permitted the flexibility needed to examine the complexity of planning and evaluation processes.

Direct observation. Site visits to the case institutions created the opportunity for direct observation,

which served as another source of evidence in the case study research (Yin, 1989). Direct observations were made throughout the CBE and the DLIS visits and included observations of DLIS physical facilities, public service areas, library, equipment, offices, computer lab, student participation and interaction in classrooms, methods of teaching, meetings, the opinions and attitudes of the persons contacted, and the appearance of the students and faculty. Also observed will be any other areas that are brought to the attention of the investigator through interviews or documentation examined. The primary instruments used to record the observations data were sketches and photographs made at each location.

Data Collection: Conducting the Case Study

The researcher was in Kuwait from January 20 to June 21, 1995, to collect the study data. He obtained an official letter from the PAAET (his sponsoring agency) to encourage the cooperation of participants in the study.

The researcher made on-site visits to the Department of Library and Information Science in the College of Basic Education in Kuwait. He gathered and examined the Department of Library and Information Science documents to extract related information about the library education program. He also collected other related documents at CBE and PAAET.

After setting appointment schedules with all participants, the investigator conducted and tape recorded semi-structured interviews. These were held with DLIS administrators and all faculty and staff members in the department and the library science library. The researcher also conducted two interviews at the PAAET headquarters with the manager of the Admissions Bureau of PAAET and the PAAET Director of Continuing Education. Two more interviews were conducted on the CBE men's and women's campuses with the directors of admissions at each campus.

At the beginning of each interview the researcher introduced himself and gave a brief overview of the study. All participants were assured of the confidentiality and anonymity of the research to allow more open and candid responses. Permission was obtained to record interviews for more precise analysis of the data. During the interview, participants were invited to offer any pertinent information that was elicited directly by the interview questions.

Throughout the interviews and document collection efforts, direct observation was made about the physical character of the department, the attitudes of the persons contacted, and the appearance of the students and faculty members.

The examination of documentation aided in validating the results of the data obtained by interviews, observation, and thorough search of relevant literature in Kuwaiti librarianship.

Data Analysis

The analysis in the second part of this study was primarily concerned with the answers to the research questions. Interview responses, comments, and suggestions were translated from Arabic to English and coded by the researcher. The researcher critiqued and analyzed the data and arranged them according to the sequence of the research questions. In addition, he applied the standards developed in the first part of the study to determine the current status of the Library and Information Science program at the College of Basic Education. When the current status did not match at least 75% of the statements in any standard, current status of the program for that standard was considered not acceptable.

Methodological Limitations

The case study methodology is limited by the sources of data. A fundamental limitation is its lack of measures of external validity. Findings of a case study represent a particular case examined and there is nothing in the case study methodology that allows the researcher

to generalize to a larger population. "Single cases offer a poor basis for generalization. . . . This is because case studies rely on analytical generalization" (Yin, 1989, p. 43).

CHAPTER IV

DEVELOPMENT OF THE STANDARDS

This chapter describes the development of global standards for undergraduate library and information science programs for developing countries. The next chapter applies these standards to the undergraduate library and information science program in the College of Basic Education in Kuwait.

Stage 1: Establishing Global Standards for Library and Information Science Programs

The purpose of stage 1 was to formulate global standards for undergraduate library and information science programs in the developing world. This was accomplished by surveying a panel of experts in the field. The results of that survey are reported here.

The survey instrument contained proposed standards extracted from the professional and research literature by the researcher, as explained in Chapter 3. Panelists were requested to rank in importance each statement in the 14 proposed standards, using a scale of 1 to 5. Analysis of the responses is presented first for all panelists, then separated by responses from panelists in developing and developed countries.

On December 15, 1994, questionnaires were mailed to all panel members from 39 countries. After six weeks only 25 (38.4%) of the 64 panelists had responded. Follow-up letters, accompanied by a second questionnaire, were sent to nonrespondents on February 15, 1995. One questionnaire sent to a panelist in Pakistan and another to one in western Australia were returned with the notations "not at this address" and "no forwarding address" written on the envelopes. At the end of April 1995, 50 usable questionnaires had been received from 34 countries, for a return rate of 78%.

Responses were tabulated on a Microsoft Excel 5.0 spreadsheet, and the mean scores and standard deviations were calculated for each statement. According to the scoring decision made earlier, statements with a mean score of 4.0 and above were to be considered generally accepted in the standards.

Figure 4.1 shows the responses and mean scores for all 147 statements in the proposed standards. Only 24 (16.3%) received mean scores lower than 4.0, whereas 123 (83.7%) had mean scores that met the 4.0 criterion.

A breakdown of the 123 statements in the proposed standards shows that 13 (8.8%) had the highest mean scores--between 4.76 and 4.86; 44 (29.9%) scored between 4.5 and 4.74; 38 (25.9%) were between 4.25 and 4.49; and

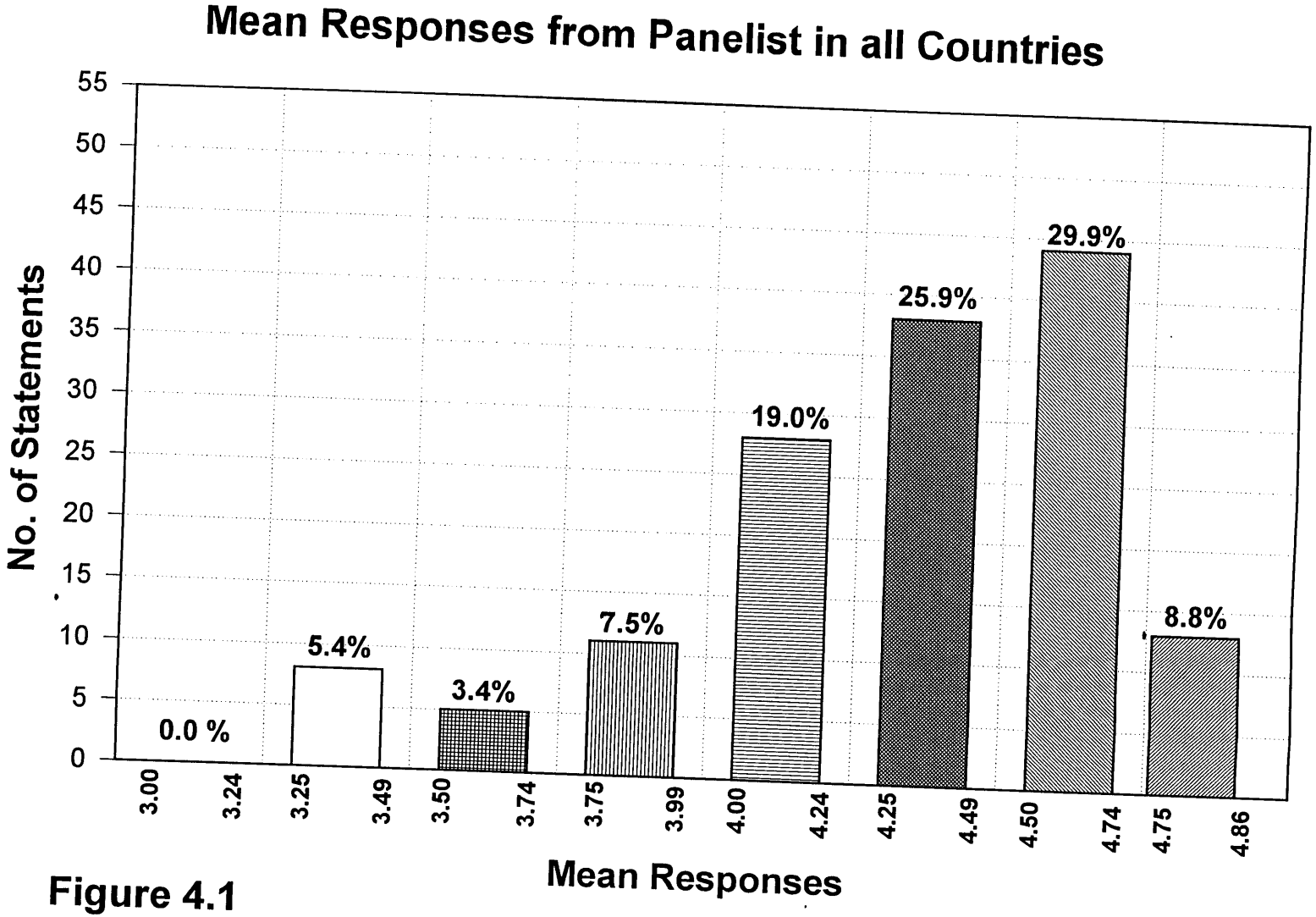

Mean Responses from Panelist in all Countries
No. of Statements
55
50
45
40
35
30
25
20
15
10
5
0
0.0 %
5.4%
3.4%
7.5%
19.0%
25.9%
29.9%
8.8%
3.00
3.24
3.25
3.49
3.50
3.74
3.75
3.99
4.00
4.24
4.25
4.49
4.50
4.74
4.75
4.86
Mean Responses

Figure 4.1

28 (19%) fell between 4.0 and 4.24.

Figure 4.1 also shows that none of the 147 ranked statements had a mean score lower than 3.25. Among the lower scores, 11 statements (7.5%) fell between 3.75 and 3.99; 5 statements were scored between 3.50 and 3.74. The lowest (8, 5.4%) were ranked from 3.25 to 3.49.

Table 4.1 shows the 13 statements ranked highest by mean scores across the proposed standards--falling between 4.76 and 4.86. The mean rankings indicate that respondents considered these statements to be extremely important. Agreement is also confirmed by the standard deviations--with a low standard deviation indicating a small range of raw scores. The three statements ranked highest by mean scores also had the lowest standard deviations, confirming the high agreement among panel members.

Most of the 13 statements in Table 4.1 emphasized that a library school should have the same privileges and prestige as other comparable programs in the parent institution. The three highest ranked statements were from the Administration standard; they were these:

- The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.

- The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.

TABLE 4.1

The highest ranked statements and variables in the proposed standards.
SORTED BY HIGHEST MEAN SCORES

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	4.86	0.35	50
The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	4.84	0.37	50
The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	4.82	0.39	50
The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	4.82	0.44	49
Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	4.82	0.44	49
The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	4.80	0.49	50
The professional library collection should be kept up-to-date with new developments in the field.	4.78	0.46	50
The library school curriculum should be revised periodically, based on present and future needs.	4.78	0.47	49
Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	4.76	0.43	50
The library school should have a clearly defined position in the organizational plan of the institution.	4.76	0.48	50
To produce qualified library personal.	4.76	0.48	49
The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	4.76	0.48	49
The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	4.76	0.52	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

•The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.

Table 4.2 shows the eight statements that ranked lowest by mean scores across the proposed standards, having means between 3.25 and 3.49. The statements also had the highest standard deviations of all the proposed standards. The scores indicate that respondents did not consider the statements to be important. Of the eight, the three with the lowest ranking were these:

- The library school should operate as an independent unit and should achieve academic levels equal to other university schools.
- The core courses should be taken during the first year.
- To determine the types of libraries and librarianship for which personnel will be prepared.

The rejection of these statements indicates the panel's agreement on the importance of not isolating the library school, an issue that has been discussed widely in the U.S. professional literature. It has been influential in the closing of more than a dozen library schools in the United States. In addition to the first bulleted item above, others among the eight lowest-ranked items that addressed this issue were these:

- The library school should have its own building rather than sharing facilities.
- The library science school should have its own library.

TABLE 4.2

The lowest ranked statements and variables in the proposed standards.
SORTED BY LOWEST MEAN SCORES

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	3.25	1.41	48
The Core courses should be taken during the first year.	3.29	1.17	48
To determine the types of libraries and librarianship for which personnel will be prepared.	3.33	1.31	48
Evidence of good health.	3.37	1.07	49
To educate sufficient indigenous personnel at non-professional levels to staff library and information centers.	3.40	1.15	47
The library school should have its own building, rather than sharing facilities.	3.40	1.18	50
The library science school should have its own library.	3.48	1.31	50
An interview with the head of the school or at least two faculty members.	3.49	1.02	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

The following pages present the results for each standard showing the mean scores, standard deviations, and the number of respondents for each statement, ranked from the highest to the lowest mean scores. Recall that for each statement in the proposed standards to be accepted it had to have a mean score of 4.0 or higher.

The first standard was Locus, which had three statements. One of these--"The library school should operate as an independent unit"--received a mean score of only 3.25, indicating that the panel did not consider it important. Table 4.3 shows the two statements that met the criteria of 4.0.

Goals was the second standard, for which five statements were presented to the panel. Table 4.4 shows the four statements that received scores of 4.0 or higher.

The highest ranked statement in this group, based on mean score--"to produce qualified library personnel"--also had the lowest standard deviation, showing that it was very important to the panelists. Within this set of statements, the one that had the lowest mean score and the highest standard deviation was "To provide for the needs of the institutions that will employ their graduates."

The third standard was General Objectives, containing five statements. Table 4.5 shows that the five statements in this grouping all met the mean score criterion.

TABLE 4.3

LOCUS (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The school should affiliate with universities and give instruction at the university level, since this will provide the cultural and academic standards and the teaching facilities needed.	**4.49**	**0.94**	**49**
The School of Library and Information Science should be part of an institution that awards a bachelor degree or equivalent credential.	**4.26**	**1.19**	**50**

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.4

GOALS (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
To produce qualified library personal.	4.76	0.48	49
To offer the type of education and training that will best enable their students to carry on these tasks.	4.65	0.76	48
The library schools must determine their own goals and purposes, which should be clearly stated in a formal document	4.61	0.55	36
To provide for the needs of the institutions that will employ their graduates.	4.02	1.11	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.5

GENERAL OBJECTIVES (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
To prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country.	4.57	0.82	49
To provide an introduction to the basic principles and practices of library services.	4.43	0.84	49
To conduct research in the field of library and information science pertinent to the needs of the country.	4.41	0.91	49
To establish the foundations of librarianship in the country.	4.16	0.92	49
To satisfy the local demand for ideas, and for solutions to professionals' problems.	4.08	0.91	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

Two of the statements--"to prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country" and "to provide an introduction to the basic principles and practices of library services"--were rated high in importance and had low standard deviations, indicating high agreement.

On the other hand, the statement--"to conduct research in the field of library and information science pertinent to the needs of the country"--based on mean scores ranked third of five statements. It had an average mean score of 4.41 and a fairly high standard deviation, suggesting that the panelists place other statements before research.

Specific Objectives was the fourth standard, containing 12 statements. Table 4.6 shows the seven statements that received mean scores of 4.0 or higher.

This set of statements was mixed in levels of importance and agreement. For example, one statement--"to prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers"--showed a high level of importance, with a mean of 4.48, but lower agreement, with a standard deviation of .97. On the other hand, the

TABLE 4.6

SPECIFIC OBJECTIVES (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
To prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers.	4.48	0.97	48
To establish a strong, respected, indigenous profession relevant to the needs of the country, with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian.	4.44	0.77	48
To provide continuing education for practicing librarians to keep up-to-date with new developments.	4.41	0.81	49
To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	4.38	1.02	48
To integrate professional concepts with the social, political, economic, and cultural aspects of the environment.	4.23	0.93	48
To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.	4.02	1.01	47
To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	4.02	1.25	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

statements, "To establish a strong, respected, indigenous profession relevant to the needs of the country with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian," showed agreement among the respondents, but had a lower level of importance. Another statement, "To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country," was not ranked very high and had a fairly high standard deviation. These scores indicate that the panel saw research as a secondary consideration, behind factors like preparing library personnel and providing continuing education.

The fifth standard, Administration, had 13 statements. Table 4.7 shows the 12 statements that obtained mean scores of 4.0 or greater. The proposed standard accorded greatest importance and agreement of all the 147 statements were in this grouping and were discussed in Table 4.1.

Within this group of statements, there was greater vatiation in the levels of agreement. For example, two statements had lower levels of importance but greater diversity in level of agreement:

- The head of the school should prepare annual reports describing principal events of the year in some detail.

TABLE 4.7

ADMINISTRATION (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	4.86	0.35	50
The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	4.84	0.37	50
The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	4.82	0.39	50
The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	4.80	0.49	50
The library school should have a clearly defined position in the organizational plan of the institution.	4.76	0.48	50
The school should prepare a long-range plan for future activity.	4.69	0.51	49
The school planners should determine any needed changes in curriculum, staff size, number and level of student, or physical plant, and should consider extending the program into the post-graduate level at the appropriate time.	4.61	0.76	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.7 --Continued

ADMINISTRATION (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The school should maintain files and documentation of its major features and activities.	**4.51**	**0.65**	**49**
The school should keep records for each student, staff person, and faculty member in the program.	**4.49**	**0.82**	**49**
The head of the school should prepare annual reports describing principal events of the year in some detail.	**4.45**	**0.61**	**49**
The head should have the authority to select students, to recommend faculty and staff, and to design, revise and develop the curriculum, with the cooperation of the faculty.	**4.45**	**0.96**	**49**
The school newsletter or bulletin should publish information on policies, regulations, requirements, and activities concerning the school.	**4.26**	**0.72**	**50**

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

- The head should have the authority to select students, to recommend faculty and staff, and to design, revise, and develop the curriculum, with the cooperation of the faculty.

The sixth standard was Financial Support, with nine statements. Table 4.8 presents the eight statements that had mean scores of 4.0 or greater.

Within this set of statements, there was considerable variation in levels of agreement. For example, one statement--"The general planning and budgeting processes of the institution as a whole should include the school as an integral part"--was ranked high in importance and had a high level of agreement. Two statements, however--"The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units" and "The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school"--were ranked high in importance but had a lower level of agreement among panelists. Another statement--"The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate, and maintain the program"--was ranked important and had a low standard deviation, indicating high agreement. The statement that, while ranked important, had the lowest level of agreement in this grouping was the following: "The school should maintain a separate

TABLE 4.8

FINANCIAL SUPPORT (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	4.82	0.44	49
The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	4.76	0.52	50
The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school.	4.65	0.63	49
The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate and maintain the program.	4.64	0.48	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.8 -- Continued

FINANCIAL SUPPORT (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The school should share in all other supporting funds, such as donations, grants, gifts, and endowments.	**4.61**	**0.67**	**49**
Funds should be available for the salaries of the academic and non-academic staff, and should include professional development, faculty travel, fellowships, and leaves with pay.	**4.58**	**0.64**	**50**
Funds should be available as needed to carry out the school's program of teaching, research, and service, while providing for instructional resources and facilities, research projects, publications, and scholarships.	**4.56**	**0.64**	**50**
The school should maintain a separate annual budget under its own control.	**4.24**	**0.98**	**50**

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

annual budget under its own control."

The seventh standard was Physical Facilities. Seven statements were presented in this standard. Table 4.9 shows the five statements that had mean scores of 4.0 or greater.

The three statements ranked highest also had the lowest standard deviations:

- Instructional and research equipment (for example, audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.

- Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.

- The head of the school should have a private office.

Library was the eighth standard, containing 24 statements. Of these, 22 had a mean score of 4.0; they are presented in Table 4.10. Based on mean scores, the five highest ranked statements were the following:

- The professional library collection should be kept up-to-date with new developments in the field.

- The collection should be easily accessible to the library school.

- Library resources should be sufficient in size and content to support the instructional and research program of the school.

- The library collection should meet the professional standards of library service.

- The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.

TABLE 4.9

PHYSICAL FACILITIES (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	4.76	0.43	50
Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	4.74	0.44	50
The head of the school should have a private office.	4.56	0.54	50
The physical plant should be accessible to handicapped, and provide adequate facilities for those with special needs.	4.34	0.80	50
Each faculty member should have an individual office.	4.30	0.74	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.10

LIBRARY (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The professional library collection should be kept up-to-date with new developments in the field.	4.78	0.46	50
The collection should be easily accessible to the library school.	4.72	0.50	50
Library resources should be sufficient in size and content to support the instructional and research program of the school.	4.70	0.51	50
The library collection should meet the professional standards of library service.	4.66	0.56	47
The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.	4.62	0.60	50
The collection of materials in the field of library and information science should be high-quality, and in large enough quantity.	4.56	0.61	50
The collection should contain sufficient reference and bibliography works to enable library science students to study, exercise, and evaluate the material in reference and subject bibliography courses.	4.52	0.58	50
A specific collection of materials in the field of library and information science should be gathered in print and non-print forms.	4.50	0.74	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.10 -- Continued

LIBRARY (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
Publications of international organizations in the field of library and information science should be in the collection.	4.44	0.54	50
A highly-automated, modern communication system should be provided for the library.	4.43	0.61	49
Professional materials published in other countries should be selectively acquired.	4.40	0.49	50
The library collection should include professional and non-professional resources as needed for general and specialized studies, and suitable for the level and degree of use required.	4.36	0.72	50
An on-line public access catalog or similar modern system should be installed and maintained.	4.35	0.66	49
All library operations should be fully-automated, and should present a qualified model for students in the school to observe.	4.29	0.65	49
At least one professional librarian should be on duty whenever the library is open.	4.28	0.83	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.10 – Continued

LIBRARY (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
Student assistants may be employed for certain tasks.	4.22	0.65	50
The ratio of professional to non-professional staff will vary according to the size and needs of the institution.	4.16	0.62	50
The collection should contain all professional library and information science books and periodicals published in the country.	4.16	0.96	49
The number of volumes per student should be equal to the number of volumes per student in all similar institutions in the country.	4.12	0.82	50
Library materials frequently used by library science students and faculty should be duplicated.	4.12	0.85	50
Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.	4.04	0.95	50
Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.	4.02	0.82	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

These statements were rated highly important, but were mixed in level of agreement among the respondents, as indicated by the standard deviation values. As examples, "Professional materials published in other countries should be selectively acquired" had a high level of agreement but was considered lower than other statements in importance. On the other hand, "A specific collection of materials in the field of library and information science should be gathered in print and non-print forms" ranked high in importance but with a lower level than other statements in agreement. The statement, "The collection should contain all professional library and information science books and periodicals published in the country," was ranked important, but had the lowest level of agreement in this grouping.

The ninth standard was Academic Staff, or faculty. The 14 statements in this group all obtained a mean score of 4.0, as shown in Table 4.11.

The seven highest ranked statements, based on the mean scores, also had the lowest standard deviations, indicating that they were ranked highly important with little disagreement among panelists. These seven are listed below:

TABLE 4.11

ACADEMIC STAFF [FACULTY] (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	4.82	0.44	49
The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	4.70	0.54	50
The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	4.64	0.56	50
The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.	4.62	0.60	50
Regular meetings of the academic staff should be held, at least one per term.	4.54	0.61	50
A variety of backgrounds is desirable on the faculty.	4.52	0.68	50
Preference will be given to those with a Ph.D. degree in library and information science with practical experience.	4.41	0.81	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.11 – Continued

ACADEMIC STAFF [FACULTY] (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The faculty members should not isolate themselves. They should participate in all the activities and programs held in the parent institution.	4.36	0.90	50
The basic minimum qualification required for full-time instructors in the library school will be a graduate professional degree in Library Science (MLS).	4.35	0.95	49
A minimum of three or four faculty members should be working full-time.	4.32	0.89	50
All faculty members should have significant professional experience appropriate to their major fields of instruction.	4.24	0.85	49
A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.	4.08	0.90	50
Teaching experience is desirable, and each staff should teach only courses for which fitted and met his formal study and/or experience.	4.02	1.00	50
A part-time faculty is desirable to assist in carrying out the instructional load, and to connect practical viewpoints to the teaching activity.	4.00	0.90	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

- Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.

- The head of the school should be a full-time faculty member, with administrative, leadership, and teaching responsibilities.

- The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.

- The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.

- Regular meetings of the academic staff should be held, at least one per term.

- A variety of backgrounds is desirable in the faculty.

- Preference will be given to those with a Ph.D. degree in library and information science with practical experience.

Overall, the scores indicate that the panel considered all the statements in this standard to be important.

The tenth standard was Non-Academic Staff. Eight statements were in this standard, of which five had mean scores of 4.0 or greater (see Table 4.12).

The two highest ranked statements had smaller variation in agreement than others in the grouping:

- The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.

- The non-academic staff (i.e., executive secretary, secretaries, clerks, clerical assistants,

TABLE 4.12

NON-ACADEMIC STAFF (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.	4.68	0.51	50
The non-academic staff (i.e. executive secretary, secretaries, clerks, clerical assistants, typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.	4.62	0.49	50
Staff should be adequate to support the head and the faculty in the performance of their responsibilities.	4.54	0.54	50
The non-academic staff should be sufficient in number, experience, and quality, from the highest professional to the lowest clerk.	4.40	0.64	50
A personal secretary should be assigned to the head of the school.	4.00	0.97	50

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.

One statement in this group, which dealt with the minimum number of non-academic staff, obtained a mean score of 3.63 only, suggesting that the panel did not consider this to be important.

Curriculum was the eleventh standard. Of the 23 statements in the standard, 22 had mean scores of 4.0 or higher, as shown in Table 4.13. The statements varied in importance and agreement, For example, "The library school curriculum should be revised periodically, based on present and future needs" was rated high in importance, but showed arelatively low level of agreement among the panelists. Eliciting greater agreement but a lower level of importance was the statement, "The objectives of the curriculum should be carefully expressed and periodically examined." Ranked fairly important but with the lowest level of agreement in this standard was the statement, "All students will be required to take library science core and advanced courses, in addition to liberal arts courses." Conversely, a statement that was not ranked high in importance but had a fairly high standard deviation was this: "Each student should be assigned a personal guidance adviser in the program."

Overall, the curriculum statements the panel found

TABLE 4.13

CURRICULUM (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	SD	N
The library school curriculum should be revised periodically, based on present and future needs.	4.78	0.47	49
The objectives of the curriculum should be carefully expressed and periodically examined.	4.74	0.44	50
The curriculum should include the basic courses in library and information science.	4.73	0.49	49
The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	4.68	0.51	50
The curriculum should emphasize fundamental principles, applications, and processes for all types of library and information centers, and the services they provide.	4.66	0.56	50
The school should have a written syllabus or course description for the entire curriculum.	4.65	0.52	49
The school should maintain and improve the quality of teaching by introducing new methods and techniques.	4.63	0.53	49
Teaching methods should include the following: lectures, seminars, research, case studies, discussion groups, practical work, field work, oral and written tests, and practical training.	4.61	0.61	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.13 -- Continued

CURRICULUM (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	SD	N
Implementing the objectives of the library school is the most important principle in designing the curriculum.	4.59	0.54	49
The curriculum should attempt to provide a foundation for graduate study in the field of library and information science.	4.59	0.57	49
The curriculum should show evidence of a proper sequence of courses, and a balance among units of instruction.	4.58	0.54	48
Modern aids to teaching should be used in the school.	4.53	0.58	49
Each course in the curriculum shall have an updated description.	4.51	0.65	49
A written syllabus that identifies each student's responsibilities, and the form of evaluation, should be made available to students in each course.	4.49	0.58	49
The curriculum of the library school should cover at least the following Core courses: classification and cataloging, reference materials and services, library management, collection development, computers in libraries, introduction to library and information science, and technical services.	4.47	0.79	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.13 -- Continued

CURRICULUM (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	SD	N
The content of the library school curriculum should include courses devoted to information science and specialization.	4.43	0.65	49
All instruction presented by the library school should be at the university level.	4.40	0.82	48
Each school must determine the quality and quantity of the required and elective courses that each student needs to pass.	4.33	0.75	49
The curriculum should be flexible in providing different types and levels of learning experiences in the program.	4.33	0.83	48
All students will be required to take library science Core and advanced courses, in addition to liberal arts courses.	4.27	0.92	48
The curriculum should also cover subject specialization, elective courses, and cultural courses.	4.23	0.69	48
Each student should be assigned a personal guidance adviser in the program.	4.00	0.84	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

highly important, based on mean scores, involved examining and revising the library school curriculum periodically; including basic courses in LIS, practical training, field trips, for all types of library and information centers; providing a written syllabus; and improving the quality of teaching.

Only one statement in the standard was not considered highly important: "The core courses should be taken during the first year." Its mean score was only 3.29.

The twelfth standard was Continuing Education, with seven statements. Table 4.14 shows the means and standard deviations for the seven, all of which had mean scores of at least 4.0.

The two highest ranked statements, based on the mean scores, also had the lowest standard deviations. Thus it can be inferred that these statements were considered highly important, with a high level of agreement among panelists. The two statements were these:

- Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.
- The school should issue a certification of completion for those who complete the continuing education session.

Admission of Students was the thirteenth standard, with 10 statements. Table 4.15 presents the five statements that had mean scores of 4.0 or higher. This group

TABLE 4.14

CONTINUING EDUCATION (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.	4.37	0.60	49
The school should issue a certificate of completion for those who complete the continuing education session.	4.32	0.65	50
A program of continuing education in library and information science should have its own specific objectives and budget.	4.32	0.68	50
Continuing education should include both formal and informal learning situations, and need not to be limited to subjects' offerings in library school.	4.27	0.67	49
The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.	4.27	0.67	49
Distance education, interactive video, and other technologies should be provided to reach practicing librarians in rural and distant areas.	4.20	0.73	50
The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain within one position category or are preparing to move into a higher one.	4.02	0.92	49

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.15

ADMISSION OF STUDENTS (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
Graduation from an accredited secondary school with a strong academic record.	4.22	0.92	49
A strong desire and capability of working with people of different backgrounds.	4.18	0.83	49
Problem solving ability.	4.13	0.79	48
High standards of scholarship and broad interests.	4.10	0.74	49
Competence in the English language.	4.02	0.98	48

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

of statements had considerable variation in levels of importance and agreement. For example, the statement, "Graduation from an accredited secondary school with a strong academic record," was high in importance but relatively low in agreement. The statement, "High standards of scholarship and broad interests," showed high agreement, but was considered less important than other statements. "Competence in the English language" was not ranked high in importance and had the lowest level of agreement in this standard.

The last standard was Completion Requirements. Seven statements were presented in this group, of which five met the 4.0 criterion. These are presented in Table 4.16.

Among those that met the criterion, "The program's requirements should not be lower than the requirements of a comparable school within the parent institution" was rated high in importance but had a somewhat lower level of agreement. On the other hand, the statement, "Students must complete all the requirements before being granted the bachelor degree certificate," had greater agreement but a lower level of importance. The statement, "The student is responsible for maintaining a minimum academic grade average consistent with the standard of university of graduation" was not ranked high in importance and had the lowest level of agreement in this standard.

TABLE 4.16

COMPLETION REQUIREMENTS (SORTED BY MEAN SCORES)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	**4.76**	**0.48**	**49**
Students must complete all the requirements before being granted the bachelor degree certificate.	**4.73**	**0.45**	**49**
Students and prospective students should have a full understanding of all the requirements.	**4.68**	**0.47**	**47**
A written statement of all the requirements for completion of the degree should be available to the students.	**4.63**	**0.53**	**49**
The student is responsible for maintaining a minimum academic grade average consistent with the standard of university for graduation.	**4.60**	**0.58**	**47**

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

As explained earlier, a mean score of 4.0 was set as the criterion for general acceptability for statements of the proposed standards. Accordingly, 123 statements were chosen as global standards for undergraduate library and information science programs in the developing countries.

Responses Reported by Developed and Developing Countries

This part of stage 1 presents the same data reported earlier but separated here by responses from developed and developing countries. In the original mailing of questionnaires, 32 were sent to panelists in 25 developing countries; of these, 26 were returned from 19 developing countries, a return rate of 81.3%. Also, 32 instruments were sent to panelists in 14 developed countries. This mailing yielded 24 usable questionnaires from 14 developed countries, a return rate of 75%.

The responses from the two groups were tabulated separately and recorded on a Microsoft Excel 5.0 spreadsheet, with mean scores and standard deviations calculated for each set of responses. These results are presented in Appendices D and E.

The data separated by developed and developing countries are shown in this section for comparison only. The standards in stage 2 that are applied to the undergraduate library and information science department in

the College of Basic Education in Kuwait are drawn from the total responses, with no distinction made between responses from the two groups of countries.

As explained earlier, a statement or variable was required to have a mean score of 4.0 or higher to be accepted as part of a standard. Figure 4.2 shows the mean responses from panelists in the developing countries for all 147 statements and variables in the proposed standards. Only 17 statements (11.6%) failed to attain the 4.0 criterion, with 130 statements (88.4%) achieving acceptance as part of the standards.

Very high mean scores--between 4.75 and 4.92--were recorded for 30 (20.4%) of the 147 statements; 48 statements (32.7%) had scores between 4.5 and 4.74; 28 statements (19%) had mean scores between 4.25 and 4.49; and 24 (16.3%) had scores between 4.0 and 4.24. Of the 17 statements that did not achieve the required 4.0 mean score, slightly more than half (10, or 6.8%) had means between 3.75 and 3.99.

Responses and means from panelists in the developed countries are shown in Figure 4.3. These data show that 106 (72.1%) of the statements achieved the criterion mean score of 4.0, indicating that panelists considered them important enough to be included in the standards. Of these, only 7 statements (4.8%) achieved the highest mean scores--between 4.75 and 4.92; slightly more than half the

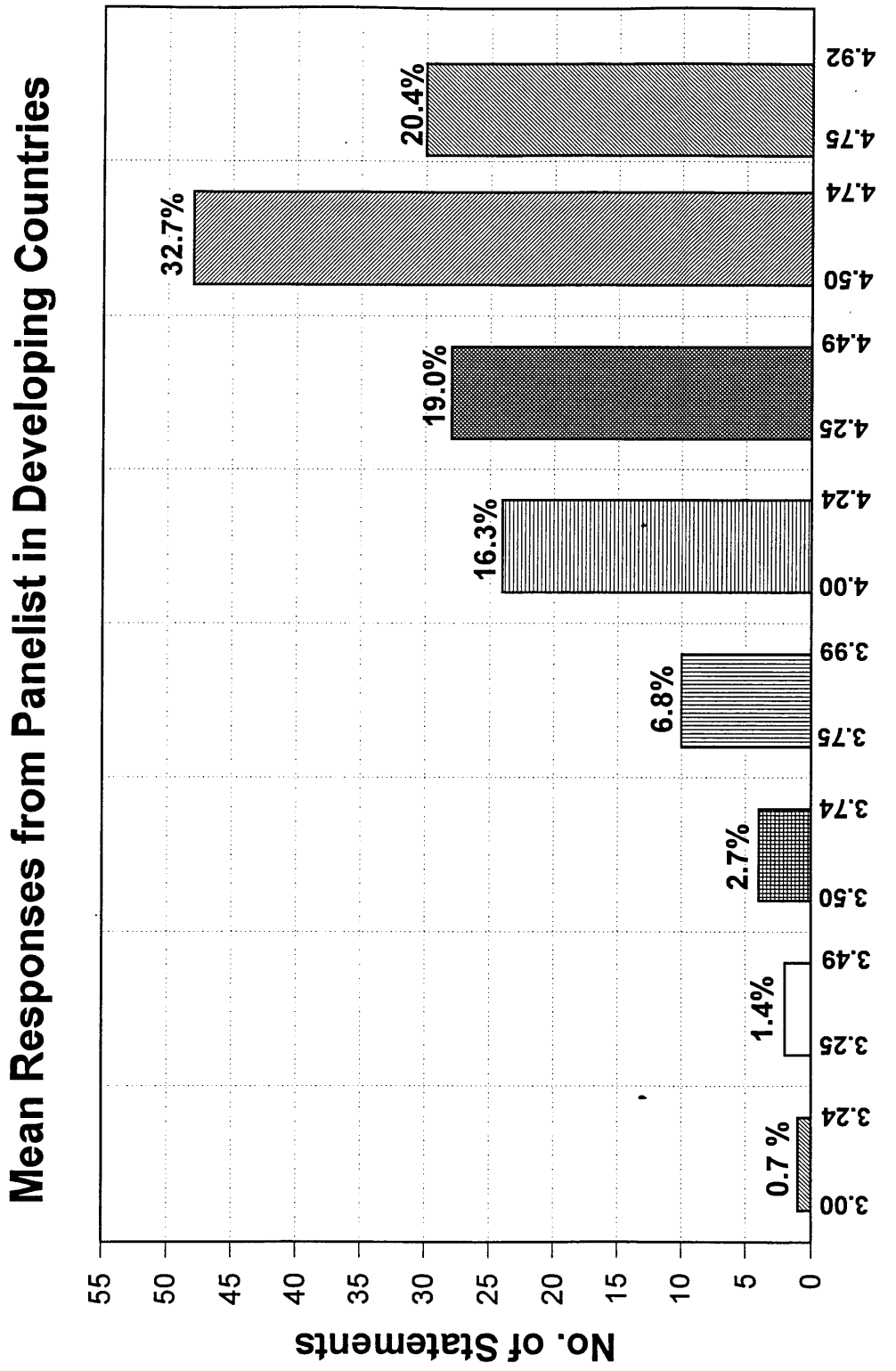

Mean Responses from Panelist in Developing Countries
No. of Statements
0
5
10
15
20
25
30
35
40
45
50
55
0.7 %
1.4%
2.7%
6.8%
16.3%
19.0%
32.7%
20.4%
3.00
3.24
3.25
3.49
3.50
3.74
3.75
3.99
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4.24
4.25
4.49
4.50
4.74
4.75
4.92
Mean Responses

Figure 4.2

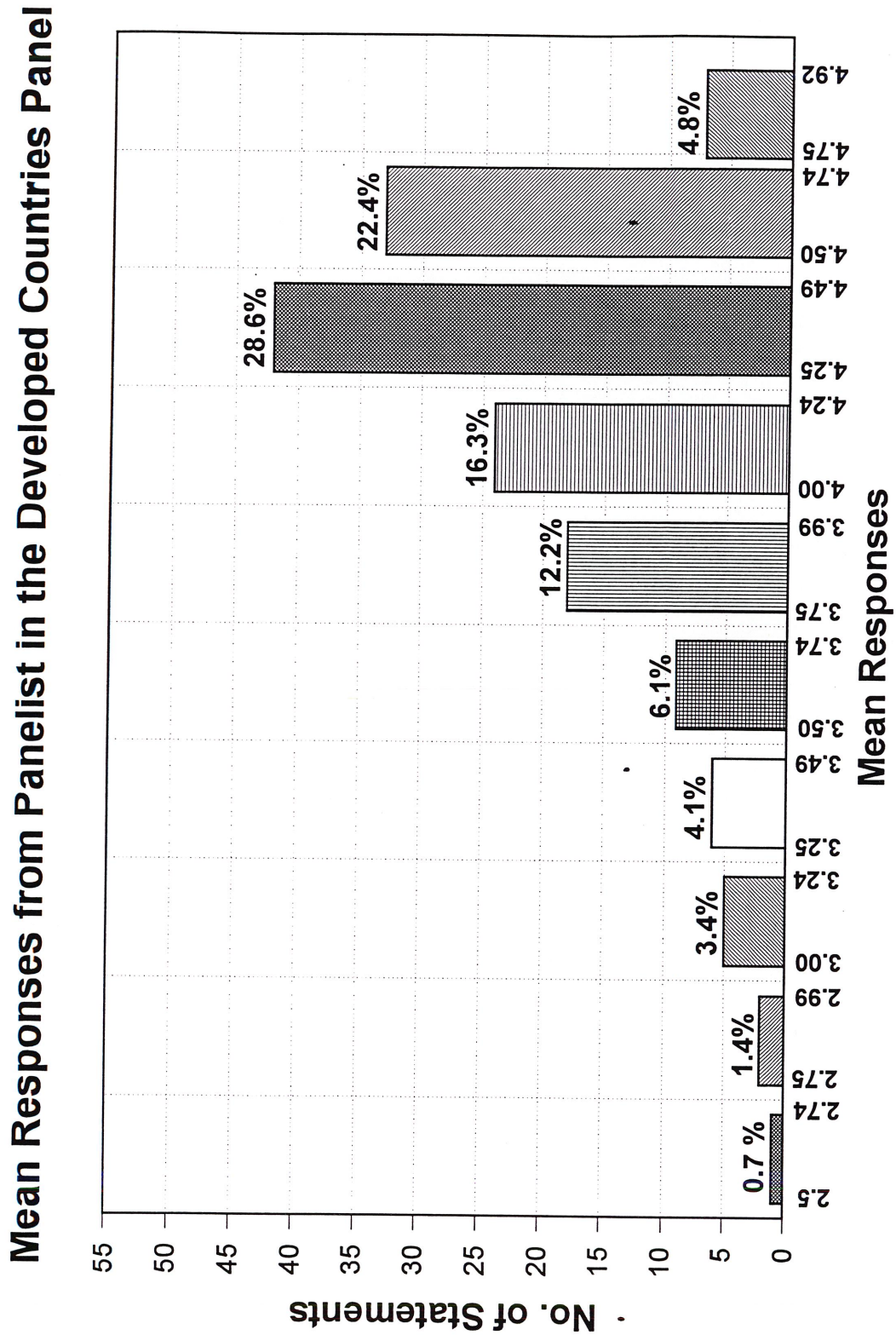

Mean Responses from Panelist in the Developed Countries Panel
No. of Statements
Mean Responses
0
5
10
15
20
25
30
35
40
45
50
55
0.7 %
1.4%
3.4%
4.1%
6.1%
12.2%
16.3%
28.6%
22.4%
4.8%
2.5
2.74
2.75
2.99
3.00
3.24
3.25
3.49
3.50
3.74
3.75
3.99
4.00
4.24
4.25
4.49
4.50
4.74
4.75
4.92

Figure 4.3

statements (75, or 51%) had mean scores between 4.25 and 4.74; 24 statements (16.3%) scored between 4.0 and 4.24.

For this set of responses, 41 statements (27.9%) failed to achieve the criterion mean score of 4.0 and thus were not considered by panelists from developed countries to be important enough to qualify as part of the standards. Three of these (2.1%) had mean scores lower than 3.0.

Highest Ranked Statements and Variables

Table 4.17 shows the highest ranked statements and variables from panelists in developing countries. Included are mean scores, standard deviations, and the number of respondents for each statement, ranked by mean scores.

With rankings based on mean scores, the 10 statements ranked highest by respondents from developing countries had the lowest standard deviations for this group of respondents, indicating high agreement among the panelists. Also, the 26 panelists represented in this group responded to all 10 items.

According to rank by mean score, the following was the most important statement: "Faculty in the school should hold equivalent titles and have the same prestige and privileges as those of the faculty in other units of the institution." It had the highest mean score (4.92)

TABLE 4.17

The highest ranked statements and variables across the proposed standards from Developing Countries Panel Responses. (Sorted by Mean Scores)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	4.92	0.27	26
The curriculum should include the basic courses in library and information science.	4.88	0.33	26
The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	4.85	0.37	26
The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	4.85	0.37	26
The professional library collection should be kept up-to-date with new developments in the field.	4.85	0.37	26
The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	4.85	0.37	26
The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	4.85	0.37	26
The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	4.85	0.37	26
The library school curriculum should be revised periodically, based on present and future needs.	4.85	0.37	26
To produce qualified library personal.	4.85	0.46	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

and a very low standard deviation (0.27). Seven of the statements shown in Table 4.17 had the same level of importance and agreement: means of 4.85 and a standard deviation of 0.37.

Slightly more than half (6 of 10) these statements were drawn from only two standards: Academic Staff, and Curriculum. In addition to the highest ranked statement shown above, which is from the Academic Staff standard, the following statements also from that standard were among the highest ranked 10:

> The head of the school should be a full-time faculty member, with administrative, leadership, and teaching responsibilities.
>
> The total number of full- and part-time staff should be adequate in number and competence to teach the courses being offered at the school, and to give individual attention to all the students.

From the Curriculum standard, the following statements were included:

> The curriculum should include the basic courses in library and information science.
>
> The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.
>
> The library school curriculum should be revised periodically, based on present and future needs.

Table 4.18 shows the highest ranked statements and variables from the developed countries. This table contains mean scores, standard deviations, and the number of respondents for each statement, sorted by mean scores.

TABLE 4.18

The highest ranked statements and variables across the proposed standards from Developed Countries Panel Responses. (Sorted by Mean Scores)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	4.92	0.28	24
The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	4.88	0.34	24
The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	4.83	0.38	24
The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	4.79	0.51	24
The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	4.78	0.52	23
Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	4.75	0.44	24
The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	4.75	0.53	24
To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	4.73	0.46	22

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

The eight highest ranked statements from the developed countries showed a broader spread among mean values than was found among the highest ranked statements from developing countries. The three highest ranked statements had the lowest standard deviations, indicating a high level of agreement among respondents. These statements were the following:

> The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.
>
> The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.
>
> The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.

These three plus the fourth-ranked statement, "The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report," were all from the Administration standard.

Two other statements shown in Table 4.18 had a high level of agreement but a lower level of importance, compared to the statements from developing countries shown in Table 4.17:

> Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.

> To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.

Within the five highest ranked statements for the developing and developed groups, two statements were common to both groups:

> The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.
>
> The general planning and budgeting processes of the institution as a whole should include the school as an integral part.

On the other hand, panelists from the two groups of countries disagreed on the importance of and agreement about this statement:

> To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.

Respondents from developed countries considered the statement very important, with a high level of agreement. These respondents accorded the statement a mean score of 4.73, with a standard deviation of 0.46. In the developing countries, by contrast, respondents considered the statement fairly important but recorded a relatively low level of agreement. For them, the statement's mean score was 4.08, with a standard deviation of 1.26. These findings suggest that the research issue is more important in the developed than in the developing countries (see Tables 4.17 and 4.18).

Lowest Ranked Statements and Variables

The statements and variables that were ranked lowest by respondents from developing countries are shown in Table 4.19. This table also contains the means, standard deviations, and numbers of respondents for each of these statements, sorted by mean scores.

No statement had a mean score lower than 3.23, but the level of disagreement about the statements was rather high, as shown by the standard deviations. With a criterion for acceptance of 4.0, these statements were not considered important enough to be included in the standards. The lowest ranked statements were these:

> The core courses should be taken during the first year.
>
> The library school should operate as an independent unit and should achieve academic levels equal to other university schools.
>
> To offer training for leadership in the profession of library and information science.

Table 4.20 shows the lowest ranked statements from panelists in the developed countries, along with mean scores, standard deviations, and numbers of respondents for each item. These seven statements had means ranging from 2.67 to 3.13 and wide diversity in the level of agreement.

Two statements had not only low mean scores (3.09) but also the highest standard deviations (1.44), indicat-

TABLE 4.19

The lowest ranked statements and variables across the proposed standards from Developing Countries Panel Responses. (Sorted by Mean Scores)

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The Core courses should be taken during the first year.	3.23	1.27	26
The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	3.40	1.38	25
To offer training for leadership in the profession of library and information science.	3.46	1.36	26
To determine the types of libraries and librarianship for which personnel will be prepared.	3.56	1.16	25
To establish consultant services for librarianship in the country.	3.65	1.20	26
The library school site should be located in the main library building of the parent institution, or close to it.	3.65	1.29	26
To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	3.65	1.32	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.20

The lowest ranked statements and variables across the proposed standards from Developed Countries Panel Responses. Sorted by Mean Scores

STATEMENTS AND VARIABLES	MEAN	S.D.	N
The library school should have its own building, rather than sharing facilities.	2.67	0.96	24
To educate sufficient indigenous personnel at non-professional levels to staff library and information centers.	2.71	1.01	21
Evidence of good health.	2.87	0.92	23
Quality of letters of reference.	3.04	0.82	23
The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	3.09	1.44	23
To determine the types of libraries and librarianship for which personnel will be prepared.	3.09	1.44	23
The library science school should have its own library.	3.13	1.30	24

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

ing that the panelists did not consider them to be important and also had considerable disagreement about them. The statements were these:

> The library school should operate as an independent unit, and should achieve academic levels equal to other university schools.
>
> To determine the types of libraries and librarianship for which personnel will be prepared.

The lowest mean score occurred for this statement--"The library school should have its own building rather than sharing facilities"--which also had a high standard deviation.

A comparison of data from Tables 4.19 and 4.20 shows that panelists from developing and developed countries agreed on two statements among the six lowest ranked statements and variables from each group:

> The library school should operate as an independent unit and should achieve academic levels equal to other university schools.
>
> To determine the types of libraries and librarianship for which personnel will be prepared.

There was not always agreement between the two groups of panelists, however. An example is the statement, "The library school should have its own building rather than sharing facilities." Among the developed countries, this statement had the lowest mean score of all the statements (2.67); its standard deviation (0.96) showed rather high disagreement. The panelists from

developing countries ranked this statement as important, with a mean score of 4.08 and a similar standard deviation (0.93).

Another examples involves two other statements:

> To offer training for leadership in the profession of library and information science.
>
> To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.

The rankings of these statements by panelists from the developing countries were not high enough to meet the criterion for acceptance as standards: 3.46 and 3.65, respectively, with standard deviations of 1.38 and 1.32. Respondents from the developed countries, however, ranked these statements high enough to be considered part of the standards, with mean scores of 4.45 and 4.43, respectively. The standard deviations were 1.06 and 1.04.

Analysis of Responses Presented by Developed Countries, Developing Countries, and Total Responses

This section presents the analysis of responses for each of the proposed standards, grouped by developed countries, by developing countries, and then by total responses. The accompanying tables present for each of the three groupings the mean scores, standard deviations, and the number of responses for each item.

Standard 1: Locus

Table 4.21 shows the three statements presented to panel members for the standard concerned with locus. Respondents from both developed and developing countries were in agreement for two of the statements, registering similar levels of importance and agreement. They disagreed on one: "The school of library and information science should be part of an institution that awards a bachelor's degree or equivalent credential." Respondents from developing countries ranked this statement as important enough to meet the criterion for acceptance as part of the standards; the respondents from developed countries did not. Also, the level of agreement was higher among respondents from developing countries. When responses of the two groups were combined, the resulting mean score was 4.26 (with a standard deviation of 1.19), which was high enough for the statement's inclusion among the accepted standards.

Standard 2: Goals

The five statements that made up the standard for goals are shown in Table 4.22. There was agreement among the respondents from developing and developed countries that three statements were important enough for inclusion and that one statement was not. The accepted statements were the following:

TABLE 4.21

Comparison of Locus results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The School of Library and Information Science should be part of an institution that awards a bachelor degree or equivalent credential.	4.26	1.19	50	3.92	1.41	24	4.58	0.86	26
The school should affiliate with universities and give instruction at the university level, since this will provide the cultural and academic standards and the teaching facilities needed.	4.49	0.94	49	4.38	1.01	24	4.60	0.87	25
The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	3.25	1.41	48	3.09	1.44	23	3.40	1.38	25

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.22

Comparison of Goals results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The library schools must determine their own goals and purposes, which should be clearly stated in a formal	4.61	0.55	36	4.47	0.61	19	4.76	0.44	17
To produce qualified library personal.	4.76	0.48	49	4.65	0.49	23	4.85	0.46	26
To determine the types of libraries and librarianship for which personnel will be prepared.	3.33	1.31	48	3.09	1.44	23	3.56	1.16	25
To provide for the needs of the institutions that will employ	4.02	1.11	49	3.87	1.01	23	4.15	1.19	26
To offer the type of education and training that will best enable their students to carry on these tasks.	4.65	0.76	48	4.68	0.57	22	4.62	0.90	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

> The library schools must determine their own goals and purposes, which should be clearly stated in a formal document.
>
> To produce qualified library personnel.
>
> To offer the type of education and training that will best enable their students to carry on these tasks.

The statement rejected by both groups was this:

> To determine the types of libraries and librarianship for which personnel will be prepared.

The statement in this standard that sparked disagreement was "To provide for the needs of the institutions that will employ their graduates." Participants from developing countries considered this to be important; the other group did not. The combined responses, however, gave the statement a mean score higher than 4.0, allowing it to be included in the final set of standards.

Standard 3: General Objectives

The five statements in the standard addressing general objectives are shown in Table 4.23. The only statement on which there was disagreement was "To establish the foundations of librarianship in the country"; it attained a mean score of 3.96 from responses of panelists in the developed countries, a score just below the criterion for acceptance. When

TABLE 4.23

Comparison of General Objectives results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
To prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country.	4.57	0.82	49	4.48	0.79	23	4.65	0.85	26
To establish the foundations of librarianship in the country.	4.16	0.92	49	3.96	1.02	23	4.35	0.80	26
To satisfy the local demand for ideas, and for solutions to	4.08	0.91	49	4.00	0.80	23	4.15	1.01	26
To provide an introduction to the basic principles and practices	4.43	0.84	49	4.43	0.73	23	4.42	0.95	26
To conduct research in the field of library and information science pertinent to the needs of the country.	4.41	0.91	49	4.52	0.90	23	4.31	0.93	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

responses were combined, however, the resulting mean score was 4.16, placing this statement among the acceptable items.

Standard 4: Specific Objectives

Twelve statements and variables were proposed in the standard for specific objectives, as shown in Table 4.24. There was difference of opinion between the panelists from developed and developing countries on several of these items.

Unlike the respondents from developing countries, the panelists from the developed countries considered the following three statements to be important:

> To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.
>
> To offer training for leadership in the profession of library and information science.
>
> To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.

Conversely, respondents from the developing countries considered the following statement to be important:

> To assist each library school in determining and formulating specific objectives to provide for the needs of library personnel in the country.

TABLE 4.24

Comparison of Specific Objectives results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
To prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers.	4.48	0.97	48	4.09	1.27	22	4.81	0.40	26
To assist each library school in determining and formulating specific objectives to provide for the needs of library personnel in the country.	3.87	0.95	47	3.52	0.98	21	4.15	0.83	26
To educate sufficient indigenous personnel at non-professional levels to staff library and information centers.	3.40	1.15	47	2.71	1.01	21	3.96	0.96	26
To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	4.02	1.25	49	4.43	1.04	23	3.65	1.32	26
To offer training for leadership in the profession of library and information science.	3.92	1.32	48	4.45	1.06	22	3.46	1.36	26
To provide continuing education for practicing librarians to keep up-to-date with new developments.	4.41	0.81	49	4.48	0.59	23	4.35	0.98	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.24 –Continued

Comparison of Specific Objectives results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.	4.02	1.01	47	4.14	0.77	22	3.92	1.19	25
To sponsor international conferences and seminars in the field of library and information science(i.e. IFLA, UNESCO).	3.75	1.23	48	3.73	1.32	22	3.77	1.18	26
To integrate professional concepts with the social, political, economic, and cultural aspects of the environment.	4.23	0.93	48	4.32	0.65	22	4.15	1.12	26
To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	4.38	1.02	48	4.73	0.46	22	4.08	1.26	26
To establish a strong, respected, indigenous profession relevant to the needs of the country, with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian.	4.44	0.77	48	4.48	0.73	23	4.40	0.82	25
To establish consultant services for librarianship in the country.	3.76	1.01	49	3.87	0.76	23	3.65	1.20	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

Responses from the developed countries resulted in a mean score of 3.52 for this statement, a score below the criterion for acceptance. When responses for all 12 statements in the standard were considered together, 7 of the 12 achieved the mean score necessary for acceptance.

Standard 5: Administration

The administration standard comprised 13 statements, only one of which elicited some disagreement between the two groups of respondents: "The head of the school should make all decisions, with consultation among the staff." The mean score for this statement was 3.63 among responses from developed countries. When responses of both groups were combined, the mean score was 3.98, which was below the criterion for acceptance. This result indicates that the panel as a whole did not consider this statement important enough for inclusion in the standards (see Table 4.25).

Standard 6: Financial Support

Among the nine statements proposed for the financial support standard, two had mixed responses (see Table 4.26):

> The school should receive one hundred percent of its financial support from the institution with which it is affiliated.

TABLE 4.25

Comparison of Administration results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	4.82	0.39	50	4.88	0.34	24	4.77	0.43	26
The library school should have a clearly defined position in the organizational plan of the institution.	4.76	0.48	50	4.71	0.55	24	4.81	0.40	26
The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	4.86	0.35	50	4.92	0.28	24	4.81	0.40	26
The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	4.80	0.49	50	4.79	0.51	24	4.81	0.49	26
The head should have the authority to select students, to recommend faculty and staff, and to design, revise and develop the curriculum, with the cooperation of the faculty.	4.45	0.96	49	4.22	1.17	23	4.65	0.69	26
The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	4.84	0.37	50	4.83	0.38	24	4.85	0.37	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.25 –Continued

Comparison of Administration results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The head of the school should make all decisions, with consultation among the staff.	3.98	1.08	50	3.63	1.17	24	4.31	0.88	26
The school newsletter or bulletin should publish information on policies, regulations, requirements, and activities concerning the school.	4.26	0.72	50	4.08	0.78	24	4.42	0.64	26
The head of the school should prepare annual reports describing principal events of the year in some detail.	4.45	0.61	49	4.26	0.69	23	4.62	0.50	26
The school should maintain files and documentation of its major features and activities.	4.51	0.65	49	4.35	0.78	23	4.65	0.49	26
The school should keep records for each student, staff person, and faculty member in the program.	4.49	0.82	49	4.22	1.04	23	4.73	0.45	26
The school should prepare a long-range plan for future activity.	4.69	0.51	49	4.57	0.59	23	4.81	0.40	26
The school planners should determine any needed changes in curriculum, staff size, number and level of student, or physical plant, and should consider extending the program into the post graduate level at the appropriate time.	4.61	0.76	49	4.48	0.99	23	4.73	0.45	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

> The school should maintain a separate annual budget under its own control.

Panelists from the developing countries considered both statements important enough for inclusion; respondents from the developed countries did not. When responses for the two statements were combined, only the statement addressing the annual budget received a mean score high enough to be included in the standards.

Standard 7: Physical Facilities

As shown in Table 4.27, the physical facilities standard had seven proposed statements. One of these did not attain the required 4.0 mean score with either group of respondents: "The library school site should be located in the main library building of the parent institution, or close to it."

On another, there was a marked difference of opinion: "The library school should have its own building rather than sharing facilities." This statement received the lowest mean score in the entire questionnaire (2.67) for participants from developed countries. Participants from developing countries, however, gave it a mean score of 4.08. It is interesting that the levels of agreement for both groups, indicated by the standard deviation, were quite similar: 0.96 for the developed countries and

TABLE 4.26

Comparison of Financial Support results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The school should receive one hundred percent of its financial support from the institution with which it is affiliated.	3.77	1.13	48	3.36	1.22	22	4.12	0.95	26
The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate and maintain the program.	4.64	0.48	50	4.54	0.51	24	4.73	0.45	26
The school should maintain a separate annual budget under its own control.	4.24	0.98	50	3.83	1.13	24	4.62	0.64	26
The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school.	4.65	0.63	49	4.52	0.73	23	4.77	0.51	26
The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	4.76	0.52	50	4.75	0.53	24	4.77	0.51	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.26 --Continued

Comparison of Financial Support results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
Funds should be available as needed to carry out the school's program of teaching, research, and service, while providing for instructional resources and facilities, research projects, publications, and scholarships.	4.56	0.64	50	4.38	0.77	24	4.73	0.45	26
Funds should be available for the salaries of the academic and non-academic staff, and should include professional development, faculty travel, fellowships, and leaves with pay.	4.58	0.64	50	4.46	0.66	24	4.69	0.62	26
The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	4.82	0.44	49	4.78	0.52	23	4.85	0.37	26
The school should share in all other supporting funds, such as donations, grants, gifts, and endowments.	4.61	0.67	49	4.52	0.73	23	4.69	0.62	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.27

Comparison of Physical Facilities results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The library school should have its own building, rather than sharing facilities.	3.40	1.18	50	2.67	0.96	24	4.08	0.93	26
The library school site should be located in the main library building of the parent institution, or close to it.	3.52	1.23	50	3.38	1.17	24	3.65	1.29	26
Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	4.74	0.44	50	4.75	0.44	24	4.73	0.45	26
The head of the school should have a private office.	4.56	0.54	50	4.54	0.51	24	4.58	0.58	26
Each faculty member should have an individual office.	4.30	0.74	50	4.25	0.68	24	4.35	0.80	26
Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	4.76	0.43	50	4.71	0.46	24	4.81	0.40	26
The physical plant should be accessible to handicapped, and provide adequate facilities for those with special needs.	4.34	0.80	50	4.38	0.77	24	4.31	0.84	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

combined, the resulting mean score was not high enough for the statement to be included in the standards.

Standard 8: Library

The 24 proposed statements for the library standard are shown in Table 4.28. The two groups of respondents accepted 20 of these and rejected one. On the remaining three statements, shown below, there was some disagreement:

> Selection of materials for the field of library and information should be a joint responsibility between the library professional staff and the library school faculty, with the final decisions made by the library staff.
>
> Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.
>
> Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.

Mean scores high enough for these three statements to be included were recorded for panelists from the developing countries, but not for those from developed countries. When the responses were combined, one statement failed to meet the criterion for acceptance--the item addressing joint responsibility for selection of materials.

TABLE 4.28

Comparison of Library results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The library science school should have its own library.	3.48	1.31	50	3.13	1.30	24	3.81	1.27	26
The library collection should meet the professional standards of library service.	4.66	0.56	47	4.57	0.68	21	4.73	0.45	26
The library collection should include professional and non-professional resources as needed for general and specialized studies, and suitable for the level and degree of use required.	4.36	0.72	50	4.21	0.78	24	4.50	0.65	26
Library resources should be sufficient in size and content to support the instructional and research program of the school.	4.70	0.51	50	4.67	0.48	24	4.73	0.53	26
The collection of materials in the field of library and information science should be high-quality, and in large enough quantity.	4.56	0.61	50	4.46	0.72	24	4.65	0.49	26
A specific collection of materials in the field of library and information science should be gathered in print and non-print forms.	4.50	0.74	50	4.50	0.78	24	4.50	0.71	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.28 –Continued

Comparison of Library results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
Selection of materials for the field of library and information science should be a joint responsibility between the library professional staff and the library school faculty, with the final decisions made by the library staff.	3.94	1.09	49	3.75	1.07	24	4.12	1.09	25
The professional library collection should be kept up-to-date with new developments in the field.	4.78	0.46	50	4.71	0.55	24	4.85	0.37	26
The collection should contain all professional library and information science books and periodicals published in the country.	4.16	0.96	49	4.13	1.01	23	4.19	0.94	26
Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.	4.04	0.95	50	3.92	1.02	24	4.15	0.88	26
Professional materials published in other countries should be selectively acquired.	4.40	0.49	50	4.33	0.48	24	4.46	0.51	26
Publications of international organizations in the field of library and information science should be in the collection.	4.44	0.54	50	4.25	0.53	24	4.62	0.50	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.28 – Continued

Comparison of Library results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.	4.02	0.82	50	3.96	0.86	24	4.08	0.80	26
Library materials frequently used by library science students and faculty should be duplicated.	4.12	0.85	50	4.13	0.80	24	4.12	0.91	26
The number of volumes per student should be equal to the number of volumes per student in all similar institutions in the country.	4.12	0.82	50	4.08	0.83	24	4.15	0.83	26
The collection should contain sufficient reference and bibliography works to enable library science students to study, exercise, and evaluate the material in reference and subject bibliography courses.	4.52	0.58	50	4.42	0.65	24	4.62	0.50	26
The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.	4.62	0.60	50	4.67	0.48	24	4.58	0.70	26
The ratio of professional to non-professional staff will vary according to the size and needs of the institution.	4.16	0.62	50	4.13	0.54	24	4.19	0.69	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.28 –Continued

Comparison of Library results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
At least one professional librarian should be on duty whenever the library is open.	4.28	0.83	50	4.04	0.91	24	4.50	0.71	26
Student assistants may be employed for certain tasks.	4.22	0.65	50	4.21	0.51	24	4.23	0.76	26
A highly-automated, modern communication system should be provided for the library.	4.43	0.61	49	4.33	0.70	24	4.52	0.51	25
All library operations should be fully-automated, and should present a qualified model for students in the school to observe.	4.29	0.65	49	4.21	0.66	24	4.36	0.64	25
An on-line public access catalog or similar modern system should be installed and maintained.	4.35	0.66	49	4.25	0.74	24	4.44	0.58	25
The collection should be easily accessible to the library school.	4.72	0.50	50	4.63	0.58	24	4.81	0.40	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

Standard 9: Academic Staff (Faculty)

The 14 statements proposed for the academic staff standard are shown in Table 4.29. The two groups of respondents were split on four of these, with respondents from developing countries considering them important enough for inclusion and panelists from developed countries scoring them as less important. The four statements are shown below:

> All faculty members should have significant professional experience appropriate to their major fields of instruction.
>
> Teaching experience is desirable, and each staff member should teach only courses for which he or she is fitted by formal study and/or experience.
>
> A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.
>
> A part-time faculty is desirable to assist in carrying out the instructional load and to connect practical viewpoints to the teaching activity.

When the responses were combined, however, all received mean scores that satisfied the criterion for inclusion.

Standard 10: Non-Academic Staff

Table 4.30 shows the eight statements that made up the non-academic staff standard. Both groups of respondents agreed on five of these statements--accepting four and rejecting one. On the remaining three statements, shown below, there was a split between the groups:

TABLE 4.29

Comparison of Academic Staff results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The basic minimum qualification required for full-time instructors in the library school will be a graduate professional degree in Library Science (MLS).	4.35	0.95	49	4.26	0.92	23	4.42	0.99	26
Preference will be given to those with a Ph.D. degree in library and information science with practical experience.	4.41	0.81	49	4.33	0.82	24	4.48	0.82	25
All faculty members should have significant professional experience appropriate to their major fields of instruction.	4.24	0.85	49	3.92	0.93	24	4.56	0.65	25
Teaching experience is desirable, and each staff should teach only courses for which fitted and met his formal study and/or experience.	4.02	1.00	50	3.75	0.94	24	4.27	1.00	26
The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	4.70	0.54	50	4.54	0.66	24	4.85	0.37	26
A minimum of three or four faculty members should be working full-time.	4.32	0.89	50	4.29	0.95	24	4.35	0.85	26
A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.	4.08	0.90	50	3.83	0.92	24	4.31	0.84	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.29 –Continued

Comparison of Academic Staff results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	4.64	0.56	50	4.42	0.65	24	4.85	0.37	26
A variety of backgrounds is desirable on the faculty.	4.52	0.68	50	4.38	0.65	24	4.65	0.69	26
A part-time faculty is desirable to assist in carrying out the instructional load, and to connect practical viewpoints to the teaching activity.	4.00	0.90	50	3.83	0.87	24	4.15	0.92	26
The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.	4.62	0.60	50	4.46	0.66	24	4.77	0.51	26
The faculty members should not isolate themselves. They should participate in all the activities and programs held in the parent institution.	4.36	0.90	50	4.21	1.02	24	4.50	0.76	26
Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	4.82	0.44	49	4.70	0.56	23	4.92	0.27	26
Regular meetings of the academic staff should be held, at least one per term.	4.54	0.61	50	4.38	0.71	24	4.69	0.47	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.30

Comparison of Non-Academic Staff results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The non-academic staff (i.e. executive secretary, secretaries, clerks, clerical assistants, typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.	4.62	0.49	50	4.71	0.46	24	4.54	0.51	26
The non-academic staff should be sufficient in number, experience, and quality, from the highest professional to the lowest clerk.	4.40	0.64	50	4.42	0.65	24	4.38	0.64	26
Staff should be adequate to support the head and the faculty in the performance of their responsibilities.	4.54	0.54	50	4.42	0.58	24	4.65	0.49	26
A minimum number of non-academic staff would be two full-time persons.	3.63	0.88	49	3.48	0.95	23	3.77	0.82	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.30 –Continued

Comparison of Non-Academic Staff results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
A personal secretary should be assigned to the head of the school.	4.00	0.97	50	3.71	0.95	24	4.27	0.92	26
The faculty members should have a minimum of one person to do their secretarial work.	3.92	0.95	49	3.74	0.96	23	4.08	0.93	26
The non-academic staff will have to accomplish certain functions and activities that require several personnel to be assigned directly to the school.	3.90	0.88	48	3.77	0.87	22	4.00	0.89	26
The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.	4.68	0.51	50	4.67	0.56	24	4.69	0.47	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

> A personal secretary should be assigned to the head of the school.
>
> The faculty members should have a minimum of one person to do their secretarial work.
>
> The non-academic staff will have to accomplish certain functions and activities that require several personnel to be assigned directly to the school.

Again, respondents from the developing countries ranked these statements high enough to meet the criterion for inclusion; the panelists from the developed countries did not. When the responses were combined, only one of the three statements--the item requiring a personal secretary for the head of the school--failed to attain the necessary 4.0 mean score.

Standard 11: Curriculum

The 23 statements proposed for the curriculum standard are shown in Table 4.31. Of these, respondents in both groups accepted 20 and rejected one. They disagreed on two of the items:

> All students will be required to take library science core and advanced courses in addition to liberal arts courses.
>
> Each student should be assigned a personal guidance adviser in the program.

Respondents from developing countries considered these statements sufficiently important for inclusion in the standards; panelists from developed countries did not.

TABLE 4.31

Comparison of Curriculum results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
Implementing the objectives of the library school is the most important principle in designing the curriculum.	4.59	0.54	49	4.38	0.58	24	4.80	0.41	25
The objectives of the curriculum should be carefully expressed and periodically examined.	4.74	0.44	50	4.67	0.48	24	4.81	0.40	26
The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	4.68	0.51	50	4.50	0.59	24	4.85	0.37	26
The curriculum should emphasize fundamental principles, applications, and processes for all types of library and information centers, and the services they provide.	4.66	0.56	50	4.50	0.66	24	4.81	0.40	26
The curriculum should include the basic courses in library and information science.	4.73	0.49	49	4.57	0.59	23	4.88	0.33	26
The curriculum should show evidence of a proper sequence of courses, and a balance among units of instruction.	4.58	0.54	48	4.32	0.57	22	4.81	0.40	26
The content of the library school curriculum should include courses devoted to information science and specialization.	4.43	0.65	49	4.43	0.59	23	4.42	0.70	26
The curriculum should be flexible in providing different types and levels of learning experiences in the program.	4.33	0.83	48	4.18	0.80	22	4.46	0.86	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.31 –Continued

Comparison of Curriculum results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The library school curriculum should be revised periodically, based on present and future needs.	4.78	0.47	49	4.70	0.56	23	4.85	0.37	26
The curriculum should attempt to provide a foundation for graduate study in the field of library and information science.	4.59	0.57	49	4.57	0.66	23	4.62	0.50	26
The curriculum of the library school should cover at least the following Core courses: classification and cataloging, reference materials and services, library management, collection development, computers in libraries, introduction to library and information science, and technical services.	4.47	0.79	49	4.26	0.86	23	4.65	0.69	26
All students will be required to take library science Core and advanced courses, in addition to liberal arts courses.	4.27	0.92	48	3.86	1.08	22	4.62	0.57	26
The Core courses should be taken during the first year.	3.29	1.17	48	3.36	1.05	22	3.23	1.27	26
The curriculum should also cover subject specialization, elective courses, and cultural courses.	4.23	0.69	48	4.27	0.63	22	4.19	0.75	26
All instruction presented by the library school should be at the university level.	4.40	0.82	48	4.52	0.79	23	4.28	0.84	25
The school should maintain and improve the quality of teaching by introducing new methods and techniques.	4.63	0.53	49	4.48	0.59	23	4.77	0.43	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.31 --Continued

Comparison of Curriculum results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
Modern aids to teaching should be used in the school.	4.53	0.58	49	4.30	0.63	23	4.73	0.45	26
Teaching methods should include the following: lectures, seminars, research, case studies, discussion groups, practical work, field work, oral and written tests, and practical training.	4.61	0.61	49	4.43	0.73	23	4.77	0.43	26
The school should have a written syllabus or course description for the entire curriculum.	4.65	0.52	49	4.61	0.50	23	4.69	0.55	26
A written syllabus that identifies each student's responsibilities, and the form of evaluation, should be made available to students in each course.	4.49	0.58	49	4.43	0.59	23	4.54	0.58	26
Each course in the curriculum shall have an updated description.	4.51	0.65	49	4.35	0.71	23	4.65	0.56	26
Each student should be assigned a personal guidance adviser in the program.	4.00	0.84	49	3.74	0.92	23	4.23	0.71	26
Each school must determine the quality and quantity of the required and elective courses that each student needs to pass.	4.33	0.75	49	4.17	0.78	23	4.46	0.71	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

However, when responses were combined, both statements attained mean scores high enough to meet the 4.0 criterion for inclusion.

Standard 12: Continuing Education

Among the seven statements addressing continuing education, two statements elicited disagreement among the two groups of respondents (see Table 4.32):

> The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain with one position category or are preparing to move into a higher one.
>
> The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.

Unlike the respondents from developed countries, the respondents from the developing countries considered these statements important enough for inclusion in the standards. When responses were combined, both statements had mean scores that met the criterion for inclusion.

Standard 13: Admission of Students

Standard 13, admission of students, comprised 10 variables, shown in Table 4.33. Respondents from both groups ranked two of these variables high enough for inclusion, with low standard deviations:

High standards of scholarship and broad interests.

Problem-solving ability.

TABLE 4.32

Comparison of Continuing Education results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
A program of continuing education in library and information science should have its own specific objectives and budget.	4.32	0.68	50	4.21	0.78	24	4.42	0.58	26
The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain within one position category or are preparing to move into a higher one.	4.02	0.92	49	3.70	0.97	23	4.31	0.79	26
Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.	4.37	0.60	49	4.17	0.58	23	4.54	0.58	26
Continuing education should include both formal and informal learning situations, and need not to be limited to subjects' offerings in library school.	4.27	0.67	49	4.17	0.58	23	4.35	0.75	26
The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.	4.27	0.67	49	3.96	0.71	23	4.54	0.51	26
Distance education, interactive video, and other technologies should be provided to reach practicing librarians in rural and distant areas.	4.20	0.73	50	4.08	0.78	24	4.31	0.68	26
The school should issue a certificate of completion for those who complete the continuing education session.	4.32	0.65	50	4.04	0.62	24	4.58	0.58	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

TABLE 4.33

Comparison of Admission of Students results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
Graduation from an accredited secondary school with a strong academic record.	4.22	0.92	49	3.87	1.10	23	4.54	0.58	26
An interview with the head of the school or at least two faculty members.	3.49	1.02	49	3.17	0.83	23	3.77	1.11	26
A high level of intelligence.	3.94	1.01	47	3.86	1.06	21	4.00	0.98	26
A strong desire and capability of working with people of different backgrounds.	4.18	0.83	49	3.96	0.98	23	4.38	0.64	26
High standards of scholarship and broad interests.	4.10	0.74	49	4.04	0.71	23	4.15	0.78	26
Problem solving ability.	4.13	0.79	48	4.00	0.93	22	4.23	0.65	26
Competence in the English language.	4.02	0.98	48	3.45	1.06	22	4.50	0.58	26
Quality of letters of reference.	3.51	0.96	49	3.04	0.82	23	3.92	0.89	26
Local, national, or international entrance examinations may be desirable.	3.73	0.92	48	3.65	0.93	23	3.80	0.91	25
Evidence of good health.	3.37	1.07	49	2.87	0.92	23	3.81	1.02	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

Four other variables were rejected by both groups:

> An interview with the head of the school or at least two faculty members.
>
> Quality of letters of reference.
>
> Local, national, or international entrance examinations may be desirable.
>
> Evidence of good health.

Disagreement was indicated on four variables, with panelists from developing countries indicating that they should be included in the standards whereas respondents from developed countries disagreed. The four variables are these:

> Graduation from an accredited secondary school with a strong academic record.
>
> A high level of intelligence.
>
> A strong desire and capability of working with people of different backgrounds.
>
> Competence in the English language.

When responses from both groups were combined, all but one of the variables received mean scores high enough for inclusion. The rejected variable was "a high level of intelligence."

Standard 14: Completion Requirements

The standard for completion requirements was represented by seven statements, shown in Table 4.34. Both groups of respondents accepted five of the

TABLE 4.34

Comparison of Completion Requirements results for developed and developing countries with the total responses

STATEMENTS AND VARIABLES	ALL PANEL RESPONSES			DEVELOPED COUNTRIES PANEL RESPONSES			DEVELOPING COUNTRIES PANEL RESPONSES		
	MEAN	S.D.	N	MEAN	S.D.	N	MEAN	S.D.	N
The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	4.76	0.48	49	4.70	0.56	23	4.81	0.40	26
A written statement of all the requirements for completion of the degree should be available to the students.	4.63	0.53	49	4.61	0.58	23	4.65	0.49	26
Students and prospective students should have a full understanding of all the requirements.	4.68	0.47	47	4.62	0.50	21	4.73	0.45	26
The hours required for the bachelors degree should range from 125-135 credit hours.	3.67	1.01	46	3.41	1.10	22	3.92	0.88	24
The student is responsible for maintaining a minimum academic grade average consistent with the standard of university for graduation.	4.60	0.58	47	4.43	0.68	21	4.73	0.45	26
The student should complete all the requirements within a period of twelve semesters or less.	3.81	1.00	48	3.50	1.06	22	4.08	0.89	26
Students must complete all the requirements before being granted the bachelor degree certificate.	4.73	0.45	49	4.70	0.47	23	4.77	0.43	26

Where MEAN = Mean score of all respondents on a Five(5) point likert scale
S.D. = Standard Deviation of the scores, and
N = Number of persons who responded to the question.

statements and rejected one. The statement in this set that failed to achieve the inclusion criterion was "The hours required for the bachelor's degree should range from 125 to 135 credit hours."

The single statement in this standard on which the two groups disagreed was this:

> The student should complete all the requirements within a period of twelve semester or less.

Panelists from developing countries considered this statement important enough for inclusion whereas the respondents from developed countries disagreed. When the scores were combined, the statement failed to achieve the criterion score and was not accepted.

As explained at the beginning of this section, the responses separated by panelists from developed and developing countries are not used further in this study. They have been presented here only for comparison purposes.

Summary of the Proposed Standards

The purpose of this study was to formulate global standards for undergraduate library and information science programs in developing countries. The first stage was accomplished by surveying international experts on education for library and information specialties. The selection process produced 64 persons from 39 countries.

Questionnaires were mailed to this group on December 15, 1994. Fifty usable questionnaires were returned from 34 countries for a return rate of 78%.

The questionnaire contained 147 statements and variables, grouped in 14 standards. Respondents were requested to rank each statement or variable in importance on a scale of 1 to 5. Statements that achieved a mean score of 4.0 or greater were to be considered generally accepted in the standards. Among the 147 proposed items, 123 (83.7%) obtained a mean score of 4.0 or greater. The 14 standards with their component statements and variables are shown in Tables 4.3 to 4.16. Data in these tables were used for the second stage of the research.

The second part of this stage used the same data to show comparisons in responses from panelists in the developing and developed countries. This analysis is shown in Tables 4.21 through 4.34. Considered by groups of respondents, 130 of the proposed statements (88.4%) were considered acceptable for inclusion by respondents in developing countries. Panelists in developed countries found 106 of the statements (72.1%) to be important enough for inclusion as standards.

The second stage of the research used the analysis of responses as a whole rather than divided by developed and developing nations. In this stage, the

standards that met the criterion for inclusion were used as the basis for determining the current status of the undergraduate library and information science program in the College of Basic Education in Kuwait. Results of this analysis are presented in the next chapter.

CHAPTER V

APPLICATION OF THE STANDARDS: ANALYSIS OF RESULTS

Stage 2: Case Study of the Undergraduate Library and Information Science Program in the College of Basic Education in Kuwait

The data collected in this study from documents, interviews, and direct observations present the findings from the case study in the Department of Library and Information Science (DLIS) at the College of Basic Education (CBE) in Kuwait. The first part describes the development of the College of Basic Education, with emphasis on the DLIS; the second part provides answers to the research questions.

Development of the College of Basic Education

Teacher training in Kuwait began seriously in 1962-63 with the opening of two institutes--one for men and one for women. Graduates of intermediate school (8th grade) were admitted to these institutes where they studied for four years to become qualified as primary school teachers (Teachers' Education Institute, 1983).

Teacher Education Institute (TEI)

In 1972-73, the Teacher's Education Institute (TEI) (currently the College of Basic Education) was established with 60 men and 147 women students. Instruction

in this program was at the semi-university level. Students were admitted after graduation from secondary school (12th grade) and studied for two years, after which they were awarded a diploma in arts/science and education (Ministry of Education, 1979).

In the academic year 1976-77, a comprehensive review of the teacher training program at the institution was conducted. In the following year (1977-78) the credit course system was introduced, replacing the academic year system. The academic programs operated on a four-semester year, with each semester lasting 15 weeks (Teacher Education Institute, 1986).

With the introduction of the credit course system came changes in objectives, curricula, methodology of teacher training, and new academic sections. The focus of the training was to provide the Ministry of Education with indigenous teachers for the country's elementary and kindergarten classes. The Ministry has continued expanding its training programs to meet the need for Kuwaiti teachers (Teacher Education Institute, 1983). The following new sections have been opened:

- The library science section in 1977-78, to prepare assistant librarians--men and women--for school, university, and public libraries.
- The kindergarten section (girls only) in 1977-78, to prepare kindergarten school mistresses.

- The art education section in 1978-79, to prepare male and female teachers of art education at the primary level.
- The physical education section in 1978-79, to prepare men and women teachers of physical education for primary grades.
- The educational technology section, in 1981-82, to prepare men and women educational technology supervisors at the primary or intermediate stage, or the Department of Educational Technology.
- The Home Economics section (girls only) in 1981-82, to prepare women teachers of home economics at the intermediate stage.
- The electronics sections (girls only) in 1982-83, to prepare women teachers of practical studies (electronics) at the intermediate stage. In 1985-86, the electricity sections replaced the electronics sections.
- The interior design section (girls only) in 1982-83, to prepare women teachers of practical studies (interior design) at the intermediate stage (Teacher Education Institute, 1983, p. 11; Ministry of Education, 1979, p. 4).

Graduation requirements at the TEI. To graduate from the TEI students are required to earn 68 credits. In each semester they register for one-fourth of these credits--

the normal course load--plus or minus three credits. In addition to academic courses, library science students have field training and other students do teaching practice. The TEI courses are grouped in the following categories:

- General requirements
- General electives
- Vocational requirements
- Specialization requirements
- Specialization electives
- Practical studies
- Free electives

On fulfilling all course requirements, a student is awarded the Institude of Education diploma, that includes his or her field of specialization, graduation date, and grades (Ministry of Education, 1979).

Faculty. Since the Teacher Education Institute opened, the size of the faculty has increased dramatically in both number and academic qualifications, a direct outgrowth of development in the institute's purposes. From 37 faculty members in 1972-73, the staff grew to 187 in 1976-77 and to 322 in 1982-83. There was also a marked increase in qualifications: from 20% with a Ph.D. in 1976-77 to 32% with this degree in 1982-83 (Teacher Education Institute, 1983). By June 1995, the College of Basic Education had 279 faculty members, 68.1% of whom had Ph.D. degrees (see Table 5.1).

Table 5.1

Current Faculty Members at the College of Basic Education as of June 1995

CBE Departments		Ph.D.	Master's	Total
Islamic studies		9	4	13
Arabic language		26	-	26
Social studies		9	4	13
Mathematics		11	4	15
Science		27	5	32
Fine arts		15	9	24
Interior decoration		4	6	10
Home economics		2	1	3
Physical education/sports		24	10	34
Psychology		15	7	22
Educational technology		5	5	10
Education		22	14	36
Library and Information Science		6	9	15
English language		4	10	14
Music		11	1	12
Total	N	190	89	279
	%	68.1	31.9	100

Note: CBE = College of Basic Education
Source: College of Basic Education Faculties Files, 1995; unpublished data.

Students. There was a corresponding increase in the number of students. In 1972-73, the enrollment was 86 men and 147 women. These numbers had grown to 378 men and 689 women by 1984-85 (Teacher Education Institute, 1986). In June 1995, 6,083 male and female students were registered for classes at the CBE (see Table 5.2).

Graduates. The number of graduates has also grown over the years. In 1973-74, diplomas in arts/science or education were awarded to 58 males and 117 female graduates of the Teacher Education Institute. In 1992-93, there were 268 male and 932 female graduates. In two decades, 12,422 men and women have graduated from the Teacher Education Institute and the College of Basic Education (see Table 5.3).

College of Basic Education (CBE)

In 1986-87, the Teacher Education Institute became the College of Basic Education (CBE). At this time, its program was expanded to cover four years, and graduates were awarded bachelor's degrees. The CBE has four separate facilities: one for men and three for women. The physical resources of CBE are adequate for the educational programs and purposes of the college.

The programs of study in the CBE are based on course credits and are structured for eight semesters. Each

Table 5.2

Male and Female Students Registered in the College of Basic Education for Second Semester, 1995

CBE Programs	Female		Male		Total
	Kuwaiti	Non-Kuwaiti	Kuwaiti	Non-Kuwaiti	
Islamic studies	319	42	277	20	658
Arabic language	443	54	210	50	757
Mathematics	461	36	162	34	693
Science	375	40	138	25	578
Fine arts	229	13	127	10	379
Physical education/sports	241	10	329	24	604
Music	53	--	12	1	66
Libraries/educational technology	329	66	225	51	671
Kindergartens	848	42	--	--	890
Home economics	337	22	--	--	359
Electricity	156	9	--	--	165
Interior decoration	256	7	--	--	263
Total	4047	341	1480	215	6083

Source: College of Basic Education Admissions Office, 1995; unpublished material.

Table 5.3

Growth in Number of Graduates in All Departments in the College of Basic Education from 1973-74 to 1993-94

Graduation Date	Female			Male			Female/ Male Sub-Total
	Kuwaiti	Non-Kuwaiti	Total	Kuwaiti	Non-Kuwaiti	Total	
1973-74	117	--	117	58	--	58	175
1974-75	326	--	326	149	--	149	475
1975-76	291	--	291	183	--	183	474
1976-77	295	--	295	151	--	151	446
1977-78	196	--	196	171	--	171	367
1978-79	3	--	3	4	--	4	7
1979-80	319	--	319	130	--	130	449
1980-81	418	3	421	149	11	160	581
1981-82	454	1	455	252	6	258	713
1982-83	481	--	481	289	3	292	773
1983-84	517	--	517	383	11	394	911
1984-85	575	--	575	248	12	260	835
1985-86	543	--	543	206	5	211	754
1986-87	741	1	742	229	5	234	976
1987-88	300	3	303	151	10	161	464
1988-89	150	1	151	108	3	111	262
1989-90	310	7	317	70	7	77	394
1990-91	--	--	--	--	--	--	--
1991-92	786	25	811	201	8	209	1020
1992-93	914	18	932	242	26	268	1200
1993-94	861	20	881	246	19	265	1146
Total	8597	79	8676	3620	126	3746	12,422

Source: Teacher Education Institute, 1983, pp. 12-135/12-136; Teacher Education Institute, 1986, pp. 27-28; Teacher Education Institute, Department of Library and Information Science, 1981, p. 28; College of Basic Education, 1995; Public Authority for Applied Education and Training, 1995.

semester extends for 15 weeks, including a registration and a final examination period. In each program students must acquire 130 credits to graduate: 40 credits in general culture; 60 in the field of specialization--36 for the major and 24 for the minor; and 30 credits in education. Students also spend one semester in applied education and training in their area of specialization. An intensive seven-week summer semester is optional. The Ministry of Education is the main employer of CBE graduates (Public Authority for Applied Education and Training, 1994-95).

Admission requirements. Students of both sexes are admitted to the college according to the following rules and conditions:

1. A student must be a Kuwaiti national.
2. Students of the Gulf Council Countries (GCC) are admitted as well as scholarship students from Arab and Islamic countries and Arab expatriates, at a percentage that does not exceed 15% of the total number of annually enrolled students in the colleges of the Public Authority for Applied Education and Training (PAAET).
3. Students must hold a General Secondary Certificate (12th grade) or its equivalent

according to the specialization they wish to enroll in. The certificate must have been received during the previous two years. Students wishing to enroll with certificates older than two years must have an exception from the Director General of the PAAET.

4. Candidates must be full-time students.
5. Students must pass an admission test prepared by the college.
6. Students must be medically fit for study in the chosen specialization (College of Basic Education, 1995, p. 5).

Available specializations. A number of specializations are available, as shown below.

First Specialization: Male and female teachers can specialize in the following areas:

- Islamic Education: Islamic Education and Arabic Language
- Arabic Language: Arabic Language and Islamic Education or Special Sciences
- Social Studies
- Science
- Mathematics: Math and Sciences
- Fine Arts: Arts Education
- Physical Education and Sports

Second Specialization: Female students can prepare

to be kindergarten teachers (Kindergarten Program).

Third Specialization: Students can prepare as specialists to work in education resources centers (Library and Educational Technology Program).

Fourth Specialization: Students can choose to prepare for teaching in intermediate and secondary school in the following programs:

- Interior Decoration: For Applied Studies Female Teachers
- Electricity: Applied Studies Female Teachers
- Home Economics: Female students only
- Music: Open to male and female students (College of Basic Education, 1995, p. 9).

Development of the Department of Library and Information Science (DLIS)

UNESCO encouraged the establishment of training programs for librarians, documentalists, and archivists in the developing countries, as well as the establishment and improvement of training facilities for these groups. To this end, two expert missions and one fellowship were awarded to Kuwait from 1946 to 1975 by UNESCO (Sharif, 1977).

Parker (1975) visited Kuwait as a consultant in 1975 and recommended to both Kuwait University and the Ministry of Education the establishment of "a faculty of

library science" to be included in "the five-year plan (1980-85)" (p. 102). The establishment of a library education program was also recommended by other consultants: William Bonnie Rast in January 1977; K. M. Stockham in February 1977; Mohammed Aman in March 1977; M. Aman, S. Alhajrasi, and A. Bader in March 1977; A. Razwan in March 1977; and A. Gamulldin in March 1977. The Ministry of Education also encouraged such a program, submitting many reports of the library system in Kuwait as well as adaptations of the curricula of the City Indigoes Institutes in London that train assistant librarians.

A working group from the Ministry of Education made up of representatives from public, school, academic, and special libraries studied the consultants' recommendations for three months. In April 1977, the group submitted its recommendation to the Ministry of Education that a library education program be established. By May 31, 1977, the Minister of Education issued a Ministry Legislation (no. 297/77) establishing a program for library assistants in the Teacher Education Institutes for male and female students, currently called the College of Basic Education (Ministry of Education, Department of Technical and Vocational Education, 1977).

Aman, Fong, and Dimitroff (1992) stated that based on Aman's recommendation in early 1977, M. Zehery,

director of the Information Center of the Kuwait Institute for Scientific Research, "drew up a list of courses which became the basis for the two-year diploma program" (p. 2). The two-year program, which began in October 1977, was designed to prepare high school graduates to be assistant librarians in school, public, special, and academic libraries. The program started with 48 male and 70 female students in 1977-78. Table 5.4 shows the number of male and female freshmen students accepted in the Department of Library and Information Science from 1977 to 1981. By the academic year 1980-81, the Department of Library Science added the word "Information" to its name, becoming the Department of Library and Information Science (DLIS).

The first students who graduated with a diploma in library science (DLS) were a group of 31 males and 61 females in June 1979. Table 5.5 shows the number of graduates from the DLIS from June 1979 to August 1982.

Faculty. The faculties of the Department of Library and Information Science at the Teacher Education Institute, from its opening in 1977-78 until 1979, were composed of adjunct and part-time teachers drawn from the Kuwait University library department and from school library departments. Most of these instructors were relying exclusively on their experience in libraries, having no professional library degree. By 1981, the

Table 5.4

Male and Female Freshmen Accepted into the Department of Library and Information Science, 1977 to 1981

Academic Year	Number of Male Students	Number of Female Students	Total
1977	48	70	118
1978	29	35	64
1979	35	35	70
1980	38	30	68
1981	64	38	102
Total	214	208	422

Source: Teachers' Education Institute, Department of Library and Information Science, 1981, p. 29.

Table 5.5

Male and Female Graduates from the Department of Library and Information Science, June 1979 to August 1982

Academic Year	Male Graduates	Female Graduates	Total
June 1979	31	61	92
January 1980	5	18	23
June 1980	15	48	63
January 1981	4	15	19
June 1981	15	20	35
January 1982	2	6	8
June 1982	13	24	37
August 1982	3	2	5
Total	88	194	282

Source: Teachers' Education Institute, Self-Study Report, 1983, pp. 12-135/12-136.

the Department of Library and Information Science had six full-time faculty members: one with a Ph.D. degree and five with master's degrees. Three of the faculty members were Kuwaiti. The remaining faculty members, however, continued to be adjunct teachers because of the lack of qualified instructors in the field (Teacher Education Institute, Department of Library and Information Science, 1981).

In response to the lack of professional teachers, three students with B.A. degrees were sent abroad in 1985 to study library and information science. For details on the number of professional staff and their qualifications, see Table 5.6.

The Department of Library and Information Science in the men's and the women's campus share part of the institution's library building. The department offices for faculty and administrative staff, classrooms, and library science library were housed there. The library for library science was established in the two campuses at the same time in 1977-78, with the opening of the Department of Library and Information Science. It is used by library science students for study and practical work. By 1981, the collection in both campuses combined included 4,548 printed items; no count was available for

Table 5.6

Number and Degrees of Faculty Members in the Department of Library Science, 1985-86

	Ph.D.		Master's		Bachelor's		
	Kuwaiti	Non-Kuwaiti	Kuwaiti	Non-Kuwaiti	Kuwaiti	Non-Kuwaiti	Total
Male	--	1	5	2	--	1	9
Female	--	--	3	1	--	1	5
Total	--	1	8	3	--	2	14

Source: Teachers Education Institute, 1986, pp. 51, 52.

audiovisual materials. Table 5.7 shows the numbers of professional materials at the library science library at both campuses in 1981.

Curriculum. The curriculum used for the two-year programs in library and information science is shown in Table 5.8. Sixty-eight credits were required for graduation; these included field training. This curriculum was used in the Department of Library and Information Science from the beginning of the program in October 1977 until it became a part of the College of Basic Education in 1986-87. At that time, the program was extended to four years and the curriculum of all programs was modified to raise the standard of preparatory stage teachers.

Following is the title and description of each course in the library and information science curriculum before 1986-87:

Building the Library Collection (3 credits)
(Required for Library Science)

-Principles and practices of library materials selection, including the study and use of selection aids for books, periodicals, and audio-visual materials.

-Censorship of some materials.

-Building library collections for libraries in Kuwait.

Introduction to Library Science (3 credits)
(Required for Library Science)

-Libraries and library science; kinds of libraries; public libraries; school libraries; specialized libraries; national libraries; information centers.

Table 5.7

Amount of Professional Materials at Department of Library Science Library

Printed Materials	Male Campus Library	Female Campus Library
English periodicals	49	55
Arabic periodicals	10	8
English books/references	840	1004
Arabic books/references	1169	1413
Total	2068	2480

Source: Teacher Education Institute, Department of Library and Information Science, 1981, p. 22.

Table 5.8

Library and Information Science Curriculum at Teacher Education Institute

Course Title	Credits	Hours
Islamic Culture	2	2
English Language I	2	3
English Language III	3	3
Libraries & Research Work	1	1
English Language II	1	2
Physical Education	1	2
Arabic Literature	3	3
Elements of Mathematics	3	4
Man & Natural Resources	3	4
Statistics	2	2
Introduction to Library Science	3	3
Library Administration	2	2
Principles of Cataloging and		

Table 5.8--Continued

Course Title	Credits	Hours
Classification	3	4
Information Sources	3	3
Reading Services	3	3
Production & Utilization of Nonconventional Means	2	3
Mechanical Processing of Data	3	3
Library Collection Development	3	3
Child & Adult Literatures and Their Services	3	3
The School Library and Its Services	3	3
Adult Literature and Its Services	3	3
The Public Library and Its Services	3	3
Introduction to Library Mechanization	3	3
University & Specialized Libraries	3	3
Field Practice I	2	4
Field Practice II	2	4
Field Practice III	4	8
Psychology of Reading	2	2
Arabic Typewriting I	1	2
Arabic Typewriting II	1	2
English Typewriting I	1	2
English Typewriting II	1	2
Islamic Civilization	2	2
Sociology	2	2
Geography of the Muslim World	2	2
Physics	2	3
General Chemistry	2	3
Biology	2	3
Introduction to Education	2	2
Total required	68 credits	

Source: Teacher Education Institute, 1978, pp. 34-36.

-Cooperation between libraries and information centers; library development; levels of study in library science.

Principles of Cataloguing and Classification (3 credits) (Required for Library Science)

-Principles of cataloguing and classification; central technical services.

Information Sources (3 credits)
(Required for Library Science)
-Kinds and levels of information sources; references, encyclopedias; dictionaries and national biographies.

-Selection and evaluation of information sources.

Library Administration (2 credits)
(Required for Library Science)

-Principles of administration; organization and planning; organization; control; library personnel.

-Sites of libraries and information centers; design and equipment; systems and procedures adopted in libraries and information centers.

Reading Services (3 credits)
(Required for Library Science)

-Introduction to libraries and information; introducing reading services and their development.

-Projects of reading services; library service techniques.

Introduction to Library Mechanization (3 credits)
(Required for Library Science)

-The concept of information systems; the importance of information organization in decision making; conventional methods of classifying information.

-Utilization of modern information systems in library technical services; methods and aids used in information systems; a synopsis on microfilm.

Child and Adult Literatures and Their Services (3 credits) (Elective for Library Science)

-An introduction to the study of child literature; the services rendered through child literature; criteria of assessing child literature.

School Library and the Services (3 credits) (Elective for Library Science; prerequisite 255)

-The site of school libraries and information centers; school library collections, their organization and preparation; school library services.

-Library administration; school libraries in Kuwait; field visits; a thorough study of a school library project.

Adult Literature and Its Services (3 credits) (Elective for Library Science)

-Importance of adult literature in the individual's life; an analysis of adult literature; the services rendered through adult literature.

The Public Library and Its Services (3 credits) (Elective for Library Science; prerequisite 256)

-Public library administration; library personnel; formation and development of public library collections; organization and preparation of collections.

-Public library services; widening the scope of library services; public libraries in Kuwait.

University and Specialized Libraries (3 credits) (Elective for Library Science; prerequisite 249)

-The university library; its aims, characteristics, role, personnel, and site.

-Library administration; information sources; the budget; department libraries, cooperation among university libraries.

Libraries and Research Work (1 credit) (Required for Library, Arts, Science, and Kindergarten programs)

-The library as a cultural, education, and social center; kinds of libraries; information sources; research methods.

-The school library and its role in education.

Production and Utilization of Nonconventional Means (2 credits) (Required for Library Science)

-Development of the concept of educational aids; the stages of producing audiovisual aids; printed matter and illustrations; paintings and posters; photography; transparencies and film strips; the projector and the overhead projector; educational tapes; the educational television.

Library Field Practice I, II, and III (8 credits) (Vocational requisite for Library Science)

-Eight credits were allotted to the field training for library science students, divided as follows:
  - a two-credit course
  - a two-credit course
  - a four-credit course

-It is performed in the library science library, school libraries, the university libraries, and public libraries. (Ministry of Education, 1979, pp. 85-88)

The Department of Library and Information Science offered courses not only for library science students but also courses, such as Libraries and Research Work, for students

in many programs at the TEI and the Kuwait Health Science Institute. Courses such as Cataloguing and Classification of Nonprint Materials were offered as requirements to students in the Educational Technology Department.

When the College of Basic Education upgraded all its tracks to four-year programs in 1986-87, the Department of Library and Information Science (DLIS) and the Department of Educational Technology (DET) were merged into one program. The libraries and educational technology program is a shared responsibility of two separate departments. The curriculum is divided between the two departments. Students in the libraries and educational technology program register for one-half of their courses in the Department of Library and Information Science and the other half in the Department of Educational Technology. In words, there are two separate majors in one program. One of the outcomes of merging the departments is that students who graduate from the joint program have the choice of working in either school libraries or in educational technology departments. Each of the two departments--the Department of Library and Information Science and the Department of Educational Technology--has its own administration, offices, faculty, and staff. Each department also offers its own courses and has its own goals, objectives, resources, facilities, budget, and

building. According to Al-Khalifah's (1994) interview with the dean of the College of Basic Education, "There is a process going on now to separate the two departments and the project in its final stages" (p. 109). In 1991, the DLIS and the DET Academic Affairs Council and the CBE Academic Affairs Council approved the separation of the two departments. The PAAET Board of Directors, which referred the subject to the PAAET Academic Affairs Council for more investigation, is the highest authority to issue the final decision. Because this study focuses on the library education program, the following section concentrates only on the Department of Library and Information Science, answering the research questions of the study.

Research Question 1

The following sections present the first research question of the study and the study results that provide answers to it. That question is this: What is the current status of the undergraduate library and information science program in Kuwait in terms of locus, goals, objectives, administration, financial support, physical facilities, library, academic staff, nonacademic staff, curriculum, continuing education, students, and completion requirements, based on the proposed standards?

Locus

The only library education program in Kuwait is offered by the Department of Library and Information Science (DLIS) of the College of Basic Education. The DLIS and the Department of Educational Technology (DET) share responsibility for one program called Libraries and Educational Technology. The program is divided between the two departments, which jointly award one degree. Each department, the DLIS and the DET, offer one-half the program's courses. A student in the program must earn 130 credits to receive a bachelor's degree in Libraries and Educational Technology. Table 5.9 compares the current status of the DLIS locus with the study data concerning the locus standard. Data in this table indicate that the DLIS satisfied all the statements in this standard.

Goals

No single written document was found in either the College of Basic Education or in the Department of Library and Information Science that described the program goals and objectives. Only one document describing the program goals and objectives was found, and this was in the private collection of an assistant professor at the DLIS, kept in his home.

TABLE 5.9

Comparison of Locus Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The school should affiliate with universities and give instruction at the university level, since this will provide the cultural and academic standards and the teaching facilities needed.	**4.49**	**YES**
The School of Library and Information Science should be part of an institution that awards a bachelor degree or equivalent credential.	**4.26**	**YES**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current Status does or does not match the statement in the standard

The goals are to prepare specialists to work in learning resource centers as school librarians or educational technology supervisors. The goals are not clearly stated because of lack of information about the need for librarians to staff libraries and information centers in the country.

Students and faculty members agreed that the program goals are not clear nor is the program's future. Students are not even sure what they will study or in what area they will graduate or work. School libraries are the only kind of library that benefits from the program graduates. In comparing the DLIS goals with the study data on the goals standard, 75% (3 of 4) of the DLIS goals did not meet the standard (see Table 5.10).

Objectives

The DLIS general objectives are these:

1. To provide high school graduates with education for libraries and educational technology.

2. To introduce students to new trends in the fields of libraries and educational technology.

3. To provide the Ministry of Education in Kuwait with graduates in libraries and educational technology to work in the learning resource center.

4. To provide all students with knowledge of the basic principles and practices in library and information

TABLE 5.10

Comparison of Goals Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
To produce qualified library personal.	**4.76**	**NO**
To offer the type of education and training that will best enable their students to carry on these tasks.	**4.65**	**YES**
The library schools must determine their own goals and purposes, which should be clearly stated in a formal document	**4.61**	**NO**
To provide for the needs of the institutions that will employ their graduates.	**4.02**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current Status does or does not match the statement in the standard

science and in educational technology.

5. To provide graduates with a comprehensive liberal arts education.

Table 5.11 compares the current status of the DLIS with the study results concerning the general objectives standard, indicating that the DLIS met 60% (3 of 5 statements) of the standard. Because the DLIS does not have any specific objectives, none of the statements in the objective standard apply to this department (see Table 5.12).

Administration

A special administration body headed by the dean of the College of Basic Education manages the affairs of the college, especially those related to academic, administrative, and financial affairs.

The deputy director general for applied education and research at the Public Authority for Applied Education and Training (PAAET) is responsible for selecting the dean for each of the four colleges. The appointment is for a period of two years and can be renewed for two more years. The selected dean chooses his two assistants from the same college: the assistant dean for applied education and research, and assistant dean for administration and finance.

Currently there are no criteria for selecting the

TABLE 5.11

Comparison of General Objectives Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
To prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country.	**4.57**	**YES**
To provide an introduction to the basic principles and practices of library services.	**4.43**	**YES**
To conduct research in the field of library and information science pertinent to the needs of the country.	**4.41**	**NO**
To establish the foundations of librarianship in the country.	**4.16**	**YES**
To satisfy the local demand for ideas, and for solutions to professionals' problems.	**4.08**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

TABLE 5.12

Comparison of Specific Objectives Standard with Current Status of Department of Library and Information science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
To prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers.	4.48	NO
To establish a strong, respected, indigenous profession relevant to the needs of the country, with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian.	4.44	NO
To provide continuing education for practicing librarians to keep up-to-date with new developments.	4.41	NO
To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	4.38	NO
To integrate professional concepts with the social, political, economic, and cultural aspects of the environment.	4.23	NO
To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.	4.02	NO
To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	4.02	NO

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

dean, assistant dean, or even the department head at any PAAET college. The PAAET is now in the process of determining these criteria.

Selecting the head of each department is one of the responsibilities of the dean of the College of Basic Education. The CBE dean selects a faculty member from each department to be the department head for two years, a period that can be renewed for an additional two years. The dean's final choice for department head, or for renewal of a second term, must be nominated by the PAAET deputy director general for applied education and research.

As there are no criteria for selecting the department head, more than three-quarters of the DLIS faculty members indicated that "they were never asked nor did they recommend any faculty member to be the department head to the CBE dean or his assistants." Because the DLIS has separate campuses for men and women, the department's administration office is placed on the women's campus, where the department's main office is located. The assistant head of the DLIS is appointed by the department head and represents the department when the head is not present. The assistant head's office is located on the men's campus; this officer is empowered to perform all the tasks of the head.

Almost 60% of the faculty members indicated that the DLIS administrators did not have sufficient administrative abilities, leadership skills, or experience to manage the department. Currently, the DLIS has nine committees that are responsible for all department activities. They are the committees for Academic Affairs (of which a subcommittee is the Curriculum Committee), Applied Research, Schedule, Final Examination, Scholarship, Employment and Promotion, Financial, Social and Cultural, and Field Training. Each of these committees has its own structure and responsibilities. Regular meetings of each committee are held at least three times a semester. Resolutions and recommendations are made after approval of the majority of members of a committee. A faculty member from each committee represents that committee on the College of Basic Education General Committee.

The Academic Department Council, chaired by the head of the department, handles all the academic affairs of the department. The Academic Affairs Council of CBE, chaired by the dean of the college, is empowered to approve the Academic Department Council's resolutions and recommendations. Such resolutions are referred by the college to a higher council, the Academic Affairs Council of the Public Authority for Applied Education and Training (PAAET). Such proposals are referred to the PAAET

Director General. This official is charged with issuing executive resolutions related to his jurisdiction; other resolutions are enacted by the Board of Directors, the highest authority with governing powers over the affairs of the PAAET.

In a comparison of the DLIS administration's current status with the study results for the administration standard, the DLIS administration did not meet the requirements of 66.7% (8 of 12 statements) of the DLIS standard (see Table 5.13).

Financial Support

The nature of the financial resources of the College of Basic Education, as these resources apply to the college's various academic institutions, differs remarkably from the financing of American or Canadian colleges and universities. The Kuwaiti government is the sole source of revenue for the College; any surplus is refunded to the government at the end of the fiscal year. The revenue is not at all dependent on loans or investments of any type. Salaries of all state employees are provided by the Ministry of Finance.

The budget of the College of Basic Education is processed according to the purposes of the college. Its goals and objectives, proposed projects, expansions or renovations, increases in number of students to be

TABLE 5.13

Comparison of Administration Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	**4.86**	**YES**
The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	**4.84**	**NO**
The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	**4.82**	**YES**
The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	**4.80**	**YES**
The library school should have a clearly defined position in the organizational plan of the institution.	**4.76**	**YES**
The school should prepare a long-range plan for future activity.	**4.69**	**NO**
The school planners should determine any needed changes in curriculum, staff size, number and level of student, or physical plant, and should consider extending the program into the post-graduate level at the appropriate time.	**4.61**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

TABLE 5.13 -- Continued

Comparison of Administration Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The school should maintain files and documentation of its major features and activities.	**4.51**	**NO**
The school should keep records for each student, staff person, and faculty member in the program.	**4.49**	**NO**
The head of the school should prepare annual reports describing principal events of the year in some detail.	**4.45**	**NO**
The head should have the authority to select students, to recommend faculty and staff, and to design, revise and develop the curriculum, with the cooperation of the faculty.	**4.45**	**NO**
The school newsletter or bulletin should publish information on policies, regulations, requirements, and activities concerning the school.	**4.26**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

admitted, and the physical facilities and manpower needed for such projects are all reflected in the budget for the following fiscal year.

The budget of the Department of Library and Information Science is included in the overall budget of the College of Basic Education; the head of the DLIS is not informed of specific annual allocations to his department. Annually, the Financial Committee of DLIS prepares an estimated budget that includes material, equipment, manpower, research proposals, and anticipated number of students for the new academic year. The department head approves the department budget and forwards it to the CBE Budget-making Committee, which revises the budget of each department and incorporates these budgets into the college budget, according to financial regulations. The CBE Committee for Academic Affairs studies the estimated expenditures budget and the manpower budget before forwarding them to the Financial Affairs Department at the PAAET. This committee revises the college's budget before it is submitted for final approval. These revisions continue until the budget is finally sanctioned by the Ministry of Finance, then the Administration for Financial Affairs at the PAAET distributes the approved funds to the College of Basic Education.

At the beginning of the academic year, the CBE

begins implementing the budget. It prepares the required forms for equipment, furniture, and materials and forwards them to the general store of the Public Authority for Applied Education and Training. This store distributes the items among the academic departments.

A high percentage of the faculty (93%) agreed that most of the problems of the DLIS are financial in nature, primarily because there is no separate or adequate budget under the direct control of the department. Because the department does not administer its own budget, almost all the department's needs and requests are either denied or delayed for indefinite periods. This condition makes it impossible for the department to plan for the future. According to one faculty interview, as an example, for the last five years, all the department's requests for upgrading its computer lab; for improving the materials for the reference, cataloging, and classification training classes; and for employing nonacademic staff have been denied.

In other examples, each department at the CBE receives the equivalent of $100 per year for petty cash. Also, the research program was cancelled for the 1994-95 academic year because of insufficient funds.

Table 5.14 compares the current financial status of the Department of Library and Information Science with

TABLE 5.14

Comparison of Financial Support Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	**4.82**	**YES**
The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	**4.76**	**YES**
The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school.	**4.65**	**YES**
The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate and maintain the program.	**4.64**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

TABLE 5.14 -- Continued

Comparison of Financial Support Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The school should share in all other supporting funds, such as donations, grants, gifts, and endowments.	**4.61**	**NO**
Funds should be available for the salaries of the academic and non-academic staff, and should include professional development, faculty travel, fellowships, and leaves with pay.	**4.58**	**NO**
Funds should be available as needed to carry out the school's program of teaching, research, and service, while providing for instructional resources and facilities, research projects, publications, and scholarships.	**4.56**	**NO**
The school should maintain a separate annual budget under its own control.	**4.24**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

the study results related to the financial support standard. The DLIS was in agreement with only 37.5% of the statements in the standard.

Physical Facilities

The Department of Library and Information Science of the College of Basic Education is housed in two sites, one for men and one for women. These were originally built for public schools and were used for this purpose until assigned for occupancy by the institution that became the College of Basic Education. The DLIS for men is housed on the CBE Idailiah men's campus; the department for women is on the CBE Shamia women's campus. Coeducation is prohibited because of the traditions of Kuwaiti society as well as Islamic rules and values.

In neither site does the DLIS have its own building. It uses a part of the college libraries complex and shares facilities with the main college library. All the library science collections are housed in their own library.

The physical facilities of the DLIS are adequate for its educational program and achievement of its purpose, especially after the renewal, expansion, and maintenance work that was carried out after Kuwait's liberation following the Iraqi invasion.

On the female campus, the DLIS has its own quarters;

there is a private office for the department head, a faculty assembly room, faculty and staff offices, a computer lab, a cataloging and classification lab, classrooms, and storage space. The building also has nice furniture and equipment suitable for use by both male and female faculty members as well as female staff and students.

The assistant department head has a private office on the male campus. Proper space, furniture, equipment, offices, and classrooms are available in the building where the program for men is housed. The department computer lab is located inside the library science library.

On both the men's and women's campuses, each faculty office is shared by two faculty members. The faculty offices are inadequate as they are poorly equipped; there are no power outlets, no direct phone lines, nor any privacy for advising students.

According to the majority of the department faculty members interviewed, instructional and teaching equipment is very limited and old; there is no modern instructional equipment nor research equipment available at DLIS. Table 5.15 shows the equipment present in the department at both the men's and women's sites. The department does not have a direct phone line at either site except for the

Table 5.15

DLIS Equipment at Both Men's and Women's Campuses

Equipment	Women's Building	Men's Building
Color TV	1	1
VCR	1	1
Overhead projector	3	1
Copy machine	1	1
Typewriter	1	-
Computer	-	1
Printer	-	-
Fax	1	-

fax line in the women's building. A comparison of the current status of the DLIS physical facilities with the results of the study findings related to the physical facilities standard shows that the DLIS failed to meet 80% (4 of the 5 statements) of the physical facilities standard (see Table 5.16).

Library

The libraries of the Public Authority for Applied Education and Teaching are organized under the libraries'

TABLE 5.16

Comparison of Physical Facilities Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	**4.76**	**NO**
Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	**4.74**	**NO**
The head of the school should have a private office.	**4.56**	**YES**
The physical plant should be accessible to handicapped, and provide adequate facilities for those with special needs.	**4.34**	**NO**
Each faculty member should have an individual office.	**4.30**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

administration, which comprises a centralized administration department and oversees 17 college and technical center libraries. The libraries are duplicated for men and women because of the PAAET's prohibition against coeducation.

The PAAET libraries administration controls expenditures, purchasing, processing, and distributing of library materials among all its libraries. The budgets of all PAAET libraries are included in the overall budget of the PAAET libraries administration; therefore, no annual allocations are made for any individual library.

All library science collections at both the men's and women's campuses are housed in their own library at the library complex in the CBE male and female headquarters. The library is in the same building with the DLIS and physical access to the collection is good. The LIS library was established on the two campuses at the same time with the opening of the DLIS in 1977-78. It is to be used by library science faculty and staff as well as by students in their course and practical work. Currently the library and its collections are not under administrative control of the DLIS. Cataloging and classification are done centrally at the PAAET libraries administration.

The library science collection consists of resources in both Arabic and English, in print forms to support the

educational mission of the DLIS. It contains a selection of books, current periodical issues, and reference books. The library uses the Dewey classification system to organize the Arabic language collection and the Library of Congress classification system to organize the English language collection. Therefore, it has two sets of manual card catalogs in Arabic and English. The manual system is being used for preparing and recording the library collection.

The LIS library staff at both the men's and women's campuses consists of only one librarian with a B.A. in library and information science at each campus. There are no assistant librarians, secretaries, clerks, typists, nor volunteers in either library. Two other female LIS library staff who are currently taking maternity leave for two years used to work as assistant librarians in the LIS women's library.

The renovated libraries, redone after the liberation, generally has adequate physical space, with new carpeting, shelving, equipment, and furnishing. Security systems for maintaining the integrity of the library materials are being installed in each library. The one in the men's library has not worked for three years.

Access to the library is extremely limited. The library is open only five days a week, from Saturday

until Wednesday as Thursday and Friday are holidays. It is open from 8 a.m. to 2 p.m., even though LIS classes continue until 5 p.m.

Inadequate access to the CBE libraries, especially the library working hours, have been noted and improvements have been recommended by many library experts, educators, faculty members, and administrators since the beginning of the study at the Teacher Education Institute. In 1983, the TEI recommended that "the library should be open from 8 a.m. to 8 p.m. (12 consecutive hours)" (Teacher Education Institute, 1983, p. 29). Aman, Fong, and Dimitroff (1992) concurred, stating, "The library should be available to both students and faculty at least until 1700 daily" (p. 34). The number of LIS printed materials available at the LIS library on both campuses is shown in Table 5.17. The library services are mainly traditional. No reference and information services are provided. Also, no index to the periodicals is available.

The library does not purchase more than two copies of one title. It circulates only one copy and keeps the other for internal reading and copying. Students are allowed to borrow three items for two weeks, and faculty can borrow five items for one month. All borrowed

Table 5.17

Number of LIS Books and Periodicals Currently Available at LIS Libraries

LIS Printed Materials	LIS Library Male Campus	LIS Library Female Campus
Arabic books	2694	3820
English books	1716	1758
Arabic periodicals	3	6
English periodicals	17	15

resources must be returned to the library from which they were taken before the last day of the semester. Table 5.18 lists the all the equipment to be found in the men's and women's campus libraries.

The interview with the librarian in the LIS library produced the following results:

1. There is no standard list defining responsibilities and duties and rights of library personnel in Kuwait. In the absence of a standard list of duties, the librarian carries out the work of the assistant and even does some clerical work. On the other hand, the assistant librarian often does the work of the librarian.

Table 5.18

Amount of Equipment in LIS Libraries

Equipment	LIS Library Male Campus	LIS Library Female Campus
Computer (386 Sx25)	1	1
Laser printer	1	1
Color TV	1	1
VCR	1	1
Fax	--	1
Typewriter	--	1
Copy machine	--	1
Overhead projector	1	--

2. There is no formal document defining the aims of the libraries and their relation to the purpose of the education program or the college.

3. There is no separate budget specified for each library. Too little money is budgeted overall, and the libraries do not receive their full allocation even of these funds. The LIS library faces a seriously inadequate budget for library collections and equipment.

4. Nonprinted materials (audiovidual materials) are not available at the LIS library because of inadequate budget, space, equipment, and staff to operate and maintain the equipment.

5. LIS faculty members are mainly involved in the selection and choice of the library collections.

6. There is a great deficiency in library personnel. Because both the men's and women's DLIS library is a one-person operation, librarians feel that clerical and administrative work required of them consumes most of their time. There is also a deficiency in continuing education and training programs for library personnel.

7. No collection development policy is used in any library.

8. Absence of an expert in operating and maintaining equipment, such as the copying machine and the library security system, leads to a higher percentage of stolen and destroyed library materials than would be the case otherwise.

Interviews with LIS faculty members concerning the LIS library and its collection produced these findings:

1. The LIS library is a traditional library. It still uses a manual system for all library operations. No automation or online catalog system is used in the library.

2. The library collections are insufficient in size and content. Reference books and bibliography works are out-dated and are not balanced in subject matter.

3. No audiovisual materials or new forms of information, such as CD-ROMs, online access, or a communication system, is maintained in the LIS library.

4. No bibliographic or typed indexes are available in Arabic or English.

5. The library collections are duplicated on the men's and women's campuses.

6. The libraries have insufficient numbers of personnel. Because there is only one librarian, if that person is late or absent, the library is closed. The LIS faculty members sometimes open the library themselves--without permission--so their students can use it while the librarian is absent. Sometimes the librarian allows the library to remain open while he or she is away.

7. The library is open only six hours daily, five days a week. Classes after 2 p.m. cannot access the library. LIS faculty members sometimes open the library after 2 p.m. for students.

8. Library equipment is very limited.

9. No subject card catalogs are available. The author and title card catalogs are not updated very often, and cards are often missing.

One faculty member who was interviewed said, "I don't even consider the LIS library a library. It is a tiny room with very limited and out-dated books operated by one person."

In comparing the DLIS library's current status with the study findings concerning the library standard, the library did not meet 86.4% (19 of 22 statements) of the standard (see Table 5.19).

Academic Staff

The employment and promotion committee at the DLIS determine the number of prospective candidates to be admitted the following academic year--their qualifications, experience, and area of specialization. The CBE dean approves the candidate list after it is approved by the DLIS head and the CBE Academic Affairs Council. The DLIS Employment and Promotion Committee conducts these interviews. Another interview is conducted by the CBE Academic Affairs Council, chaired by the CBE dean. The PAAET Board of Directors is the highest authority to accept or reject a candidate.

The DLIS currently has 15 full-time faculty members teaching at both the men's and women's campuses. In addition, nine faculty members are on scholarship leave to earn their Ph.D. degrees in library and information studies in the United States and the United Kingdom.

TABLE 5.19

Comparison of Library Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The professional library collection should be kept up-to-date with new developments in the field.	**4.78**	**NO**
The collection should be easily accessible to the library school.	**4.72**	**YES**
Library resources should be sufficient in size and content to support the instructional and research program of the school.	**4.70**	**NO**
The library collection should meet the professional standards of library service.	**4.66**	**NO**
The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.	**4.62**	**NO**
The collection of materials in the field of library and information science should be high-quality, and in large enough quantity.	**4.56**	**NO**
The collection should contain sufficient reference and bibliography works to enable library science students to study, exercise, and evaluate the material in reference and subject bibliography courses.	**4.52**	**NO**
A specific collection of materials in the field of library and information science should be gathered in print and non-print forms.	**4.50**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

TABLE 5.19 -- Continued

Comparison of Library Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
Publications of international organizations in the field of library and information science should be in the collection.	**4.44**	**NO**
A highly-automated, modern communication system should be provided for the library.	**4.43**	**NO**
Professional materials published in other countries should be selectively acquired.	**4.40**	**YES**
The library collection should include professional and non-professional resources as needed for general and specialized studies, and suitable for the level and degree of use required.	**4.36**	**NO**
An on-line public access catalog or similar modern system should be installed and maintained.	**4.35**	**NO**
All library operations should be fully-automated, and should present a qualified model for students in the school to observe.	**4.29**	**NO**
At least one professional librarian should be on duty whenever the library is open.	**4.28**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

TABLE 5.19 -- Continued

Comparison of Library Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
Student assistants may be employed for certain tasks.	**4.22**	**NO**
The ratio of professional to non-professional staff will vary according to the size and needs of the institution.	**4.16**	**NO**
The collection should contain all professional library and information science books and periodicals published in the country.	**4.16**	**NO**
The number of volumes per student should be equal to the number of volumes per student in all similar institutions in the country.	**4.12**	**NO**
Library materials frequently used by library science students and faculty should be duplicated.	**4.12**	**YES**
Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.	**4.04**	**NO**
Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.	**4.02**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

Six (40%) of the 15 full-time faculty members have Ph.D. degrees--five in library and information science and one in education. Nine (60%) have master's degrees in library and information science. Ten of the 15 Ph.D. and master's holders (67%) received their education in American library schools; another 3 (20%) have degrees from British library schools. Of the remaining faculty members, one has a degree from a Russian school and one from an Egyptian school. Among these 15 faculty members, 80% (12) are Kuwaiti and 3 (20%) are from Egypt and Syria. Data indicate that the majority of LIS faculty are male (60%, or 9); six (40%) are female (see Table 5.20). The

Table 5.20

Number, Gender, Nationality, and Academic Degree of LIS Faculty Members

	Ph.D. in LIS		Master's in LIS		
	Kuwaiti	Non-Kuwaiti	Kuwaiti	Non-Kuwaiti	Total
Male	2	3	4	--	9
Female	1	--	5	--	6
Total	3	3	9	--	15

distribution of the faculty members by age shows the majority of the group were 40 t0 44 years old (9 or 60%); the next largest group was the 45 to 59 year olds (3, or 20%) (see Table 5.21).

No part-time faculty position is permitted at the DLIS or at the CBE. Instead, adjunct teaching positions are available to absorb the excess teaching load. There are no criteria for selecting an adjunct instructor. Someone who has only a bachelor's degree with some field experience is allowed to teach in the DLIS.

The regular teaching loads (class hours) of a full-time faculty member in one week range from 12 to 20 hours. The average teaching load is 15 hours per week.

Table 5.21

Age of LIS Faculty Members

Age	Number
30-34	1
35-39	1
40-44	9
45-49	3
50-54	1
Total	15

The average teaching load for the DLIS head is 9 semester hours.

With respect to working load, the responsibilities of the LIS faculties involve full-time duties in teaching and other educational activities in the DLIS, such as advising students, providing registration guidance, serving on different committees, counseling, performing administrative duties, and so on. With these kinds of loads, faculty have little time for research or writing for publication.

With regard to professional experience, the majority of LIS faculty members have more than eight years of experience in library and information science fields and more than 10 years of experience as faculty members in the DLIS. The productivity of LIS faculty members in terms of publications and research is quite low. Only two of the 15 faculty members (13.3%) had research and publication credentials. Another six (40%) reported having done Ph.D. or master's thesis research or bibliographies. The remaining seven (46.7%) had done no research or publication. Thus, selection, promotion, and appraisal of faculty members is always linked to research and publication. Selection criteria in PAAET colleges specifies a minimum requirement of three papers for promotion to associate professor and four papers for promotion to full professor.

A considerable percentage (60%) of the faculty members agreed that there is a great deficiency in the number of LIS faculty members. The quantity is low compared to the increasing number of students enrolled in the program. Almost all faculty members interviewed indicated that because of the lack of nonacademic staff, they had to spend much time doing clerical or secretarial work, such as typing, copying, responding to CBE and PAAET requests, doing registration, and similar tasks. One faculty member declared, "Faculty members feel that the clerical, secretarial, and administrative work required of us consumes most of our time." A comparison of the DLIS faculty's current status with the study results related to the faculty standard showed that 50% of the DLIS faculty met the standard (see Table 5.22).

Nonacademic Staff

There were only three full-time nonacademic staff currently working in both the DLIS men's and women's campuses. One person was employed as a secretary and another as a field training coordinator on the female campus. The other worked on the men's campus as a field training coordinator. The Department of Library and Information Science on the men's campus shares a secretary with the Department of Social Studies. The half secretary, from time to time, stops by and tries to do a

TABLE 5.22

Comparison of Acadamic Staff Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	**4.82**	**YES**
The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	**4.70**	**YES**
The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	**4.64**	**NO**
The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.	**4.62**	**NO**
Regular meetings of the academic staff should be held, at least one per term.	**4.54**	**YES**
A variety of backgrounds is desirable on the faculty.	**4.52**	**YES**
Preference will be given to those with a Ph.D. degree in library and information science with practical experience.	**4.41**	**YES**

MEAN = Mean score of all respondents on a 5 point Likert-type scale

YES/NO = Current status does or does not match the statement in the standard

TABLE 5.22 -- Continued

Comparison of Acadamic Staff Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The faculty members should not isolate themselves. They should participate in all the activities and programs held in the parent institution.	**4.36**	**NO**
The basic minimum qualification required for full-time instructors in the library school will be a graduate professional degree in Library Science (MLS).	**4.35**	**YES**
A minimum of three or four faculty members should be working full-time.	**4.32**	**YES**
All faculty members should have significant professional experience appropriate to their major fields of instruction.	**4.24**	**NO**
A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.	**4.08**	**NO**
Teaching experience is desirable, and each staff should teach only courses for which fitted and met his formal study and/or experience.	**4.02**	**NO**
A part-time faculty is desirable to assist in carrying out the instructional load, and to connect practical viewpoints to the teaching activity.	**4.00**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale

YES/NO = Current status does or does not match the statement in the standard

little work. Even so, he has no office and no equipment on the men's campus. There is no other nonacademic staff in the DLIS.

No job description exists for nonacademic staff, whether at DLIS or CBE, to specify their responsibilities and duties. Consequently, the few nonacdemic staff employed have minimal skills. The department head noted that "the secretary had not been able to type since she was employed because of eye problems." Because of the insufficient number of nonacademic staff and the absence of job qualifications, the LIS faculty members do most of the nonacdemic staff work.

All faculty members complain about the lack of positions at the state level for employing additional nonacademic staff for the PAAET colleges. Table 5.23 shows a comparison of the DLIS nonacademic staff status with the study results for the nonacademic staff standard, indicating that 80% of the standard (four of the five statements) was not met.

Curriculum

The Curriculum Committee is a subcommittee of the Academic Affairs Committee at the DLIS. Among its responsibilities is proposing new courses, revising or developing existing ones, suggesting plans and programs for developing curricula, and approving various

TABLE 5.23

Comparison of Non-Acadamic Staff Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.	**4.68**	**YES**
The non-academic staff (i.e. executive secretary, secretaries, clerks, clerical assistants, typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.	**4.62**	**NO**
Staff should be adequate to support the head and the faculty in the performance of their responsibilities.	**4.54**	**NO**
The non-academic staff should be sufficient in number, experience, and quality, from the highest professional to the lowest clerk.	**4.40**	**NO**
A personal secretary should be assigned to the head of the school.	**4.00**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

activities related to the application and development of syllabi.

The CBE requires 130 semester hours for the completion of a B.A. in libraries and information technology. These credits are grouped as follows:

- 70 credits in liberal arts
  - •40 credits in general culture
  - •30 credits in education
- 60 credits in libraries and educational technology
  - •32 credits in library and information science
    - •24 credits in required courses
    - •8 credits in electives
  - •28 credits in educational technology
    - •25 credits in required courses
    - •3 credits in electives

As shown above, only 32 credits in library and information science are required, and the DLIS offers these courses. The LIS curriculum is oriented toward school librarianship. Thus, this curriculum does not prepare its graduates to work in any other type of library, such as public, academic, or special. The overall objective of the DLIS is to educate and train men and women high school graduates to be librarians in school libraries. Even so, a number of graduates work in academic, public, and special library settings.

Students in the program are required to take library and information science courses and educational technology courses concurrently with liberal arts subjects in their freshman year. Emphasis has also been put on prac-

tical experience (field training), which the students will gain from a practicum during their junior and senior years. Arabic is the language of instruction.

Table 5.24 shows that DLIS requires nine core courses, each requiring two or three credit hours. The number of hours per week in teaching a subject varies from two to five. The total credit hours for required courses is 24. The courses are "Introduction to Library and Information Science," "Information Resources,"

Table 5.24

Library and Information Science Required Courses

Course Title	Credits	Hours
Introduction to Library and Information Science	3	3
Information Resources	3	5
Building and Developing a Library Collection	3	5
Introduction to Cataloging	3	5
Introduction to Subject Analysis	3	5
Children and Young Adult Literature and Services	2	2
Library Resource Centers Administration	2	2
Library Resource Centers Services	2	2
Computer and Its Applications in Library Resource Centers	3	4
Total credit hours	24	33

Source: College of Basic Education, Department of Library and Information Science, Study Manual, 1987.

"Building and Developing a Library Collection," "Introduction to Cataloging," "Introduction to Subject Analysis," "Children and Young Adult Literature and Services," "Library Resource Center Administration," "Library Resource Center Services," and "The Computer and Its Application in Library Resource Centers."

Table 5.25 displays the DLIS elective courses. A student can select one course as an elective from the first group. The course is either "Introduction to Bibliography" or "Information Resources in Arabic Heritage"; the latter course, however, has never been taught. Students also can select two courses from the second group. These courses are "Children and Young Adults Libraries," "Advanced Cataloging," "Advanced Subject Analysis," and "Library Services for Special Groups"; the last course is also never taught. The total credit hours allowed for elective courses is eight.

In general practice, the DLIS begins instruction in library and information science courses in the first semester of the four-year college curriculum. Students are also required to study liberal arts courses, which are a basic requirement for all students in any department of the College of Basic Education. Among the liberal arts courses are 40 credit hours in general culture and 30 credits in education and field training. The general

Table 5.25

Library and Information Science Elective Courses

Course Title	Credits	Hours
*Student selects 1 course from this group		
Introduction to Bibliography	2	3
Information Resources in Arabic Heritage+	2	3
*Student selects 2 courses from this group		
Children and Young Adults Libraries	3	4
Advanced Cataloging	3	4
Advanced Subject Analysis	3	4
Library Services for Special Groups+	3	4
Total requirement for electives in LIS	8	11

+Course never taught

Source: College of Basic Education, Department of Library and Information Science, Study Manual, 1987.

culture requirement includes courses in basic mathematics, basic sciences, social sciences, languages, religion, humanities, statistics, philosophy, and others. The education courses can be selected from educational psychology, psychology of learning, teaching methods, Islamic educational thought and trends, and others. Students in the libraries and educational technology program are required to take 28 credit hours in 10 educational technology courses, which are offered by the Department of Educational Technology. These courses include "Educational Films," "Drawing," "Photography," "TV," "Educational Equipment and Its Use," "Designing and Production of Audiovisual Materials," and others.

The following review of the contents of LIS curricular offerings is based on syllabi from the DLIS.

Introduction to Library and Information Science. This course provides an overview of the library and information science field, covering the philosophy and importance of the profession in modern society, types of libraries and information centers with their functions and services, levels of education for library and information science in developed and developing countries, organizations of library and information science, and the development of library services in Kuwait.

Information Resources. This course gives students

an understanding of information resources, their types, forms, selection and evaluation criteria, and their utilization in information services to users. The students in this course survey the basic general reference tools in both Arabic and English.

Building and Developing a Library Collection. This course emphasizes the basic principles and practices of building a library collection, including the acquisition of all types and forms of library materials and the bibliographic tools used to build these collections to meet users' needs.

Introduction to Cataloging. This course deals with principles and practices of cataloging. The student is prepared for cataloging through practicing with Anglo-American cataloging Rules 2 principles. A brief introduction is given to various schemes of cataloging cards.

Introduction to Subject Analysis. This course concentrates on the principles and applications of classification and subject headings. Students are prepared for classifying and choosing subject headings through the Dewey Decimal Classification, Sears' list of subject headings, the Library of Congress subject headings, and a list of Arabic subject headings.

Children and Young Adult Literature and Services. This course covers the development of children's literature, an analysis of children's literature, criteria for

selecting and evaluating children's literature and reading through a variety of children's fiction and nonfiction books. The course also enables the students to present and manage children's literature through services and activities.

Library Resource Center Administration. This course concerns principles of administration and organization as they relate to library resource centers, including planning, budgeting, staffing, directing, cooperation, and library routines such as keeping statistical records and reporting.

Library Resource Center Services. This course deals with library resource center services, including direct and indirect services and activities, such as reference, bibliographical, circulation, translation, abstracting, indexing, and other user services.

The Computer and Its Applications in Library Resource Centers. This course deals simply with methods of operating the computer, its main units, and their functions. It also covers the importance of the computer and its applications in learning resource centers.

Introduction to Bibliography. This course provides students with understanding of the basic principles and practices of bibliography. It covers the importance of bibliographies and their role in research, types of

bibliographies and bibliographic services, and the methods and stages of preparing bibliographies. It also presents the status of bibliography and bibliographies in the Arab world.

Information Resources in the Arabic Heritage. This is a specialized reference course in the Arabic heritage. The study and use of different Arabic heritage reference tools and materials is also included in this course. The course is never taught.

Children and Young Adult Libraries. This course deals with different types of children's libraries in terms of goals, facilities, collection, organization, staffing, services, and activities.

Advanced Cataloging. This advanced course deals with aspects of descriptive cataloging, such as analytical cataloging, cataloging of special materials (maps, manuscripts, etc.) and finally central, mechanical, and cooperative cataloging.

Advanced Subject Analysis. The course covers the recent important developments in the area of subject analysis and important theories of classification and indexing. It also deals with comparative study of classification and indexing schemes.

Library Services for Special Groups. This course covers needs and services with different categories for special groups such as the gifted and talented, mentally

retarded, visually impaired, hearing disabled, physically handicapped, and so on. The course has never been taught.

Field Training

Field training or practical work is considered an indispensable requirement for all students in libraries and educational technology. Four field training courses, a total of 11 credits, are required for all students in the program. Because the libraries and educational technology program is divided between the Department of Library and Information Science and the Department of Educational Technology, each field training course is also divided in half. For a period of two days a week, four hours each day for six weeks, students do practical work in library and information science. For the same period of time, they also do practical work in educational technology during the regular semester. Practice work in various library duties is conducted in approved libraries under the supervision of the LIS instructor and librarians of the selected libraries. Practice work in educational technology is also conducted under the supervision of the educational technology instructor in selected educational technology centers. After the practice period is over, the students meet and have discussions with the instructors and generally produce a written

report. Each instructor submits 50% of the student's grade to the field training coordinator at the DLIS. The Coordinator adds the grades together and submits the student's final grade to the registrar's office.

A comparison of the current status of the DLIS curriculum with the study results related to the curriculum standard shows that 50% of the DLIS curriculum met the standard (see Table 5.26).

Continuing Education

The Department of Library and Information Science currently does not sponsor or provide any continuing education programs. The PAAET Community Service and Continuing Education Department (CSCE) is offering to the public a diversified, scientific specialized and applied training program. A low percentage of DLIS faculty participate in these programs. The CSCE sponsored 15 continuing education courses in library and information science from 1987 to 1994. Because of low attendance and insufficient budget, these continuing education courses are not currently offered.

As the DLIS does not sponsor or provide any continuing education program, none of the statements in the continuing education standard apply to the DLIS (see Table 5.27).

TABLE 5.26

Comparison of Curriculum Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The library school curriculum should be revised periodically, based on present and future needs.	**4.78**	**NO**
The objectives of the curriculum should be carefully expressed and periodically examined.	**4.74**	**NO**
The curriculum should include the basic courses in library and information science.	**4.73**	**YES**
The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	**4.68**	**YES**
The curriculum should emphasize fundamental principles, applications, and processes for all types of library and information centers, and the services they provide.	**4.66**	**NO**
The school should have a written syllabus or course description for the entire curriculum.	**4.65**	**YES**
The school should maintain and improve the quality of teaching by introducing new methods and techniques.	**4.63**	**NO**
Teaching methods should include the following: lectures, seminars, research, case studies, discussion groups, practical work, field work, oral and written tests, and practical training.	**4.61**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale

YES/NO = Current status does or does not match the statement in the standard

TABLE 5.26 -- Continued

Comparison of Curriculum Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
Implementing the objectives of the library school is the most important principle in designing the curriculum.	**4.59**	**YES**
The curriculum should attempt to provide a foundation for graduate study in the field of library and information science.	**4.59**	**NO**
The curriculum should show evidence of a proper sequence of courses, and a balance among units of instruction.	**4.58**	**YES**
Modern aids to teaching should be used in the school.	**4.53**	**NO**
Each course in the curriculum shall have an updated description.	**4.51**	**NO**
A written syllabus that identifies each student's responsibilities, and the form of evaluation, should be made available to students in each course.	**4.49**	**YES**
The curriculum of the library school should cover at least the following Core courses: classification and cataloging, reference materials and services, library management, collection development, computers in libraries, introduction to library and information science, and technical services.	**4.47**	**YES**

MEAN = Mean score of all respondents on a 5 point Likert-type scale

YES/NO = Current status does or does not match the statement in the standard

TABLE 5.26 -- Continued

Comparison of Curriculum Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The content of the library school curriculum should include courses devoted to information science and specialization.	**4.43**	**NO**
All instruction presented by the library school should be at the university level.	**4.40**	**YES**
Each school must determine the quality and quantity of the required and elective courses that each student needs to pass.	**4.33**	**YES**
The curriculum should be flexible in providing different types and levels of learning experiences in the program.	**4.33**	**NO**
All students will be required to take library science Core and advanced courses, in addition to liberal arts courses.	**4.27**	**YES**
The curriculum should also cover subject specialization, elective courses, and cultural courses.	**4.23**	**NO**
Each student should be assigned a personal guidance adviser in the program.	**4.00**	**YES**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

TABLE 5.27

Comparison of Continuing Education Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.	4.37	NO
The school should issue a certificate of completion for those who complete the continuing education session.	4.32	NO
A program of continuing education in library and information science should have its own specific objectives and budget.	4.32	NO
Continuing education should include both formal and informal learning situations, and need not to be limited to subjects' offerings in library school.	4.27	NO
The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.	4.27	NO
Distance education, interactive video, and other technologies should be provided to reach practicing librarians in rural and distant areas.	4.20	NO
The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain within one position category or are preparing to move into a higher one.	4.02	NO

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

Admission of Students

The dean of students and trainee affairs for the Public Authority for Applied Education and Training supervises the implementation of the admission and registration policy of the PAAET colleges and institutes. The PAAET Admission Bureau has its own criteria for selecting prospective students. The Admissions Bureau accepts new freshmen for all the PAAET colleges and institutions in January and August of each academic year. Based on the student's high school grade point average and request for a specific program or college, the PAAET Admission Bureau distributes the prospective students among these programs. The decision of the Admissions Bureau is final.

Two faculty members from the Department of Educational Technology (DET) and two from the Department of Library and Information Science (DLIS) interview the freshmen after they are assigned into the libraries and educational technology program. The DLIS head said, "No one is rejected in the interview. It is just routine."

The CBE admissions office divides the freshmen who are accepted in the Libraries and Educational Technology program between the two departments: the DLIS and the DET. It assigns an academic adviser for each student.

The adviser assists the student and participates in the selection of courses; signs all forms related to the

selection, addition, and deletion of courses; and helps the student solve any problems that arise. Entering freshmen attend the CBE and the DLIS orientation meeting where the system of study, counseling, registration, attendance, and other matters are discussed.

In the 1994-95 academic year, 126 female and 97 male freshmen were accepted into the Libraries and Educational Technology Program. The lowest high school grade point average for acceptance of the male students was 65.6%; 69.5% was the lowest for the female students. No accurate data at either the PAAET Admissions Bureau or the CBE admission offices are available regarding the number and gender of freshmen accepted in the program before 1994-95.

Currently, 671 students are enrolled in the program. Of these, 395 are female and 276 are male. Sixty-six of the women and 51 of the men are non-Kuwaiti. The Libraries and Educational Technology program has the highest number of non-Kuwaiti students of all the CBE male and female academic programs (see Table 5.2). More than 80% of the students are married, with one to three children.

By 1994-95, 1,063 students had graduated. Of those, 657 (381 women and 276 men) had graduated with a diploma in Library and Information Science (from 1979-80 to 1989-90). The remaining 404 (303 women and 103 men) had

graduated with a B.A. in Libraries and Educational Technology from 1991-92 to 1994-95 (see Table 5.28).

In 1986-87 the first group of freshmen students was accepted into the Libraries and Educational Technology program. In 1989-90, the last group of students graduated with a diploma in Library and Information Science. By June 1992, the first group of students had graduated with a B.A. in Libraries and Educational Technology. This class was composed of 7 men and 24 women. The students lost one academic year because of the Iraqi invasion. The Ministry of Education is the main employer for CBE graduates.

The quality of students is a major concern for the majority of DLIS faculty. They contend that a high percentage of students accepted into the program prefer another program, want to transfer to another program at CBE, want a B.A. and to be a school employee but not a teacher, are concerned that they will be qualified as neither a librarian nor an educational technology supervisor, or do not understand the nature of librarianship.

Another DLIS faculty member who was interviewed described some of the students in the program: "They are full-time students, full-time state employees, married, have children, are average or below-average students, are

Table 5.28

Number and Gender of LIS Graduates, 1979-80 to 1994-95

Academic Year	Female			Male		
	Kuwaiti	Non-Kuwaiti	Total	Kuwaiti	Non-Kuwaiti	Total
1979-80	79	--	79	36	--	36
1980-81	82	1	83	34	--	34
1981-82	31	1	32	18	--	18
1982-83	26	--	26	30	--	30
1983-84	27	--	27	50	--	50
1984-85	34	--	34	25	--	25
1985-86	28	--	28	23	--	23
1986-87*	20	--	20	19	--	19
1987-88	21	--	21	20	--	20
1988-89	29	1	30	19	--	19
1989-90**	1	--	1	2	--	2
1990-91***	--	--	--	--	--	--
1991-92	49	1	50	14	--	14
1992-93	68	5	73	22	1	23
1993-94	90	1	91	25	1	26
1994-95	87	2	89	39	1	40
Subtotal	672	12	684	376	3	379

Total graduates: 1063

*Freshmen accepted in the new program (Libraries and Educational Technology
**The last year students graduated with a degree in Library and Information Science
***The Iraqi invasion

Sources: College of Basic Education, Admissions Office, 1995, unpublished data; The Public Authority for Applied Education and Training, Admission Bureau, 1995, unpublished data.

unmotivated, have low attendance, fail to complete assignments, and don't want any grade less than A+." One faculty member expressed the belief that most female students are harder working, more motivated, and of better quality than most male students.

Table 5.29 shows a comparison of the current DLIS admission practices with the admission of students standard; the data indicate that 80% of current practice did not meet the standard, failing to agree with 4 of 5 statements.

Completion Requirements

A student in the program must amass 130 credits to be awarded a bachelor's degree in Libraries and Educational Technology. The student must complete all the requirements in 12 semesters or less, and maintain a grade point average of at least 2.0 (on a scale of 4.0) to be eligible for graduation.

The 130 credit hours that the students must complete are grouped in the following categories:

•70 credits in liberal arts

•60 credits in libraries and educational technology

A comparison of the DLIS completion requirements with the study results related to the Completion standard shows that 80% of the current requirements (4 of the 5 statements) did meet the standard (see Table 5.30).

TABLE 5.29

Comparison of Admission of Students Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
Graduation from an accredited secondary school with a strong academic record.	**4.22**	**YES**
A strong desire and capability of working with people of different backgrounds.	**4.18**	**NO**
Problem solving ability.	**4.13**	**NO**
High standards of scholarship and broad interests.	**4.10**	**NO**
Competence in the English language.	**4.02**	**NO**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

TABLE 5.30

Comparison of Completion Requirements Standard with Current Status of Department of Library and Information Science

STATEMENTS AND VARIABLES	MEAN	CURRENT STATUS
The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	**4.76**	**YES**
Students must complete all the requirements before being granted the bachelor degree certificate.	**4.73**	**YES**
Students and prospective students should have a full understanding of all the requirements.	**4.68**	**NO**
A written statement of all the requirements for completion of the degree should be available to the students.	**4.63**	**YES**
The student is responsible for maintaining a minimum academic grade average consistent with the standard of university for graduation.	**4.60**	**YES**

MEAN = Mean score of all respondents on a 5 point Likert-type scale
YES/NO = Current status does or does not match the statement in the standard

Research Question 2

The second research question of the study is really a series of questions:

How adequate is the curriculum for the present? Does it have weaknesses? If so, what is their nature?

In this section, the study findings are applied to answer these questions.

The library and information science curriculum is directed toward school librarianship, with little or no attention paid to the needs of other types of library and information centers. The curriculum does not prepare its graduates to work in special, public, academic libraries or information centers, thus failing to meet an urgent and present need in Kuwait.

The library and information science curriculum is limited to 32 credit hours in 15 courses. Nine of the 15 are required; the three remaining courses can be selected from six electives offered in the department. The curriculum cannot exceed these 32 credit hours. Nonetheless, it cannot add any new courses. Any change in course credit, name, topic, or course content must be approved by the Academic Affairs Committee of the Department of Library and Information Science, the College of Basic Education, and finally by the Public Authority for Applied Education and Training. Based on the interview with the DLIS head,

"The DLIS Curriculum Committee did not meet once since liberation in 1991 to add, develop, or revise any course in the LIS curriculum."

In an information interview, the General Director of School and Public Libraries in the Ministry of Education made this comment: "The total number of courses in the LIS curriculum is not enough to graduate a qualified school librarian." Faculty in the Department of Library and Information Science strongly agree with this opinion.

The LIS curriculum lacks courses that deal with specialization, computer science and information technology. Advanced courses in information science, library automation, and communication, all essential to modern librarianship, are not represented in the curriculum. Most emphasis is put on cataloging, classification, reference, and book selection as more than 75% of the LIS syllabus covers these four courses. Without question, the curriculum is out of date and does not reflect modern practices in library and information services.

There is overlap in the existing required courses. This is apparent in courses such as "Information Resources" and "Building the Library Collection"; it is also evident in "Children and Young Adult Libraries" and "Children and Young Adult Literature."

Although each required course has a stipulated number of credit hours, the actual time a student must

spend in each course far exceeds this amount. As an example, "Information Resources" and "Building and Developing the Library Collection" both carry three credit hours, but require five hours of student time per week. The majority of LIS faculty strongly agree that five hours per week is too much time to spend on these courses; they cost instructors and students time and interest.

At the other end of the spectrum are courses, such as "Introduction to Catalonging" and "Introduction to Subject Analysis," which have too much content to be covered in one course. The instructors admit freely that they must leave many basic principles untouched. Other problems are inadequacies of adjunct instructors in applying the AACR2, the Library of Congress, and Dewey Cataloging and Classification codes as well as insufficient bibliographical tools with which to teach students.

More than three sections are offered in most courses on both the men's and women's campuses. Even with a written syllabus for each course, different faculty members and adjunct instructors often teach very different versions for the same course. Many do not follow the syllabus or they leave a number of topics uncovered. A striking example is the teaching of "The Computer and Its Applications in Learning Resource Centers." This course

is taught from a very theoretical perspective at the men's campus and with a very practical approach at the women's campus.

A high percentage of both faculty and students agreed that students do not benefit fully from their field training courses. They spend only 50% of their time in actual practice, which is conducted in poorly operated and equipped libraries, conducted under the supervision of adjunct instructors or librarians. The LIS faculty agreed that some field training supervisors are not qualified to provide students with training.

Another major factor affecting the quality of library education is the lack of adequate teaching materials in the Arabic language. Few textbooks and bibliographical tools have been written in Arabic, and these are quite elementary. Even so, the courses depend totally on these textbooks, which are also old and outdated. There is also an acute shortage of audiovisual materials, facilities, and equipment in the department, a major problem affecting the quality of teaching library and information science courses. Students are not taught to solve specific problems in librarianship, and no modern methods of education are used in the department.

The actual library of the Department of Library and Information Science and its inadequate library resources and services is also a major issue affecting the curricu-

lum. Students do not have sufficient opportunity for reference and bibliography work; they have no chance to study and evaluate materials; they do not have enough periodicals in the Arabic language; and they lack updated library resources in non-print form. All these are serious deficiencies for a program in librarianship.

The faculty also reflects a lack of qualified, high-level professionals. There is no specialization among the faculty, with any member permitted to teach any course. With no specialists in information technology, communication, and computer science, the teaching methods and subject coverage are stagnant and in serious need of updating.

Another negative factor in the quality of the program is the students themselves. Many of them are not competent in English and are not computer literate. Often these students register for overloads--more than 20 hours per semester--and have neither the time or ability to earn anything more than a barely average grade.

The last factor affecting quality of the program is the lack of nonacademic staff. There is virtually no one to provide secretarial or clerical services for faculty or students. All these issues reflect the inadequacy of the curriculum in the Department of Library and Information Science at the present.

Research Question 3

The third question guiding the study was this: To what extent does the curriculum reflect new developments in the information age? The answer is detailed in this section.

After examining the library and information science curriculum and all syllabi, observing classes, and interviewing the DLIS faculty, the researcher found only one course that deals with computers in the library. The course title is "The Computer and Its Application in Learning Resource Centers." It is a three-credit required course requiring four hours per week. Students take this course in their last semester.

Several factors affect the teaching of this course. The DLIS has a computer lab on the men's campus and another on the women's campus. The computer lab on the women's campus has this equipment: 13 IBM personal computers, 386SX25. These are freestanding; they are not connected in a local network or to the Internet. They operate with either Windows 3.1 or DOS 6.0. Three of the PCs have a single-speed CD-ROM drive with no sound cards. There is no printer, no phone line, no PC for the instructor, no overhead projector. The lab is located inside the DLIS building.

Computers on the male campus have exactly the same

features, except there are only eight PCs, and there is a black and white dot-matrix printer. The lab is located inside the LIS library, outside the DLIS building.

These computers were brought to the DLIS after liberation from the Iraqi invasion in 1991 by the Libraries Administration of the Public Authority for Applied Education and Training because one of the library and information science faculty members was Director of PAAET Libraries Administration at that time. No staff are assigned to work in these labs to operate or maintain the machines or train students in their use. There is no licensed software for the computers.

For the last five years, the DLIS has requested equipment and softwear to upgrade the computer labs--memory upgrades, multimedia kits, scanners, color and laser printers, direct phone lines, modems, local network and Internet connections, and a variety of software and CD-ROM applications. All these requests have been either denied or delayed because of lack of funds at PAAET to provide for them.

Faculty sometimes bring their own CD-ROMs for students to practice with. One LIS faculty member installed his own personal copy of an Arabic word processing program on each PC in the two labs. A faculty member on the women's campus obtained an unlicensed copy of software titled MOLLI, release 4.1, from a colleague working in a

special library and installed it in each computer on the women's campus. The computer lab on the men's campus does not have this software. MOLLI is a sample library collection system that allows circulation, cataloging, and inventory functions; however, students find it difficult to work with because of their own incompetence in English and their lack of computer literacy.

The course, "The Computer and Its Application in Library Resource Centers," covers these topics: computer definition, units, advantages, function, historical development, kinds, hardware, software, applications, and use in libraries and information centers. Even with a written syllabus for this course, each faculty member or adjunct instructor teaches it his own way and covers different amounts of information, depending on the instructor's knowledge and experience. Some instructors treat the course as pure computer science, unrelated to libraries. No DLIS faculty member has a specialty or formal study in information technology or computer science.

As noted earlier, this course is taught complete differently on the men's and women's campuses, with the application for men almost totally theoretical and the approach for women completely practical. Men use Windows and the word processing program. The women are taught to

use the MOLLI and an Arabic word processing program.

Because no staff are assigned to the computer lab on the women's campus, it opens with the beginning of class and closes when class ends. More students are registered for the course than can be accommodated at the existing computers in the labs. For that reason, the instructors do not give assignments to be completed outside of class. The instructors must spend much time explaining and detailing each point and step in the assignment with each student throughout the class period. During class, two students use each computer. Access is a little better on the men's campus. Because it is located inside the LIS library, it is open during library hours.

Research Question 4

The last research question of the study asked, What kinds of courses should be added to the curriculum in the near future? The recommendations of the DLIS faculty are reported here.

About 60% of the DLIS faculty members recommended that one or more courses in information technology be added to the curriculum. Topics suggested cover computers in libraries, information marketing, online searching, softwear selection and evaluation in library and information science, library automation, electronic and desktop publishing, information system analysis, the Internet,

and networks.

The remaining 40% of the faculty recommended courses in librarianship. Topics they suggested for inclusion were preservation of library materials, cataloging of nonbook materials, serials, government documents, publishing, national library, indexing, problems and issues in librarianship, Library of Congress Classification System, and history of books and libraries.

The following chapter provides the summary, analysis, and conclusions drawn from the study. It also provides suggestions for further research.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of Stage 1 of this study was to formulate global standards for undergraduate library and information science programs in developing countries. The first stage was accomplished by surveying an international panel of experts on education for library and information specialists. A questionnaire was sent to 64 panelists in 39 countries; 50 (78%) usable questionnaires from panelists in 34 countries were returned.

The questionnaire contained 147 statements and variables, grouped into 14 standards. The standards addressed locus, goals, general and specific objectives, administration, financial support, physical facilities, library, academic staff, nonacademic staff, curriculum, continuing education, admission of students, and completion requirements. Respondents were requested to rank each statement or variable in importance on a scale of 1 to 5. Statements that achieved a mean score of 4.0 or greater were accepted as part of the standard. Among the 147 proposed statements and variables, 123 (83.7%) obtained mean scores of 4.0 or greater. The statements and variables were then used in the second stage of the

research as the basis for determining the current status of the undergraduate and information science program in the College of Basic Education in Kuwait. A second purpose was to determine the adequacy of the library and information science curriculum in this program at present, how the curriculum deals with new developments in the field, and finally, what kinds of courses should be added. A case study analysis was selected as the most appropriate methodology for this study. Research data were collected on site through document examination, semistructured open-ended interviews, and direct observation. The goals of the study were achieved.

Summary of Findings

In Kuwait, the first program in library and information science was established in 1977 as an independent department in the Teacher Education Institute (currently the College of Basic Education [CBE]). It was a two-year program designed to prepare high school graduates to be assistant librarians in public school, special, and academic libraries. When the CBE began offering four-year degrees in 1986-87, the Department of Library and Information Science (DLIS) and the Department of Educational Technology (DET) merged into one program called the Libraries and Educational Technology program. This program is a shared responsibility of the two separate

departments--the DLIS and the DET. Students in the Libraries and Educational Technology Program register for one-half of their courses in the DLIS and the other half in the DET. In other words, there are two separate majors in one single program. Each of the two departments--the DLIS and the DET--has its own administration, offices, faculty members, and staff. Each department also offers its own courses, has its own goals, objectives, resources, facilities, budget, and building.

In determining the current status of the Department of Library and Information Science, a combination of data sources and analytic methods were utilized. These produced a description of the DLIS in terms of the 14 standards developed earlier in the research. If the DLIS did not match at least 75% of the statements in a standard, its current status for that standard was considered unacceptable. The following list shows each standard and the percentage of the standard met by the DLIS:

1. Locus: 100%
2. Goals: less than 25%
3. General Objectives: 60%
4. Specific Objectives: 0%
5. Administration: 33.3%
6. Financial Support: 37.5%
7. Physical Facilities: 20%

8. Library: 13.6%

9. Faculty: 50%

10. Nonacademic staff: 20%

11. Curriculum: 50%

12. Continuing Education: 0%

13. Admission of Students: 20%

14. Completion: 80%

Concerning the Library and Information Science curriculum, the following findings resulted from the study:

1. The Library and Information Science (LIS) curriculum is limited to 32 credit hours in nine required and three elective courses. These courses are directed only toward school librarianship.

2. More than 75% of the LIS curriculum is concentrated in four areas: cataloging, classification, references, and book selection.

3. There is considerable overlap in subjects and topics of the courses in the LIS curriculum.

4. The number of hours a student spends on each course in the curriculum generally far exceeds the number of credit hours the course carries.

5. The subject matter of basic courses, such as "Introduction to Cataloging" and "Introduction to Subject Analysis" is far greater than can be covered in one course.

6. Even with a written syllabus, instructors do not follow the syllabus guidelines; different instructors cover varying amounts of information, stressing different topics and leaving some completely unaddressed.

7. Courses related to computers are taught completely differently for men and women, with men receiving a theoretical orientation and women receiving practical instruction.

8. The LIS courses are taught almost completely from textbooks; however, the books are old and outdated.

9. Lectures and practical work are the only teaching methods used in the DLIS.

10. Only one introductory courses in the entire LIS curriculum deals with computers and their applications in libraries.

11. Students do not have sufficient opportunity in reference and bibliography to study, exercise, and evaluate. Lack of professional periodicals in the Arabic language and up-to-date library resources, especially in nonprint form, are a major drawback.

12. No staff are assigned to the technical services and computer labs to operate and maintain the equipment or to train students in their use. For this reason, the labs are closed most of the time.

13. MOLLI is the only LIS software installed in the

computer lab, and only on the women's campus. No other software is available in either the men's or women's campuses.

14. When asked what changes needed to be made in the LIS curriculum, 60% of the faculty said courses in information technology needed to be added. The remaining 40%, however, saw a more pressing need for courses in librarianship.

Conclusions

The following conclusions were drawn from the study data:

1. The standards developed for this study are an appropriate measure of undergraduate library and information science programs.

2. The library education program at the College of Basic Education in Kuwait met only two of the 14 standards. These two are locus and completion requirements. The 12 standards for which the program fell below minimum acceptability were goals, general and specific objectives, administration, financial support, physical facilities, library, academic and nonacademic staff, curriculum, continuing education, and admission to students.

3. Students in the program are required to take 12 courses in library and information science. This course requirement is not sufficient to produce a qualified school

librarian.

4. The LIS curriculum lacks courses that deal with specialization, information technology, and computer science. Courses in information science, communication, and library automation that are closely related to librarianship are not represented in the LIS curriculum.

5. The courses in the LIS curriculum are out of date and do not address the modern approach to library and information services. They are not adequate for the present information age.

6. The LIS curriculum does not educate students to solve specific problems in the field of librarianship. No modern methods of education are used in the Department of Library and Information Science.

7. Several issues directly affect the quality of the LIS curriculum:

   a. Lack of adequate teaching materials, bibliographical tools, and textbooks at the Department of Library and Information Science.

   b. Acute shortage of audiovisual materials, facilities, and equipment.

   c. Lack of sufficient number of qualified high-level professional faculty members.

   d. Acute shortage of nonacademic staff to provide clerical and secretarial assistance to the faculty.

e. Inadequate financing and support for necessary equipment, materials, and tools for the technical services and computer labs.

f. Inadequacy in the library science library--its resources and services.

g. Poor quality of students, especially as evidenced in their poor computer literacy and lack of competence in English.

h. Poor qualifications of adjunct faculty.

8. The shortage of instructors with skills in information and computer technology and communications hampers any efforts to revise the LIS curriculum, allowing teaching methods and subject coverage to stagnate.

9. The number of graduates of the program does not meet the country's demand. The program has graduated only 1,063 students in 16 years. This small number falls far short of meeting Kuwait's current and future manpower needs.

10. The library education at the College of Basic Education in Kuwait is currently oriented toward only one type of librarianship--the type needed in the school library. The needs of other types of libraries and information centers in the country are not addressed.

The conclusions drawn from the study findings

support and reconfirm earlier findings about the quality of education provided by the Department of Library and Information Science in the College of Basic Education in Kuwait. Findings of inadequacy were reported by Al-Ansari (1992), Aman (1992c), Aman, Fong, and Dimitroff (1992), Abdel-Motey and Al-Hmood (1992, 1993), and others.

Recommendations for Further Research

The following recommendations are based on the findings of this research and the conclusions drawn from them:

1. Global standards for undergraduate library and information science programs in the developing countries were formulated for this study. These standards should be used to determine the current status of library and information education programs in various countries around the world.

2. This set of undergraduate standards should be compared with standards for graduates of master's programs in library and information science.

3. The standards should be translated into the languages used in Third World countries--French, Arabic, Spanish, and others--so they can be adopted and applied internationally.

4. A follow-up study should be undertaken every five years to determine the status of the library

education program in Kuwait.

5. The findings of this study should be compared with findings of similar studies done in the Arabian Gulf states as these countries share many similarities, such as language, economic conditions, geographic area, government systems, education, and others.

6. Further study is recommended to determine the differences and similarities between the male and female graduates of the program in Kuwait. Such a study should examine the graduates' performance in the workplace and the expectations of their supervisers regarding the knowledge and skills they acquired in the program.

APPENDIX A

COVER LETTER AND PANEL OF EXPERTS

The Florida State University
Tallahassee, Florida 32306-2048

School of Library and Information Studies
(904) 644-5775 FAX: (904) 644-9763

Dear Dr.

Subject: Standards for International Undergraduate LIS Programs

Based on your expert knowledge and experience in Education for Library and Information specialties in your country and abroad, and your long involvement with international librarianship, you have been selected to be part of an international panel to help formulate global standards for undergraduate library and information science programs. Your participation is very important to help us define the qualitative and quantitative standards for excellent library education, and to help the library profession to establish guidelines for undergraduate library and information programs around the world. Also to help the library community examine these library education programs from an international perspective.

The survey instrument that you are being asked to respond to, is a part of my doctoral research which will examine the undergraduate programs of library and information science. This study will evaluate the quality of library education in the State of Kuwait. In order to study any undergraduate program in library and information science in developing countries, it is necessary first to formulate new global standards that would enable a valid and reliable study to be made. Kindly I am asking you, based on your knowledge and expertise, to help establish these standards.

Enclosed is a booklet containing the proposed standards synthesized from the professional literature. Please express your agreement or disagreement on the importance of these statements by circling the appropriate number. Directions are provided on page 2 of the booklet. Please read through the entire suggested list before making your responses. Your suggestions on these or other statements would be most welcome and appreciated. Please feel free to make additional comments on the booklet itself.

It would be appreciated if you could return the completed instrument to me as soon as possible, preferably by **January 30, 1995**. A self-addressed envelope, and a $1.00 U.S. to cover the postage, is enclosed for your convenience.

Thank you for your time and cooperation.

Sincerely,

Ali Al-khabbaz

Ali Al-khabbaz, Doctoral Candidate,
School of Library and Information Studies, FSU

We urge you to respond to Mr. Alkhabbaz's request. His study has potential major implications for the development of global standards for undergraduate library and information science programs.

F. William Summers

F. William Summers
Major Professor

Jane B. Robbins

Jane B. Robbins
Dean

PANEL FOR DETERMINING GLOBAL STANDARDS FOR UNDERGRADUATE LIBRARY & INFORMATION SCIENCE PROGRAMS IN THE DEVELOPING COUNTRIES *

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APPENDIX B

DIRECTIONS AND SURVEY INSTRUMENT

Directions

This survey instrument requests your opinion to formulate global standard for undergraduate library and information science programs. The proposed standard is selected and synthesized from the library literature in the United States. Library education program may differ from country to another, but there should be an international standard that are common across nations. Based on your knowledge and experiences, you are being asked to respond to the proposed standard, which can be used to determine the quality of any library education program.

Please go through the list, and express your agreement or disagreement of each suggested statement by circling the appropriate number on a 5-point scale as follows:

1 = Strongly disagree.
2 = Disagree.
3 = Neutral or No opinion.
4 = Agree.
5 = Strongly agree.

Please respond to all suggested statements in the proposed standard. You may strongly agree with all or none of them. Please feel free to suggest other statements or comments in the blank spaces or in the margins available. Please also use additional sheets if necessary to make any other comments or suggestions you wish.

Please return the completed instrument using the enclosed self-addressed and stamped (U.S. $1.00 included to cover the postage) envelop by ...(date)...

Thank you for your time and assistance.

PROPOSED STANDARDS FOR UNDERGRADUATE LIBRARY AND INFORMATION SCIENCE PROGRAMS IN THE DEVELOPING COUNTRIES

Statements and Variables	Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree 2=Disagree 3=Neutral/No Opinion 4=Agree 5=Strongly Agree**				
Locus	SD	D	N	A	SA
1. The School of Library and Information Science should be part of an institution that awards a bachelor degree or equivalent credential.	1	2	3	4	5
2. The school should affiliate with universities and give instruction at the university level, since this will provide the cultural and academic standards and the teaching facilities needed.	1	2	3	4	5
3. The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	1	2	3	4	5
4. Others (Please Specify)					
_____	1	2	3	4	5
_____	1	2	3	4	5
Goals					
The library schools must determine their own goals and purposes, which should be clearly stated in a formal document:	1	2	3	4	5
Here are some potential goals:					
1. To produce qualified library personnel.	1	2	3	4	5
2. To determine the types of libraries and librarianship for which personnel will be prepared.	1	2	3	4	5
3. To provide for the needs of the institutions that will employ their graduates.	1	2	3	4	5
4. To offer the type of education and training that will best enable their students to carry on these tasks.	1	2	3	4	5
5. Others (Please Specify)					
_____	1	2	3	4	5
_____	1	2	3	4	5

Statements and Variables

Rating

Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable.

1=Strongly Disagree 2=Disagree
3=Neutral/No Opinion 4=Agree
5=Strongly Agree

OBJECTIVES

The objectives of the Library and Information Science Program are:

I. General Objectives

		SD	D	N	A	SA
	The undergraduate library and information science program will promote general objectives, derived from its goals and those of the university, which are clearly stated in a formal document:					
1.	To prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country.	1	2	3	4	5
2.	To establish the foundations of librarianship in the country.	1	2	3	4	5
3.	To satisfy the local demand for ideas, and for solutions to professionals' problems.	1	2	3	4	5
4.	To provide an introduction to the basic principles and practices of library services.	1	2	3	4	5
5.	To conduct research in the field of library and information science pertinent to the needs of the country.	1	2	3	4	5
6.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

II. Specific Objectives

	The undergraduate library and information science program will fulfill specific objectives, derived from its goals, which are clearly stated in a formal document:					
1.	To prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers.	1	2	3	4	5
2.	To assist each library school in determining and formulating specific objectives to provide for the needs of library personnel in the country.	1	2	3	4	5
3.	To educate sufficient indigenous personnel at non-professional levels to staff library and information centers.	1	2	3	4	5

	Statements and Variables	Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree 2=Disagree** **3=Neutral/No Opinion 4=Agree** **5=Strongly Agree**				
		SD	D	N	A	SA
4.	To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	1	2	3	4	5
5.	To offer training for leadership in the profession of library and information science.	1	2	3	4	5
6.	To provide continuing education for practicing librarians to keep up-to-date with new developments.	1	2	3	4	5
7.	To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.	1	2	3	4	5
8.	To sponsor international conferences and seminars in the field of library and information science(i.e. IFLA, UNESCO)	1	2	3	4	5
9.	To integrate professional concepts with the social, political, economic, and cultural aspects of the environment.	1	2	3	4	5
10.	To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	1	2	3	4	5
11.	To establish a strong, respected, indigenous profession relevant to the needs of the country, with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian.	1	2	3	4	5
12.	To establish consultant services for librarianship in the country.	1	2	3	4	5
13.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

Statements and Variables

Rating

Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable.

1=Strongly Disagree 2=Disagree
3=Neutral/No Opinion 4=Agree
5=Strongly Agree

	ADMINISTRATION	SD	D	N	A	SA
1.	The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	1	2	3	4	5
2.	The library school should have a clearly defined position in the organizational plan of the institution.	1	2	3	4	5
3.	The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	1	2	3	4	5
4.	The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	1	2	3	4	5
5.	The head should have the authority to select students, to recommend faculty and staff, and to design, revise and develop the curriculum, with the cooperation of the faculty.	1	2	3	4	5
6.	The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	1	2	3	4	5
7.	The head of the school should make all decisions, with consultation among the staff.	1	2	3	4	5
8.	The school newsletter or bulletin should publish information on policies, regulations, requirements, and activities concerning the school.	1	2	3	4	5
9.	The head of the school should prepare annual reports describing principal events of the year in some detail.	1	2	3	4	5
10.	The school should maintain files and documentation of its major features and activities.	1	2	3	4	5
11.	The school should keep records for each student, staff person, and faculty member in the program.	1	2	3	4	5
12.	The school should prepare a long-range plan for future activity.	1	2	3	4	5
13.	The school planners should determine any needed changes in curriculum, staff size, number and level of student, or physical plant, and should consider extending the program into the post-graduate level at the appropriate time.	1	2	3	4	5

Statements and Variables	Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. 1=Strongly Disagree 2=Disagree 3=Neutral/No Opinion 4=Agree 5=Strongly Agree				
	SD	D	N	A	SA
14. Others (Please Specify)					
_____	1	2	3	4	5
_____	1	2	3	4	5
Financial Support:					
1. The school should receive one hundred percent of its financial support from the institution with which it is affiliated.	1	2	3	4	5
2. The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate and maintain the program.	1	2	3	4	5
3. The school should maintain a separate annual budget under its own control.	1	2	3	4	5
4. The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school.	1	2	3	4	5
5. The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	1	2	3	4	5
6. Funds should be available as needed to carry out the school's program of teaching, research, and service, while providing for instructional resources and facilities, research projects, publications, and scholarships.	1	2	3	4	5
7. Funds should be available for the salaries of the academic and non-academic staff, and should include professional development, faculty travel, fellowships, and leaves with pay.	1	2	3	4	5
8. The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	1	2	3	4	5
9. The school should share in all other supporting funds, such as donations, grants, gifts, and endowments.	1	2	3	4	5
10. Others (Please Specify)					
_____	1	2	3	4	5
_____	1	2	3	4	5

Statements and Variables		Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree** **2=Disagree** **3=Neutral/No Opinion** **4=Agree** **5=Strongly Agree**				
PHYSICAL FACILITIES		SD	D	N	A	SA
1.	The library school should have its own building, rather than sharing facilities.	1	2	3	4	5
2.	The library school site should be located in the main library building of the parent institution, or close to it.	1	2	3	4	5
3.	Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	1	2	3	4	5
4.	The head of the school should have a private office.	1	2	3	4	5
5.	Each faculty member should have an individual office.	1	2	3	4	5
6.	Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	1	2	3	4	5
7.	The physical plant should be accessible to handicapped, and provide adequate facilities for those with special needs.	1	2	3	4	5
8.	Others (Please Specify) _____	1	2	3	4	5
	_____	1	2	3	4	5
LIBRARY						
1.	The library science school should have its own library.	1	2	3	4	5
2.	The library collection should meet the professional standards of library service.	1	2	3	4	5
3.	The library collection should include professional and non-professional resources as needed for general and specialized studies, and suitable for the level and degree of use required.	1	2	3	4	5
4.	Library resources should be sufficient in size and content to support the instructional and research program of the school.	1	2	3	4	5

	Statements and Variables	Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree** **2=Disagree** **3=Neutral/No Opinion** **4=Agree** **5=Strongly Agree**				
		SD	D	N	A	SA
5.	The collection of materials in the field of library and information science should be high-quality, and in large enough quantity.	1	2	3	4	5
6.	A specific collection of materials in the field of library and information science should be gathered in print and non-print forms.	1	2	3	4	5
7.	Selection of materials for the field of library and information science should be a joint responsibility between the library professional staff and the library school faculty, with the final decisions made by the library staff.	1	2	3	4	5
8.	The professional library collection should be kept up-to-date with new developments in the field.	1	2	3	4	5
9.	The collection should contain all professional library and information science books and periodicals published in the country.	1	2	3	4	5
10.	Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.	1	2	3	4	5
11.	Professional materials published in other countries should be selectively acquired.	1	2	3	4	5
12.	Publications of international organizations in the field of library and information science should be in the collection.	1	2	3	4	5
13.	Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.	1	2	3	4	5
14.	Library materials frequently used by library science students and faculty should be duplicated.	1	2	3	4	5
15.	The number of volumes per student should be equal to the number of volumes per student in all similar institutions in the country.	1	2	3	4	5
16.	The collection should contain sufficient reference and bibliography works to enable library science students to study, exercise, and evaluate the material in reference and subject bibliography courses.	1	2	3	4	5
17.	The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.	1	2	3	4	5

	Statements and Variables	Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree** **2=Disagree** **3=Neutral/No Opinion** **4=Agree** **5=Strongly Agree**				
		SD	D	N	A	SA
18.	The ratio of professional to non-professional staff will vary according to the size and needs of the institution.	1	2	3	4	5
19.	At least one professional librarian should be on duty whenever the library is open.	1	2	3	4	5
20.	Student assistants may be employed for certain tasks.	1	2	3	4	5
21.	A highly-automated, modern communication system should be provided for the library.	1	2	3	4	5
22.	All library operations should be fully-automated, and should present a qualified model for students in the school to observe.	1	2	3	4	5
23.	An on-line public access catalog or similar modern system should be installed and maintained.	1	2	3	4	5
24.	The collection should be easily accessible to the library school.	1	2	3	4	5
25.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5
ACADEMIC STAFF (faculty)						
1.	The basic minimum qualification required for full-time instructors in the library school will be a graduate professional degree in Library Science (MLS).	1	2	3	4	5
2.	Preference will be given to those with a Ph.D. degree in library and information science with practical experience.	1	2	3	4	5
3.	All faculty members should have significant professional experience appropriate to their major fields of instruction.	1	2	3	4	5
4.	Teaching experience is desirable, and each staff should teach only courses for which fitted and met his formal study and/or experience.	1	2	3	4	5
5.	The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	1	2	3	4	5

	Statements and Variables	Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree** **2=Disagree** **3=Neutral/No Opinion** **4=Agree** **5=Strongly Agree**				
		SD	D	N	A	SA
6.	A minimum of three or four faculty members should be working full-time.	1	2	3	4	5
7.	A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.	1	2	3	4	5
8.	The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	1	2	3	4	5
9.	A variety of backgrounds is desirable on the faculty.	1	2	3	4	5
10.	A part-time faculty is desirable to assist in carrying out the instructional load, and to connect practical viewpoints to the teaching activity.	1	2	3	4	5
11.	The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.	1	2	3	4	5
12.	The faculty members should not isolate themselves. They should participate in all the activities and programs held in the parent institution.	1	2	3	4	5
13.	Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	1	2	3	4	5
14.	Regular meetings of the academic staff should be held, at least one per term.	1	2	3	4	5
15.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

Statements and Variables

Rating

Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable.

1=Strongly Disagree **2=Disagree**
3=Neutral/No Opinion **4=Agree**
5=Strongly Agree

NON-ACADEMIC STAFF

		SD	D	N	A	SA
1.	The non-academic staff (i.e. executive secretary, secretaries, clerks, clerical assistants, typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.	1	2	3	4	5
2.	The non-academic staff should be sufficient in number, experience, and quality, from the highest professional to the lowest clerk.	1	2	3	4	5
3.	Staff should be adequate to support the head and the faculty in the performance of their responsibilities.	1	2	3	4	5
4.	A minimum number of non-academic staff would be two full-time persons.	1	2	3	4	5
5.	A personal secretary should be assigned to the head of the school.	1	2	3	4	5
6.	The faculty members should have a minimum of one person to do their secretarial work.	1	2	3	4	5
7.	The non-academic staff will have to accomplish certain functions and activities that require several personnel to be assigned directly to the school.	1	2	3	4	5
8.	The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.	1	2	3	4	5
9.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

Statements and Variables	Rating				
	Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree 2=Disagree 3=Neutral/No Opinion 4=Agree 5=Strongly Agree**				
CURRICULUM	SD	D	N	A	SA
1. Implementing the objectives of the library school is the most important principle in designing the curriculum.	1	2	3	4	5
2. The objectives of the curriculum should be carefully expressed and periodically examined.	1	2	3	4	5
3. The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	1	2	3	4	5
4. The curriculum should emphasize fundamental principles, applications, and processes for all types of library and information centers, and the services they provide.	1	2	3	4	5
5. The curriculum should include the basic courses in library and information science.	1	2	3	4	5
6. The curriculum should show evidence of a proper sequence of courses, and a balance among units of instruction.	1	2	3	4	5
7. The content of the library school curriculum should include courses devoted to information science and specialization.	1	2	3	4	5
8. The curriculum should be flexible in providing different types and levels of learning experiences in the program.	1	2	3	4	5
9. The library school curriculum should be revised periodically, based on present and future needs.	1	2	3	4	5
10. The curriculum should attempt to provide a foundation for graduate study in the field of library and information science.	1	2	3	4	5
11. The curriculum of the library school should cover at least the following Core courses: classification and cataloging, reference materials and services, library management, collection development, computers in libraries, introduction to library and information science, and technical services.	1	2	3	4	5
12. All students will be required to take library science Core and advanced courses, in addition to liberal arts courses.	1	2	3	4	5
13. The Core courses should be taken during the first year.	1	2	3	4	5

	Statements and Variables	Rating Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable. **1=Strongly Disagree 2=Disagree 3=Neutral/No Opinion 4=Agree 5=Strongly Agree**				
		SD	D	N	A	SA
14.	The curriculum should also cover subject specialization, elective courses, and cultural courses.	1	2	3	4	5
15.	All instruction presented by the library school should be at the university level.	1	2	3	4	5
16.	The school should maintain and improve the quality of teaching by introducing new methods and techniques.	1	2	3	4	5
17.	Modern aids to teaching should be used in the school.	1	2	3	4	5
18.	Teaching methods should include the following: lectures, seminars, research, case studies, discussion groups, practical work, field work, oral and written tests, and practical training.	1	2	3	4	5
19.	The school should have a written syllabus or course description for the entire curriculum.	1	2	3	4	5
20.	A written syllabus that identifies each student's responsibilities, and the form of evaluation, should be made available to students in each course.	1	2	3	4	5
21.	Each course in the curriculum shall have an updated description.	1	2	3	4	5
22.	Each student should be assigned a personal guidance adviser in the program.	1	2	3	4	5
23.	Each school must determine the quality and quantity of the required and elective courses that each student needs to pass.	1	2	3	4	5
24.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

Statements and Variables

Rating

Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable.

1=Strongly Disagree 2=Disagree
3=Neutral/No Opinion 4=Agree
5=Strongly Agree

CONTINUING EDUCATION

		SD	D	N	A	SA
1.	A program of continuing education in library and information science should have its own specific objectives and budget.	1	2	3	4	5
2.	The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain within one position category or are preparing to move into a higher one.	1	2	3	4	5
3.	Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.	1	2	3	4	5
4.	Continuing education should include both formal and informal learning situations, and need not to be limited to subjects' offerings in library school.	1	2	3	4	5
5.	The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.	1	2	3	4	5
6.	Distance education, interactive video, and other technologies should be provided to reach practicing librarians in rural and distant areas.	1	2	3	4	5
7.	The school should issue a certificate of completion for those who complete the continuing education session.	1	2	3	4	5
8.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

Statements and Variables

Rating

Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable.

1=Strongly Disagree **2=Disagree**
3=Neutral/No Opinion **4=Agree**
5=Strongly Agree

ADMISSION OF STUDENTS

Standards for admission to the school should be the same as those prescribed by the institution for other bachelor degree programs.

The criteria for selection of the prospective students should be clearly stated in a formal document. These criteria should be made known to the prospective students (applicants). The school should not select or reject applicants on the basis of age, sex, religion, color, politics, nationality, family prestige, race, wealth, lifestyle, or physical disability. Each school will determine its own method of judging applicants.

Admission to the program leading to the bachelor degree shall be based upon the following entrance requirements:

		SD	D	N	A	SA
1.	Graduation from an accredited secondary school with a strong academic record.	1	2	3	4	5
2.	An interview with the head of the school or at least two faculty members.	1	2	3	4	5
3.	A high level of intelligence.	1	2	3	4	5
4.	A strong desire and capability of working with people of different backgrounds.	1	2	3	4	5
5.	High standards of scholarship and broad interests.	1	2	3	4	5
6.	Problem solving ability.	1	2	3	4	5
7.	Competence in the English language.	1	2	3	4	5
8.	Quality of letters of reference.	1	2	3	4	5
9.	Local, national, or international entrance examinations may be desirable.	1	2	3	4	5
10.	Evidence of good health.	1	2	3	4	5
11.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

Statements and Variables

Rating

Please circle the appropriate number which expresses your level of agreement on the importance of each statement and variable.

1=Strongly Disagree **2=Disagree**
3=Neutral/No Opinion **4=Agree**
5=Strongly Agree

	COMPLETION REQUIREMENTS	SD	D	N	A	SA
1.	The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	1	2	3	4	5
2.	A written statement of all the requirements for completion of the degree should be available to the students.	1	2	3	4	5
3.	Students and prospective students should have a full understanding of all the requirements.	1	2	3	4	5
4.	The hours required for the bachelors degree should range from 125-135 credit hours.	1	2	3	4	5
5.	The student is responsible for maintaining a minimum academic grade average consistent with the standard of university for graduation.	1	2	3	4	5
6.	The student should complete all the requirements within a period of twelve semesters or less.	1	2	3	4	5
7.	Students must complete all the requirements before being granted the bachelor degree certificate.	1	2	3	4	5
8.	Others (Please Specify)					
	_____	1	2	3	4	5
	_____	1	2	3	4	5

Thank you very much for your time and cooperation.

Please return this booklet using the self-addressed, stamped envelope provided. If for some reason the envelope is missing, please return by air mail to:

Ali Alkhabbaz,
School of Library & Information Studies R-106,
Florida State University,
Tallahassee, Florida 32306-2048,
U. S. A.

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APPENDIX C

PANEL'S RESPONSES TO STANDARDS FOR UNDERGRADUATE LIBRARY AND INFORMATION SCIENCES

A GLOBAL STANDARDS FOR UNDERGRADUATE LIBRARY AND INFORMATION SCIENCE PROGRAMS IN THE DEVELOPING COUNTRIES

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
LOCUS			
1. The School of Library and Information Science should be part of an institution that awards a bachelor degree or equivalent credential.	50	4.26	1.19
2. The school should affiliate with universities and give instruction at the university level, since this will provide the cultural and academic standards and the teaching facilities needed.	49	4.49	0.94
3. The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	48	3.25	1.41
4. Other statements suggested by panel members			
The school should function in collaboration with other communication disciplines.	1	4	
In offering distance education programs, the only teaching units should be located in a university which has expertise in a distance education.	1	5	
GOALS			
The library schools must determine their own goals and purposes, which should be clearly stated in a formal document:	36	4.61	0.55
Here are some potential goals:			
1. To produce qualified library personnel.	49	4.76	0.48
2. To determine the types of libraries and librarianship for which personnel will be prepared.	48	3.33	1.31

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
3. To provide for the needs of the institutions that will employ their graduates.	49	4.02	1.11
4. To offer the type of education and training that will best enable their students to carry on these tasks.	48	4.65	0.76
5. Other statements suggested by panel members			
To offer library education in a broad context of information.	1	5	
To provide for the needs of information processes their graduates will carry out regardless institution of employment.	1	5	
To provide for the needs of library and a variety of information services personnel in the country.	1	5	
To ensure life-long education and development of the professionals.	1	5	
To enhance the existing professional structure by offering standardized program and evaluating it from time to time.	1	5	
To take an active part in the planning, implementation, and evaluation of information / documentation units.	1	5	
To encourage research and development.	1	5	
To produce it require support, technical or subprofessional personnel if required.	1	4	

OBJECTIVES

The objectives of the Library and Information Science Program are:

I. General Objectives

The undergraduate library and information science program will promote general objectives, derived from its goals and those of the university, which are clearly stated in a formal document:

1. To prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country.	49	4.57	0.82

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
2. To establish the foundations of librarianship in the country.	49	4.16	0.92
3. To satisfy the local demand for ideas, and for solutions to professionals' problems.	49	4.08	0.91
4. To provide an introduction to the basic principles and practices of library services.	49	4.43	0.84
5. To conduct research in the field of library and information science pertinent to the needs of the country.	49	4.41	0.91
6. Other statements suggested by panel members			
To introduce new concepts and ideas of information technology and its applications in libraries and information centers.	1	5	
To satisfy continuing development needs.	1	5	
To provide essential community services.	1	5	
To prepare for research - based education programmes included in the school.	1	5	
Librarianship as basis of general education useful in variety areas - communication, journalism, publishing and book selling.	1	4	
To cooperate with networks, and agences serving local information needs.	1	5	
II. Specific Objectives			
The undergraduate library and information science program will fulfill specific objectives, derived from its goals, which are clearly stated in a formal document:			
1. To prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers.	48	4.48	0.97
2. To assist each library school in determining and formulating specific objectives to provide for the needs of library personnel in the country.	47	3.87	0.95

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
3. To educate sufficient indigenous personnel at non-professional levels to staff library and information centers.	47	3.40	1.15
4. To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	49	4.02	1.25
5. To offer training for leadership in the profession of library and information science.	48	3.92	1.32
6. To provide continuing education for practicing librarians to keep up-to-date with new developments.	49	4.41	0.81
7. To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.	47	4.02	1.01
8. To sponsor international conferences and seminars in the field of library and information science(i.e. IFLA, UNESCO).	48	3.75	1.23
9. To integrate professional concepts with the social, political, economic, and cultural aspects of the environment.	48	4.23	0.93
10. To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	48	4.38	1.02
11. To establish a strong, respected, indigenous profession relevant to the needs of the country, with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian.	48	4.44	0.77
12. To establish consultant services for librarianship in the country.	49	3.76	1.01
13. Other statements suggested by panel members			
To write for publication in professional journals and to prepare conference papers.	1	5	
To seek influence decisions makers to work with other school in the region.	1	5	
To conduct short in service courses to practitioners on new developments.	1	5	

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
To offer higher degrees for graduates of undergraduate programs.	1	5	
ADMINISTRATION			
1. The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	50	4.82	0.39
2. The library school should have a clearly defined position in the organizational plan of the institution.	50	4.76	0.48
3. The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	50	4.86	0.35
4. The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	50	4.80	0.49
5. The head should have the authority to select students, to recommend faculty and staff, and to design, revise and develop the curriculum, with the cooperation of the faculty.	49	4.45	0.96
6. The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	50	4.84	0.37
7. The head of the school should make all decisions, with consultation among the staff.	50	3.98	1.08
8. The school newsletter or bulletin should publish information on policies, regulations, requirements, and activities concerning the school.	50	4.26	0.72
9. The head of the school should prepare annual reports describing principal events of the year in some detail.	49	4.45	0.61
10. The school should maintain files and documentation of its major features and activities.	49	4.51	0.65
11. The school should keep records for each student, staff person, and faculty member in the program.	49	4.49	0.82

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
12. The school should prepare a long-range plan for future activity.	49	4.69	0.51
13. The school planners should determine any needed changes in curriculum, staff size, number and level of student, or physical plant, and should consider extending the program into the post-graduate level at the appropriate time.	49	4.61	0.76
14. Other statements suggested by panel members			
The school should be represented in the council of the university or the parent institution.	1	5	
FINANCIAL SUPPORT			
1. The school should receive one hundred percent of its financial support from the institution with which it is affiliated.	48	3.77	1.13
2. The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate and maintain the program.	50	4.64	0.48
3. The school should maintain a separate annual budget under its own control.	50	4.24	0.98
4. The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school.	49	4.65	0.63
5. The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	50	4.76	0.52
6. Funds should be available as needed to carry out the school's program of teaching, research, and service, while providing for instructional resources and facilities, research projects, publications, and scholarships.	50	4.56	0.64
7. Funds should be available for the salaries of the academic and non-academic staff, and should include professional development, faculty travel, fellowships, and leaves with pay.	50	4.58	0.64
8. The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	49	4.82	0.44

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
9. The school should share in all other supporting funds, such as donations, grants, gifts, and endowments.	49	4.61	0.67
10. Other statements suggested by panel members			
The school should actively seek to raise funds from external sources.	1	5	
The school should generate funds through consultants, training, conference, workshops, etc.	1	5	
Parent institution should be able to reduce funding if goals are not achieved.	1	4	
PHYSICAL FACILITIES			
1. The library school should have its own building, rather than sharing facilities.	50	3.40	1.18
2. The library school site should be located in the main library building of the parent institution, or close to it.	50	3.52	1.23
3. Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	50	4.74	0.44
4. The head of the school should have a private office.	50	4.56	0.54
5. Each faculty member should have an individual office.	50	4.30	0.74
6. Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	50	4.76	0.43
7. The physical plant should be accessible to handicapped, and provide adequate facilities for those with special needs.	50	4.34	0.80
8. Other statements suggested by panel members			
Proper facilities to train students on technical processing, use of computers in libraries and other new technologies should be provided.	1	5	
Research activities should have proper space.	1	5	

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
LIBRARY			
1. The library science school should have its own library.	50	3.48	1.31
2. The library collection should meet the professional standards of library service.	47	4.66	0.56
3. The library collection should include professional and non-professional resources as needed for general and specialized studies, and suitable for the level and degree of use required.	50	4.36	0.72
4. Library resources should be sufficient in size and content to support the instructional and research program of the school.	50	4.70	0.51
5. The collection of materials in the field of library and information science should be high-quality, and in large enough quantity.	50	4.56	0.61
6. A specific collection of materials in the field of library and information science should be gathered in print and non-print forms.	50	4.50	0.74
7. Selection of materials for the field of library and information science should be a joint responsibility between the library professional staff and the library school faculty, with the final decisions made by the library staff.	49	3.94	1.09
8. The professional library collection should be kept up-to-date with new developments in the field.	50	4.78	0.46
9. The collection should contain all professional library and information science books and periodicals published in the country.	49	4.16	0.96
10. Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.	50	4.04	0.95
11. Professional materials published in other countries should be selectively acquired.	50	4.40	0.49
12. Publications of international organizations in the field of library and information science should be in the collection.	50	4.44	0.54

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
13. Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.	50	4.02	0.82
14. Library materials frequently used by library science students and faculty should be duplicated.	50	4.12	0.85
15. The number of volumes per student should be equal to the number of volumes per student in all similar institutions in the country.	50	4.12	0.82
16. The collection should contain sufficient reference and bibliography works to enable library science students to study, exercise, and evaluate the material in reference and subject bibliography courses.	50	4.52	0.58
17. The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.	50	4.62	0.60
18. The ratio of professional to non-professional staff will vary according to the size and needs of the institution.	50	4.16	0.62
19. At least one professional librarian should be on duty whenever the library is open.	50	4.28	0.83
20. Student assistants may be employed for certain tasks.	50	4.22	0.65
21. A highly-automated, modern communication system should be provided for the library.	49	4.43	0.61
22. All library operations should be fully-automated, and should present a qualified model for students in the school to observe.	49	4.29	0.65
23. An on-line public access catalog or similar modern system should be installed and maintained.	49	4.35	0.66
24. The collection should be easily accessible to the library school.	50	4.72	0.50
25. Other statements suggested by panel members			
System, OPAC, CD-ROMs etc, in a local network accessible to the library school.	1	5	

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
A collection of new forms of information (CD-ROMs) should be maintained in the library to replace old (papers) forms.	1	5	
The library should be a model for teaching, study, and research.	1	5	
The main library should maintain a respectable collection on library science to enlarge students, faculty, interaction with the main library.	1	5	
On-line access to date bases and internet is the responsibility of the school - not the library.	1	5	
ACADEMIC STAFF (faculty)			
1. The basic minimum qualification required for full-time instructors in the library school will be a graduate professional degree in Library Science (MLS).	49	4.35	0.95
2. Preference will be given to those with a Ph.D. degree in library and information science with practical experience.	49	4.41	0.81
3. All faculty members should have significant professional experience appropriate to their major fields of instruction.	49	4.24	0.85
4. Teaching experience is desirable, and each staff should teach only courses for which fitted and met his formal study and/or experience.	50	4.02	1.00
5. The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	50	4.70	0.54
6. A minimum of three or four faculty members should be working full-time.	50	4.32	0.89
7. A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.	50	4.08	0.90
8. The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	50	4.64	0.56
9. A variety of backgrounds is desirable on the faculty.	50	4.52	0.68

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
10. A part-time faculty is desirable to assist in carrying out the instructional load, and to connect practical viewpoints to the teaching activity.	50	4.00	0.90
11. The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.	50	4.62	0.60
12. The faculty members should not isolate themselves. They should participate in all the activities and programs held in the parent institution.	50	4.36	0.90
13. Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	49	4.82	0.44
14. Regular meetings of the academic staff should be held, at least one per term.	50	4.54	0.61
15. Other statements suggested by panel members			
Faculty members should have cordial relationship with senior university library staff and undertake some research jointly with them.	1	4	
Full - time faculty should carry out research and development.	1	5	
The faculty members should continue research and their scientific growth and should be active in scientific societies.	1	5	
NON-ACADEMIC STAFF			
1. The non-academic staff (i.e. executive secretary, secretaries, clerks, clerical assistants, typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.	50	4.62	0.49
2. The non-academic staff should be sufficient in number, experience, and quality, from the highest professional to the lowest clerk.	50	4.40	0.64
3. Staff should be adequate to support the head and the faculty in the performance of their responsibilities.	50	4.54	0.54

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
4. A minimum number of non-academic staff would be two full-time persons.	49	3.63	0.88
5. A personal secretary should be assigned to the head of the school.	50	4.00	0.97
6. The faculty members should have a minimum of one person to do their secretarial work.	49	3.92	0.95
7. The non-academic staff will have to accomplish certain functions and activities that require several personnel to be assigned directly to the school.	48	3.90	0.88
8. The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.	50	4.68	0.51
9. Other statements suggested by panel members			
Staffing decision should rest with the head.	1	5	
Accounting / audit assistant to help with budgeting and budget / finance management at department level.	1	5	
CURRICULUM			
1. Implementing the objectives of the library school is the most important principle in designing the curriculum.	49	4.59	0.54
2. The objectives of the curriculum should be carefully expressed and periodically examined.	50	4.74	0.44
3. The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	50	4.68	0.51
4. The curriculum should emphasize fundamental principles, applications, and processes for all types of library and information centers, and the services they provide.	50	4.66	0.56
5. The curriculum should include the basic courses in library and information science.	49	4.73	0.49

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
6. The curriculum should show evidence of a proper sequence of courses, and a balance among units of instruction.	48	4.58	0.54
7. The content of the library school curriculum should include courses devoted to information science and specialization.	49	4.43	0.65
8. The curriculum should be flexible in providing different types and levels of learning experiences in the program.	48	4.33	0.83
9. The library school curriculum should be revised periodically, based on present and future needs.	49	4.78	0.47
10. The curriculum should attempt to provide a foundation for graduate study in the field of library and information science.	49	4.59	0.57
11. The curriculum of the library school should cover at least the following Core courses: classification and cataloging, reference materials and services, library management, collection development, computers in libraries, introduction to library and information science, and technical services.	49	4.47	0.79
12. All students will be required to take library science Core and advanced courses, in addition to liberal arts courses.	48	4.27	0.92
13. The Core courses should be taken during the first year.	48	3.29	1.17
14. The curriculum should also cover subject specialization, elective courses, and cultural courses.	48	4.23	0.69
15. All instruction presented by the library school should be at the university level.	48	4.40	0.82
16. The school should maintain and improve the quality of teaching by introducing new methods and techniques.	49	4.63	0.53
17. Modern aids to teaching should be used in the school.	49	4.53	0.58
18. Teaching methods should include the following: lectures, seminars, research, case studies, discussion groups, practical work, field work, oral and written tests, and practical training.	49	4.61	0.61
19. The school should have a written syllabus or course description for the entire curriculum.	49	4.65	0.52

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
20. A written syllabus that identifies each student's responsibilities, and the form of evaluation, should be made available to students in each course.	49	4.49	0.58
21. Each course in the curriculum shall have an updated description.	49	4.51	0.65
22. Each student should be assigned a personal guidance adviser in the program.	49	4.00	0.84
23. Each school must determine the quality and quantity of the required and elective courses that each student needs to pass.	49	4.33	0.75
24. Other statements suggested by panel members			
Regular quality assessment of program.	1	5	
Regular student evaluation of faculty/ program.	1	5	
CONTINUING EDUCATION			
1. A program of continuing education in library and information science should have its own specific objectives and budget.	50	4.32	0.68
2. The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain within one position category or are preparing to move into a higher one.	49	4.02	0.92
3. Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.	49	4.37	0.60
4. Continuing education should include both formal and informal learning situations, and need not to be limited to subjects' offerings in library school.	49	4.27	0.67
5. The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.	49	4.27	0.67
6. Distance education, interactive video, and other technologies should be provided to reach practicing librarians in rural and distant areas.	50	4.20	0.73

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
7. The school should issue a certificate of completion for those who complete the continuing education session.	50	4.32	0.65
8. Other statements suggested by panel members			
Continuing education programs jointly with the professional association.	1	4	
Continuing education could be financed by its users (their institution).	1	4	
ADMISSION OF STUDENTS			
Standards for admission to the school should be the same as those prescribed by the institution for other bachelor degree programs. The criteria for selection of the prospective students should be clearly stated in a formal document. These criteria should be made known to the prospective students (applicants). The school should not select or reject applicants on the basis of age, sex, religion, color, politics, nationality, family prestige, race, wealth, lifestyle, or physical disability. Each school will determine its own method of judging applicants.			
Admission to the program leading to the bachelor degree shall be based upon the following entrance requirements:			
1. Graduation from an accredited secondary school with a strong academic record.	49	4.22	0.92
2. An interview with the head of the school or at least two faculty members.	49	3.49	1.02
3. A high level of intelligence.	47	3.94	1.01
4. A strong desire and capability of working with people of different backgrounds.	49	4.18	0.83
5. High standards of scholarship and broad interests.	49	4.10	0.74
6. Problem solving ability.	48	4.13	0.79
7. Competence in the English language.	48	4.02	0.98
8. Quality of letters of reference.	49	3.51	0.96

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
9. Local, national, or international entrance examinations may be desirable.	48	3.73	0.92
10. Evidence of good health.	49	3.37	1.07
11. Other statements suggested by panel members			
Competence in native language and one foreign language at least.	1	4	
Similar entrance qualifications as at other university.	1	5	
A strong motivation to work with information - processes - not because they like books and reading.	1	5	

COMPLETION REQUIREMENTS

1. The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	49	4.76	0.48
2. A written statement of all the requirements for completion of the degree should be available to the students.	49	4.63	0.53
3. Students and prospective students should have a full understanding of all the requirements.	47	4.68	0.47
4. The hours required for the bachelors degree should range from 125-135 credit hours.	46	3.67	1.01
5. The student is responsible for maintaining a minimum academic grade average consistent with the standard of university for graduation.	47	4.60	0.58
6. The student should complete all the requirements within a period of twelve semesters or less.	48	3.81	1.00
7. Students must complete all the requirements before being granted the bachelor degree certificate.	49	4.73	0.45
8. Other statements suggested by panel members.			

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

APPENDIX D

RESPONSES TO PROPOSED STANDARDS FROM PANELISTS IN DEVELOPING COUNTRIES

RESULT OF THE PROPOSED STANDARDS

The following pages present the results for the proposed standards according to the international panels responded from developing countries.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
LOCUS			
1. The School of Library and Information Science should be part of an institution that awards a bachelor degree or equivalent credential.	26	4.58	0.86
2. The school should affiliate with universities and give instruction at the university level, since this will provide the cultural and academic standards and the teaching facilities needed.	25	4.60	0.87
3. The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	25	3.40	1.38
GOALS			
The library schools must determine their own goals and purposes, which should be clearly stated in a formal document:	17	4.76	0.44
Here are some potential goals:			
1. To produce qualified library personnel.	26	4.85	0.46
2. To determine the types of libraries and librarianship for which personnel will be prepared.	25	3.56	1.16
3. To provide for the needs of the institutions that will employ their graduates.	26	4.15	1.19
4. To offer the type of education and training that will best enable their students to carry on these tasks.	26	4.62	0.90

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
OBJECTIVES			
The objectives of the Library and Information Science Program are:			
I. General Objectives			
The undergraduate library and information science program will promote general objectives, derived from its goals and those of the university, which are clearly stated in a formal document:			
1. To prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country.	26	4.65	0.85
2. To establish the foundations of librarianship in the country.	26	4.35	0.80
3. To satisfy the local demand for ideas, and for solutions to professionals' problems.	26	4.15	1.01
4. To provide an introduction to the basic principles and practices of library services.	26	4.42	0.95
5. To conduct research in the field of library and information science pertinent to the needs of the country.	26	4.31	0.93
II. Specific Objectives			
The undergraduate library and information science program will fulfill specific objectives, derived from its goals, which are clearly stated in a formal document:			
1. To prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers.	26	4.81	0.40
2. To assist each library school in determining and formulating specific objectives to provide for the needs of library personnel in the country.	26	4.15	0.83
3. To educate sufficient indigenous personnel at non-professional levels to staff library and information centers.	26	3.96	0.96
4. To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	26	3.65	1.32
5. To offer training for leadership in the profession of library and information science.	26	3.46	1.36

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
6. To provide continuing education for practicing librarians to keep up-to-date with new developments.	26	4.35	0.98
7. To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.	25	3.92	1.19
8. To sponsor international conferences and seminars in the field of library and information science(i.e. IFLA, UNESCO).	26	3.77	1.18
9. To integrate professional concepts with the social, political, economic, and cultural aspects of the environment.	26	4.15	1.12
10. To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	26	4.08	1.26
11. To establish a strong, respected, indigenous profession relevant to the needs of the country, with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian.	25	4.40	0.82
12. To establish consultant services for librarianship in the country.	26	3.65	1.20
ADMINISTRATION			
1. The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	26	4.77	0.43
2. The library school should have a clearly defined position in the organizational plan of the institution.	26	4.81	0.40
3. The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	26	4.81	0.40
4. The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	26	4.81	0.49
5. The head should have the authority to select students, to recommend faculty and staff, and to design, revise and develop the curriculum, with the cooperation of the faculty.	26	4.65	0.69
6. The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	26	4.85	0.37

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
7. The head of the school should make all decisions, with consultation among the staff.	26	4.31	0.88
8. The school newsletter or bulletin should publish information on policies, regulations, requirements, and activities concerning the school.	26	4.42	0.64
9. The head of the school should prepare annual reports describing principal events of the year in some detail.	26	4.62	0.50
10. The school should maintain files and documentation of its major features and activities.	26	4.65	0.49
11. The school should keep records for each student, staff person, and faculty member in the program.	26	4.73	0.45
12. The school should prepare a long-range plan for future activity.	26	4.81	0.40
13. The school planners should determine any needed changes in curriculum, staff size, number and level of student, or physical plant, and should consider extending the program into the post-graduate level at the appropriate time.	26	4.73	0.45
FINANCIAL SUPPORT			
1. The school should receive one hundred percent of its financial support from the institution with which it is affiliated.	26	4.12	0.95
2. The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate and maintain the program.	26	4.73	0.45
3. The school should maintain a separate annual budget under its own control.	26	4.62	0.64
4. The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school.	26	4.77	0.51
5. The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	26	4.77	0.51
6. Funds should be available as needed to carry out the school's program of teaching, research, and service, while providing for instructional resources and facilities, research projects, publications, and scholarships.	26	4.73	0.45

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
7. Funds should be available for the salaries of the academic and non-academic staff, and should include professional development, faculty travel, fellowships, and leaves with pay.	26	4.69	0.62
8. The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	26	4.85	0.37
9. The school should share in all other supporting funds, such as donations, grants, gifts, and endowments.	26	4.69	0.62
PHYSICAL FACILITIES			
1. The library school should have its own building, rather than sharing facilities.	26	4.08	0.93
2. The library school site should be located in the main library building of the parent institution, or close to it.	26	3.65	1.29
3. Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	26	4.73	0.45
4. The head of the school should have a private office.	26	4.58	0.58
5. Each faculty member should have an individual office.	26	4.35	0.80
6. Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	26	4.81	0.40
7. The physical plant should be accessible to handicapped, and provide adequate facilities for those with special needs.	26	4.31	0.84
LIBRARY			
1. The library science school should have its own library.	26	3.81	1.27
2. The library collection should meet the professional standards of library service.	26	4.73	0.45
3. The library collection should include professional and non-professional resources as needed for general and specialized studies, and suitable for the level and degree of use required.	26	4.50	0.65
4. Library resources should be sufficient in size and content to support the instructional and research program of the school.	26	4.73	0.53
5. The collection of materials in the field of library and information science should be high-quality, and in large enough quantity.	26	4.65	0.49

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
6. A specific collection of materials in the field of library and information science should be gathered in print and non-print forms.	26	4.50	0.71
7. Selection of materials for the field of library and information science should be a joint responsibility between the library professional staff and the library school faculty, with the final decisions made by the library staff.	25	4.12	1.09
8. The professional library collection should be kept up-to-date with new developments in the field.	26	4.85	0.37
9. The collection should contain all professional library and information science books and periodicals published in the country.	26	4.19	0.94
10. Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.	26	4.15	0.88
11. Professional materials published in other countries should be selectively acquired.	26	4.46	0.51
12. Publications of international organizations in the field of library and information science should be in the collection.	26	4.62	0.50
13. Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.	26	4.08	0.80
14. Library materials frequently used by library science students and faculty should be duplicated.	26	4.12	0.91
15. The number of volumes per student should be equal to the number of volumes per student in all similar institutions in the country.	26	4.15	0.83
16. The collection should contain sufficient reference and bibliography works to enable library science students to study, exercise, and evaluate the material in reference and subject bibliography courses.	26	4.62	0.50
17. The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.	26	4.58	0.70
18. The ratio of professional to non-professional staff will vary according to the size and needs of the institution.	26	4.19	0.69
19. At least one professional librarian should be on duty whenever the library is open.	26	4.50	0.71

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
20. Student assistants may be employed for certain tasks.	26	4.23	0.76
21. A highly-automated, modern communication system should be provided for the library.	25	4.52	0.51
22. All library operations should be fully-automated, and should present a qualified model for students in the school to observe.	25	4.36	0.64
23. An on-line public access catalog or similar modern system should be installed and maintained.	25	4.44	0.58
24. The collection should be easily accessible to the library school.	26	4.81	0.40
ACADEMIC STAFF (faculty)			
1. The basic minimum qualification required for full-time instructors in the library school will be a graduate professional degree in Library Science (MLS).	26	4.42	0.99
2. Preference will be given to those with a Ph.D. degree in library and information science with practical experience.	25	4.48	0.82
3. All faculty members should have significant professional experience appropriate to their major fields of instruction.	25	4.56	0.65
4. Teaching experience is desirable, and each staff should teach only courses for which fitted and met his formal study and/or experience.	26	4.27	1.00
5. The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	26	4.85	0.37
6. A minimum of three or four faculty members should be working full-time.	26	4.35	0.85
7. A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.	26	4.31	0.84
8. The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	26	4.85	0.37
9. A variety of backgrounds is desirable on the faculty.	26	4.65	0.69
10. A part-time faculty is desirable to assist in carrying out the instructional load, and to connect practical viewpoints to the teaching activity.	26	4.15	0.92

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
11. The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.	26	4.77	0.51
12. The faculty members should not isolate themselves. They should participate in all the activities and programs held in the parent institution.	26	4.50	0.76
13. Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	26	4.92	0.27
14. Regular meetings of the academic staff should be held, at least one per term.	26	4.69	0.47
NON-ACADEMIC STAFF			
1. The non-academic staff (i.e. executive secretary, secretaries, clerks, clerical assistants, typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.	26	4.54	0.51
2. The non-academic staff should be sufficient in number, experience, and quality, from the highest professional to the lowest clerk.	26	4.38	0.64
3. Staff should be adequate to support the head and the faculty in the performance of their responsibilities.	26	4.65	0.49
4. A minimum number of non-academic staff would be two full-time persons.	26	3.77	0.82
5. A personal secretary should be assigned to the head of the school.	26	4.27	0.92
6. The faculty members should have a minimum of one person to do their secretarial work.	26	4.08	0.93
7. The non-academic staff will have to accomplish certain functions and activities that require several personnel to be assigned directly to the school.	26	4.00	0.89
8. The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.	26	4.69	0.47

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
CURRICULUM			
1. Implementing the objectives of the library school is the most important principle in designing the curriculum.	25	4.80	0.41
2. The objectives of the curriculum should be carefully expressed and periodically examined.	26	4.81	0.40
3. The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	26	4.85	0.37
4. The curriculum should emphasize fundamental principles, applications, and processes for all types of library and information centers, and the services they provide.	26	4.81	0.40
5. The curriculum should include the basic courses in library and information science.	26	4.88	0.33
6. The curriculum should show evidence of a proper sequence of courses, and a balance among units of instruction.	26	4.81	0.40
7. The content of the library school curriculum should include courses devoted to information science and specialization.	26	4.42	0.70
8. The curriculum should be flexible in providing different types and levels of learning experiences in the program.	26	4.46	0.86
9. The library school curriculum should be revised periodically, based on present and future needs.	26	4.85	0.37
10. The curriculum should attempt to provide a foundation for graduate study in the field of library and information science.	26	4.62	0.50
11. The curriculum of the library school should cover at least the following Core courses: classification and cataloging, reference materials and services, library management, collection development, computers in libraries, introduction to library and information science, and technical services.	26	4.65	0.69
12. All students will be required to take library science Core and advanced courses, in addition to liberal arts courses.	26	4.62	0.57
13. The Core courses should be taken during the first year.	26	3.23	1.27
14. The curriculum should also cover subject specialization, elective courses, and cultural courses.	26	4.19	0.75
15. All instruction presented by the library school should be at the university level.	25	4.28	0.84

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
16. The school should maintain and improve the quality of teaching by introducing new methods and techniques.	26	4.77	0.43
17. Modern aids to teaching should be used in the school.	26	4.73	0.45
18. Teaching methods should include the following: lectures, seminars, research, case studies, discussion groups, practical work, field work, oral and written tests, and practical training.	26	4.77	0.43
19. The school should have a written syllabus or course description for the entire curriculum.	26	4.69	0.55
20. A written syllabus that identifies each student's responsibilities, and the form of evaluation, should be made available to students in each course.	26	4.54	0.58
21. Each course in the curriculum shall have an updated description.	26	4.65	0.56
22. Each student should be assigned a personal guidance adviser in the program.	26	4.23	0.71
23. Each school must determine the quality and quantity of the required and elective courses that each student needs to pass.	26	4.46	0.71
CONTINUING EDUCATION			
1. A program of continuing education in library and information science should have its own specific objectives and budget.	26	4.42	0.58
2. The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain within one position category or are preparing to move into a higher one.	26	4.31	0.79
3. Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.	26	4.54	0.58
4. Continuing education should include both formal and informal learning situations, and need not to be limited to subjects' offerings in library school.	26	4.35	0.75
5. The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.	26	4.54	0.51
6. Distance education, interactive video, and other technologies should be provided to reach practicing librarians in rural and distant areas.	26	4.31	0.68

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
7. The school should issue a certificate of completion for those who complete the continuing education session.	26	4.58	0.58
ADMISSION OF STUDENTS			
Standards for admission to the school should be the same as those prescribed by the institution for other bachelor degree programs. The criteria for selection of the prospective students should be clearly stated in a formal document. These criteria should be made known to the prospective students (applicants). The school should not select or reject applicants on the basis of age, sex, religion, color, politics, nationality, family prestige, race, wealth, lifestyle, or physical disability. Each school will determine its own method of judging applicants.			
Admission to the program leading to the bachelor degree shall be based upon the following entrance requirements:			
1. Graduation from an accredited secondary school with a strong academic record.	26	4.54	0.58
2. An interview with the head of the school or at least two faculty members.	26	3.77	1.11
3. A high level of intelligence.	26	4.00	0.98
4. A strong desire and capability of working with people of different backgrounds.	26	4.38	0.64
5. High standards of scholarship and broad interests.	26	4.15	0.78
6. Problem solving ability.	26	4.23	0.65
7. Competence in the English language.	26	4.50	0.58
8. Quality of letters of reference.	26	3.92	0.89
9. Local, national, or international entrance examinations may be desirable.	25	3.80	0.91
10. Evidence of good health.	26	3.81	1.02
COMPLETION REQUIREMENTS			
1. The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	26	4.81	0.40
2. A written statement of all the requirements for completion of the degree should be available to the students.	26	4.65	0.49

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
3. Students and prospective students should have a full understanding of all the requirements.	26	4.73	0.45
4. The hours required for the bachelors degree should range from 125-135 credit hours.	24	3.92	0.88
5. The student is responsible for maintaining a minimum academic grade average consistent with the standard of university for graduation.	26	4.73	0.45
6. The student should complete all the requirements within a period of twelve semesters or less.	26	4.08	0.89
7. Students must complete all the requirements before being granted the bachelor degree certificate.	26	4.77	0.43

APPENDIX E

RESPONSES TO PROPOSED STANDARDS FROM PANELISTS IN DEVELOPED COUNTRIES

RESULT OF THE PROPOSED STANDARDS

The following pages present the results for the proposed standards according to the international panels responded from developed countries.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
LOCUS			
1. The School of Library and Information Science should be part of an institution that awards a bachelor degree or equivalent credential.	24	3.92	1.41
2. The school should affiliate with universities and give instruction at the university level, since this will provide the cultural and academic standards and the teaching facilities needed.	24	4.38	1.01
3. The library school should operate as independent unit, and should achieve academic levels equal to other university schools.	23	3.09	1.44
GOALS			
The library schools must determine their own goals and purposes, which should be clearly stated in a formal document:	19	4.47	0.61
Here are some potential goals:			
1. To produce qualified library personnel.	23	4.65	0.49
2. To determine the types of libraries and librarianship for which personnel will be prepared.	23	3.09	1.44
3. To provide for the needs of the institutions that will employ their graduates.	23	3.87	1.01
4. To offer the type of education and training that will best enable their students to carry on these tasks.	22	4.68	0.57

1. Number of respondents who answered the question.
2. Mean score on a five(5) point scale.
3. Standard deviation of scores.

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
OBJECTIVES			
The objectives of the Library and Information Science Program are:			
I. General Objectives			
The undergraduate library and information science program will promote general objectives, derived from its goals and those of the university, which are clearly stated in a formal document:			
1. To prepare librarians for one, or more than one, type of library or information center, as required by the needs of the country.	23	4.48	0.79
2. To establish the foundations of librarianship in the country.	23	3.96	1.02
3. To satisfy the local demand for ideas, and for solutions to professionals' problems.	23	4.00	0.80
4. To provide an introduction to the basic principles and practices of library services.	23	4.43	0.73
5. To conduct research in the field of library and information science pertinent to the needs of the country.	23	4.52	0.90
II. Specific Objectives			
The undergraduate library and information science program will fulfill specific objectives, derived from its goals, which are clearly stated in a formal document:			
1. To prepare sufficient numbers of library personnel with the knowledge and skills that will meet the employment requirements of academic, public, special, and school libraries and information centers.	22	4.09	1.27
2. To assist each library school in determining and formulating specific objectives to provide for the needs of library personnel in the country.	21	3.52	0.98
3. To educate sufficient indigenous personnel at non-professional levels to staff library and information centers.	21	2.71	1.01
4. To train sufficient indigenous librarians and information specialists to occupy leading positions in the field of library and information science.	23	4.43	1.04
5. To offer training for leadership in the profession of library and information science.	22	4.45	1.06

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
6. To provide continuing education for practicing librarians to keep up-to-date with new developments.	23	4.48	0.59
7. To publish professional journals, monographs, textbooks, and teaching materials concerning the problems of the profession in the country and new developments in the field.	22	4.14	0.77
8. To sponsor international conferences and seminars in the field of library and information science(i.e. IFLA, UNESCO).	22	3.73	1.32
9. To integrate professional concepts with the social, political, economic, and cultural aspects of the environment.	22	4.32	0.65
10. To encourage and stimulate research in the field of library and information science to identify problems facing the profession in the country.	22	4.73	0.46
11. To establish a strong, respected, indigenous profession relevant to the needs of the country, with well-trained and highly skilled personnel, imbued with the philosophy of the professional librarian.	23	4.48	0.73
12. To establish consultant services for librarianship in the country.	23	3.87	0.76
ADMINISTRATION			
1. The library school should have an equal designation and a similar organizational level as that of comparable programs in the parent institution.	24	4.88	0.34
2. The library school should have a clearly defined position in the organizational plan of the institution.	24	4.71	0.55
3. The head of the library school should have title, status, salary, and authority comparable to heads of similar units in the parent institution.	24	4.92	0.28
4. The head of the school should report to the chief academic officer, or to the same person to whom heads of comparable schools report.	24	4.79	0.51
5. The head should have the authority to select students, to recommend faculty and staff, and to design, revise and develop the curriculum, with the cooperation of the faculty.	23	4.22	1.17
6. The head should have sufficient academic qualifications, experience, leadership skills, administrative abilities, and understanding of developments in the field.	24	4.83	0.38

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
7. The head of the school should make all decisions, with consultation among the staff.	24	3.63	1.17
8. The school newsletter or bulletin should publish information on policies, regulations, requirements, and activities concerning the school.	24	4.08	0.78
9. The head of the school should prepare annual reports describing principal events of the year in some detail.	23	4.26	0.69
10. The school should maintain files and documentation of its major features and activities.	23	4.35	0.78
11. The school should keep records for each student, staff person, and faculty member in the program.	23	4.22	1.04
12. The school should prepare a long-range plan for future activity.	23	4.57	0.59
13. The school planners should determine any needed changes in curriculum, staff size, number and level of student, or physical plant, and should consider extending the program into the post-graduate level at the appropriate time.	23	4.48	0.99
FINANCIAL SUPPORT			
1. The school should receive one hundred percent of its financial support from the institution with which it is affiliated.	22	3.36	1.22
2. The parent institution (or controlling agency) will provide continuing financial support adequate to develop, innovate and maintain the program.	24	4.54	0.51
3. The school should maintain a separate annual budget under its own control.	24	3.83	1.13
4. The school should prepare an accurate budget and decide the amount of the needed funds, based on the specific needs of the school.	23	4.52	0.73
5. The institution shall provide financial support of the library school in a manner consistent with its policies for the support of other comparable units.	24	4.75	0.53
6. Funds should be available as needed to carry out the school's program of teaching, research, and service, while providing for instructional resources and facilities, research projects, publications, and scholarships.	24	4.38	0.77

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
7. Funds should be available for the salaries of the academic and non-academic staff, and should include professional development, faculty travel, fellowships, and leaves with pay.	24	4.46	0.66
8. The general planning and budgeting processes of the institution as a whole should include the school as an integral part.	23	4.78	0.52
9. The school should share in all other supporting funds, such as donations, grants, gifts, and endowments.	23	4.52	0.73
PHYSICAL FACILITIES			
1. The library school should have its own building, rather than sharing facilities.	24	2.67	0.96
2. The library school site should be located in the main library building of the parent institution, or close to it.	24	3.38	1.17
3. Proper space, equipment, and furniture will be needed for classrooms, offices, laboratories, study areas, assembly rooms, and storage.	24	4.75	0.44
4. The head of the school should have a private office.	24	4.54	0.51
5. Each faculty member should have an individual office.	24	4.25	0.68
6. Instructional and research equipment (for example: audiovisual equipment, computers, multimedia resources) should be provided according to the needs of the school.	24	4.71	0.46
7. The physical plant should be accessible to handicapped, and provide adequate facilities for those with special needs.	24	4.38	0.77
LIBRARY			
1. The library science school should have its own library.	24	3.13	1.30
2. The library collection should meet the professional standards of library service.	21	4.57	0.68
3. The library collection should include professional and non-professional resources as needed for general and specialized studies, and suitable for the level and degree of use required.	24	4.21	0.78
4. Library resources should be sufficient in size and content to support the instructional and research program of the school.	24	4.67	0.48
5. The collection of materials in the field of library and information science should be high-quality, and in large enough quantity.	24	4.46	0.72

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
6. A specific collection of materials in the field of library and information science should be gathered in print and non-print forms.	24	4.50	0.78
7. Selection of materials for the field of library and information science should be a joint responsibility between the library professional staff and the library school faculty, with the final decisions made by the library staff.	24	3.75	1.07
8. The professional library collection should be kept up-to-date with new developments in the field.	24	4.71	0.55
9. The collection should contain all professional library and information science books and periodicals published in the country.	23	4.13	1.01
10. Professional books and periodicals published by neighboring countries in the language native to the school should be acquired.	24	3.92	1.02
11. Professional materials published in other countries should be selectively acquired.	24	4.33	0.48
12. Publications of international organizations in the field of library and information science should be in the collection.	24	4.25	0.53
13. Older principal books that are not entirely replaced by newer publications in the collection should be obtained, as well as back files of principal journals.	24	3.96	0.86
14. Library materials frequently used by library science students and faculty should be duplicated.	24	4.13	0.80
15. The number of volumes per student should be equal to the number of volumes per student in all similar institutions in the country.	24	4.08	0.83
16. The collection should contain sufficient reference and bibliography works to enable library science students to study, exercise, and evaluate the material in reference and subject bibliography courses.	24	4.42	0.65
17. The library should have an adequate number of professional and non-professional staff with a high level of qualifications and experience.	24	4.67	0.48
18. The ratio of professional to non-professional staff will vary according to the size and needs of the institution.	24	4.13	0.54
19. At least one professional librarian should be on duty whenever the library is open.	24	4.04	0.91

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
20. Student assistants may be employed for certain tasks.	24	4.21	0.51
21. A highly-automated, modern communication system should be provided for the library.	24	4.33	0.70
22. All library operations should be fully-automated, and should present a qualified model for students in the school to observe.	24	4.21	0.66
23. An on-line public access catalog or similar modern system should be installed and maintained.	24	4.25	0.74
24. The collection should be easily accessible to the library school.	24	4.63	0.58
ACADEMIC STAFF (faculty)			
1. The basic minimum qualification required for full-time instructors in the library school will be a graduate professional degree in Library Science (MLS).	23	4.26	0.92
2. Preference will be given to those with a Ph.D. degree in library and information science with practical experience.	24	4.33	0.82
3. All faculty members should have significant professional experience appropriate to their major fields of instruction.	24	3.92	0.93
4. Teaching experience is desirable, and each staff should teach only courses for which fitted and met his formal study and/or experience.	24	3.75	0.94
5. The head of the school should be a full-time faculty member, with administrative, leadership and teaching responsibilities.	24	4.54	0.66
6. A minimum of three or four faculty members should be working full-time.	24	4.29	0.95
7. A maximum ratio of one instructor for every twelve students, in full-time equivalents, is desirable.	24	3.83	0.92
8. The total number of full- and part-time staff should be adequate in number and competency to teach the courses being offered at the school, and to give individual attention to all the students.	24	4.42	0.65
9. A variety of backgrounds is desirable on the faculty.	24	4.38	0.65
10. A part-time faculty is desirable to assist in carrying out the instructional load, and to connect practical viewpoints to the teaching activity.	24	3.83	0.87

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
11. The faculty members should possess intellectual awareness, maintain an interest in research, continue their professional growth, and should be active in professional associations.	24	4.46	0.66
12. The faculty members should not isolate themselves. They should participate in all the activities and programs held in the parent institution.	24	4.21	1.02
13. Faculty in the school should hold equivalent titles, and have the same prestige and privileges, as that of the faculty in other units of the institution.	23	4.70	0.56
14. Regular meetings of the academic staff should be held, at least one per term.	24	4.38	0.71
NON-ACADEMIC STAFF			
1. The non-academic staff (i.e. executive secretary, secretaries, clerks, clerical assistants, typists, program assistants) should have qualifications equal to those of persons in comparable units of the institution.	24	4.71	0.46
2. The non-academic staff should be sufficient in number, experience, and quality, from the highest professional to the lowest clerk.	24	4.42	0.65
3. Staff should be adequate to support the head and the faculty in the performance of their responsibilities.	24	4.42	0.58
4. A minimum number of non-academic staff would be two full-time persons.	23	3.48	0.95
5. A personal secretary should be assigned to the head of the school.	24	3.71	0.95
6. The faculty members should have a minimum of one person to do their secretarial work.	23	3.74	0.96
7. The non-academic staff will have to accomplish certain functions and activities that require several personnel to be assigned directly to the school.	22	3.77	0.87
8. The non-academic staff should have the same benefits and privileges as those persons employed in similar work elsewhere in the institution.	24	4.67	0.56
CURRICULUM			
1. Implementing the objectives of the library school is the most important principle in designing the curriculum.	24	4.38	0.58

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
2. The objectives of the curriculum should be carefully expressed and periodically examined.	24	4.67	0.48
3. The curriculum should consist of a unified series of formal courses, practical training, field trips, and other educational experiences.	24	4.50	0.59
4. The curriculum should emphasize fundamental principles, applications, and processes for all types of library and information centers, and the services they provide.	24	4.50	0.66
5. The curriculum should include the basic courses in library and information science.	23	4.57	0.59
6. The curriculum should show evidence of a proper sequence of courses, and a balance among units of instruction.	22	4.32	0.57
7. The content of the library school curriculum should include courses devoted to information science and specialization.	23	4.43	0.59
8. The curriculum should be flexible in providing different types and levels of learning experiences in the program.	22	4.18	0.80
9. The library school curriculum should be revised periodically, based on present and future needs.	23	4.70	0.56
10. The curriculum should attempt to provide a foundation for graduate study in the field of library and information science.	23	4.57	0.66
11. The curriculum of the library school should cover at least the following Core courses: classification and cataloging, reference materials and services, library management, collection development, computers in libraries, introduction to library and information science, and technical services.	23	4.26	0.86
12. All students will be required to take library science Core and advanced courses, in addition to liberal arts courses.	22	3.86	1.08
13. The Core courses should be taken during the first year.	22	3.36	1.05
14. The curriculum should also cover subject specialization, elective courses, and cultural courses.	22	4.27	0.63
15. All instruction presented by the library school should be at the university level.	23	4.52	0.79
16. The school should maintain and improve the quality of teaching by introducing new methods and techniques.	23	4.48	0.59
17. Modern aids to teaching should be used in the school.	23	4.30	0.63

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
18. Teaching methods should include the following: lectures, seminars, research, case studies, discussion groups, practical work, field work, oral and written tests, and practical training.	23	4.43	0.73
19. The school should have a written syllabus or course description for the entire curriculum.	23	4.61	0.50
20. A written syllabus that identifies each student's responsibilities, and the form of evaluation, should be made available to students in each course.	23	4.43	0.59
21. Each course in the curriculum shall have an updated description.	23	4.35	0.71
22. Each student should be assigned a personal guidance adviser in the program.	23	3.74	0.92
23. Each school must determine the quality and quantity of the required and elective courses that each student needs to pass.	23	4.17	0.78
CONTINUING EDUCATION			
1. A program of continuing education in library and information science should have its own specific objectives and budget.	24	4.21	0.78
2. The library school should provide a continuing education program for all practicing library and information science personnel, whether they remain within one position category or are preparing to move into a higher one.	23	3.70	0.97
3. Continuing education should be designed to keep practicing library and information science personnel equally advanced in their areas of specialization.	23	4.17	0.58
4. Continuing education should include both formal and informal learning situations, and need not to be limited to subjects' offerings in library school.	23	4.17	0.58
5. The library school should offer short and intensive courses and workshops for the advantage of all practicing library and information personnel.	23	3.96	0.71
6. Distance education, interactive video, and other technologies should be provided to reach practicing librarians in rural and distant areas.	24	4.08	0.78
7. The school should issue a certificate of completion for those who complete the continuing education session.	24	4.04	0.62

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
ADMISSION OF STUDENTS			
Standards for admission to the school should be the same as those prescribed by the institution for other bachelor degree programs. The criteria for selection of the prospective students should be clearly stated in a formal document. These criteria should be made known to the prospective students (applicants). The school should not select or reject applicants on the basis of age, sex, religion, color, politics, nationality, family prestige, race, wealth, lifestyle, or physical disability. Each school will determine its own method of judging applicants.			
Admission to the program leading to the bachelor degree shall be based upon the following entrance requirements:			
1. Graduation from an accredited secondary school with a strong academic record.	23	3.87	1.10
2. An interview with the head of the school or at least two faculty members.	23	3.17	0.83
3. A high level of intelligence.	21	3.86	1.06
4. A strong desire and capability of working with people of different backgrounds.	23	3.96	0.98
5. High standards of scholarship and broad interests.	23	4.04	0.71
6. Problem solving ability.	22	4.00	0.93
7. Competence in the English language.	22	3.45	1.06
8. Quality of letters of reference.	23	3.04	0.82
9. Local, national, or international entrance examinations may be desirable.	23	3.65	0.93
10. Evidence of good health.	23	2.87	0.92
COMPLETION REQUIREMENTS			
1. The program's requirements should not be lower than the requirements of a comparable school within the parent institution.	23	4.70	0.56
2. A written statement of all the requirements for completion of the degree should be available to the students.	23	4.61	0.58
3. Students and prospective students should have a full understanding of all the requirements.	21	4.62	0.50

Statements and Variables	N[1]	MEAN[2]	S.D.[3]
4. The hours required for the bachelors degree should range from 125-135 credit hours.	22	3.41	1.10
5. The student is responsible for maintaining a minimum academic grade average consistent with the standard of university for graduation.	21	4.43	0.68
6. The student should complete all the requirements within a period of twelve semesters or less.	22	3.50	1.06
7. Students must complete all the requirements before being granted the bachelor degree certificate.	23	4.70	0.47

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BIOGRAPHICAL SKETCH

Ali Fakher Al-Khabbaz was born on October 31, 1959, in Kuwait, where he completed his elementary, intermediate, and secondary school education. He received a diploma in library science from the Teacher Education Institute in 1981. After his graduation, the Public Authority for Applied Education and Training (PAAET) granted him a scholarship to pursue undergraduate studies in the United States. He entered Ohio Dominican College in Columbus, Ohio, in 1982 and received a bachelor's degree in library and information science in December 1984. He worked after graduation at the Kuwait Central Library from 1985 to 1987. Late in 1987 he received another scholarship from PAAET to pursue graduate studies in the United States. He entered the master's degree program in library and information science at Clarion University (Pennsylvania) in 1987, graduating in spring, 1989.

After graduation, he was employed as an instructor in the Department of Library and Information Science in the College of Basic Education in Kuwait from 1989 to 1992. He is proud that he did not leave Kuwait during the Iraqi invasion, which lasted seven months. During this

time, he worked as a baker in the Al-Rumithyah Bakery. While on duty, he was wounded in the arm.

In August of 1992, the PAAET granted him a third scholarship. He entered the Ph.D. program of the School of Library and Information Studies of Florida State University, completing his doctorate in the summer of 1996.

He is presently working as a faculty member in the Department of Library and Information Science in the College of Basic Education in Kuwait.