Revisions of Curricula and New Ph.D. Program at the School of Library and Information Science, Keio University: A Progress Report

慶應義塾大学図書館・情報学科のカリキュラム改訂 および新設博士課程: 経過報告

Takahisa Sawamoto

澤 本 孝 久

要旨

昭和 26 年,慶應義塾大学にわが国で始めての図書館学科が創設されてから,もうすぐ四半世紀にもなろうとしている。この間に何回か学部課程のカリキュラムを改訂してきたが,特に昭和 44 年度から始まり,本年4月に開設された博士課程の準備段階であった昭和 49 年度の始めまでの5年間は,学部課程のカリキュラムの再検討および修士・博士課程の調査検討に並々ならぬ努力がはらわれた。

また、本学科の教員のみによる検討が客観性を欠くことを恐れ、 昭和 46 年、内部検討が一応終結した段階で米国からドロシー・パーカー博士と フォスター・モーハート博士の 両氏を招聘し克明な 調査が 行なわれたが、本文には両氏の調査経過と勧告が紹介されている。

さらに、図書館情報学の分析の結果考えられた理論的なカリキュラム構造と、本学科学部課程で採用した実際上のカリキュラム構造を対比している。修士課程のカリキュラム構造には若干の欠陥や不均衡な点が発見されたが、今後の大学院課程のカリキュラム改訂の際には、根本的な研究と学部・修士・博士課程の一貫性に一層留意する必要があろう。

- I. Review of SLIS by Experts
- II. Revision of the Undergraduate Curriculum
- III. Structure of the Curriculum for Master's Program
- IV. New Ph.D. Program

A historical review of the development of the School of Library and Information Science (SLIS) was made by the writer and published in *Library and Information Science*, no. 9, 1971. In a section of that article, the past curricular changes in the School were described, 1) and concerning improvement of the curriculum, the writer noted as follows:

To improve the present curriculum, the aim must be to establish well-balanced and flexible programs on both the undergraduate and the graduate levels. The present programs should be carefully examined and reorganized so that a graduate program leading to the Doctor's degree can be developed eventually.²⁾

Takahisa Sawamoto, Director and Professor, School of Library and Information Science, Keio University. 澤本孝久: 慶應義塾大学, 図書館·情報学科, 主任教授

In keeping with this, an effort to revise the curricula of the undergraduate and Master's programs at the School of Library and Information Science was initiated by its faculty in the 1969-70 academic year.

Although the School had made curricular revisions in its short history of twenty-four years, it was considered urgent to revise its curricula again to meet the new demands of society caused by the ever-changing needs of information users and by the technological development in this country.

At the initial stage of the new revision, the contents of each course were to be reported to a special Curriculum Committee organized by the faculty members of the School which was to review and re-examine the contents and to prepare a draft revision. According to the general plan of the Committee, the exploratory stage was to be finished in one year, and it was hoped that a definite plan for revision would be drawn up by the end of the next year, the 1970-71 academic year. When completed, the plan would have to be submitted for approval first to a faculty meeting of the Faculty of Letters, to which the School belongs, and then to a University Council meeting if the revision required any changes in the University Regulations. This meant that another year would be needed to put the new revised curricula into effect.

The work of the Curriculum Committee of the School made only slow progress during the period between April of 1969 and March of 1970. Although each member on the faculty was well aware that some of the courses he was teaching constituted important and integral parts of the entire curriculum, he perhaps tended to think that any changing of contents would be made not in the courses he was teaching but in those being taught by others. This was one of the main reasons, it seemed to the writer, why no remarkable progress was made in the initial stage, even though the Committee spent considerable time on the matter.

In the second year, the Committee employed the almost same procedures as in the first year, and again the progress was not very satisfactory. However, the Committee could explore at least general tendencies and find weak points, if any, in each of the main courses.

As the academic year from April of 1971 to March of 1972 was the twentieth anniversary of the School, it was hoped very much that completion of the curricular revision could be part of its observance. This meant that the final plan for the revision would have to be drawn up and submitted for approval to a faculty meeting of the Faculty of Letters held long enough before the end of the 1971–72 academic year to allow the University Council to examine and give approval to it before the beginning of the 1972–73 academic year.

At the beginning of the 1971–72 academic year, the University Administration approved the furnishing of aid to make it possible for the Committee to explore and collect data and information needed for its work.

I. Review of SLIS by Experts

It was also considered necessary to invite several professional experts to observe the activities of the School and to check its curricula against what was demanded of it.

Negotiations was made by the Keio Admini stration with Dr. J. George Harrar, President of the Rockefeller Foundation, and with Dr. Fred C. Cole, President of the Council on Library Resources.

President Saku Sato's letters sent to them in July of 1971 said: "...In marking the twentieth anniversary of its (the School's) founding, it desires to ascertain how it can do even better in its next twenty years. Thus it proposes to do through an objective study of its curriculum, its activities and its potentialities by experts who are thoroughly acquainted with worldwide library and information developments..." "3)

Attached to the letters was the "Proposal for Study, Evaluation and Program Development of the School."

In the proposal it was envisaged that the investigators would:

 Review the development of the School and assess what it has done in:

- Meeting the general and special needs in Japan for library and information education,
- b. Training its teaching staff,
- Providing a center for library and information education in the Pacific area, and
- d. Adapting itself to new developments and needs;
- 2. Survey current and anticipated needs for library and information education in Japan;
- 3. Determine the relationship of the School to other library schools in Japan;
- 4. Evaluate the adequacy of the faculty; and
- 5. Explore the anticipated needs for library and information training over the next two decades, giving specific attention to:
 - a. Types of library needs (public, children's, academic, special, etc.),
 - b. New courses.
 - c. The teaching staff,
 - d. Employment trends,
 - e. Services of the School as a center for Asian training,
 - f. Other Japanese library schools, and
 - g. Funding.4)

Keio's request received most sympathetic consideration by the presidents of both of the foundations, and the School was fortunate to be given supportive grants for this project and to have Dr. Dorothy Parker, formerly Associate Director of the Agricultural Sciences of the Rockefeller Foundation, and Dr. Foster E. Mohrhardt, Senior Program Specialist of the Council on Library Resources, as visiting investigator-consultants at the School from October 5 through November 22 and from October 6 through October 31, 1971, respectively.

To carry out the study, a team was organized, the leader of which was Dr. Parker, who had been acquainted with the School and its work from almost the time of its inception and knew its strengths and weaknesses. She was assisted by Dr. Mohrhardt, who brought to the study his broad experience. The writer participated in the team as its secretary on the urging of Dr. Parker. The team, of course, was helped by the faculty and staff members of the School

whenever necessary.

At the beginning of the project, the investigators allocated their time approximately as follows on the assumption that Dr. Mohrhardt would be able to stay in Japan and participate in the study for only five weeks:

- 1. Keio University School of Library and Information Science............ 3 weeks
- 2. Discussions with Japanese library leaders 2 weeks
- 3. Discussions with information science and documentation specialists............ 1 week
- 5. Visits to other library schools... 1 week

Both Dr. Parker and Dr. Mohrhardt made very thorough and energetic investigation of the School and its environment. Their report, A Review of the School of Library and Information Science, Keio University, was submitted to President Sato of Keio University in March, 1972.

In the conclusion of their report, they said that the survey of the School had led to a number of recommendations for improvement of the School. These recommendations read as follows:

A. Policy

- 1. That excellence of education for library and information science, both in teaching and learning, continue to be the prime objective of the School of Library and Information Science and that the School of Library and Information Science make a concerted effort to help raise Japanese library standards.
- That the present successful and effective integration of instruction in library and information science be continued and that this combined curriculum be the subject of continued study, experimentation, and evaluation.
- 3. That a course on library business procedures be added to the curriculum, such

- as accounting, book-keeping, etc.
- 4. That the School of Libray and Information Science continue to attract talented students from a wide range of subject specialization who are dedicated to a lifetime career of library and information science.
- 5. That during the next five years the School of Library and Information Science continue to add advanced courses to the curriculum in order that a Ph. D. program can be offerred in library and information science to a few carefully selected, highly qualified students to provide the country with more teachers of these subjects.
- 6. That a study be made to determine the need for and feasibility of providing former graduates of the School of Library and Information Science with an opportunity to continue their education in library and information science because of the rapid and important changes now occurring in these fields.
- 7. That the School of Library and Information Science examine the need to include additional practical experience in library and information science to the present curriculum.
- 8. That the School of Library and Information Science encourage research in the field of the history of library education, both recorded and oral history, while many of the pioneers are still living.
- B. Faculty
- 9. That the faculty of the School of Library and Information Science have at least two more full-time members immediately and another two as soon as possible in order to:
 - (a) include some younger faculty members to maintain a balance of all age groups,
 - (b) relieve the present faculty members from their heavy teaching loads and provide them with sufficient time for the preparation for their classes and assembling teaching materials, and
- (c) increase the number of faculty members who have a background in the humani-

- ties and social sciences in order to maintain a balance of representation of all of the academic fields among the faculty.
- 10. That the School of Library and Information Science faculty members continue their extra-curricular activities:
 - (a) as members of government committees and commissions for the upgrading of standards for library and information science.
 - (b) as lecturers for national and international training programs to upgrade the level of performance of library emplovees.
 - (c) as leaders in various professional organizations.
 - (d) as leaders and collaborators in international professional activities, and
 - (e) as investigators and authors of and original research and creative writing (such as children's literature) and other fields which are contributions to both general education and the education of library and information science specialists.
- 11. That the faculty continue to bring to the attention of all members of the faculty and administration of Keio University and other institutions the urgency of Japan's need for outstanding library and information specialists whose training includes the widest possible background of substantive knowledge.
- 12. That the sabbatical leave now available to the School of Library and Information Science faculty members also be given to the professional librarians of Keio University to permit and encourage study and research that will contribute not only to the individuals' advancement but also to the advancement of library and information science. And furthermore that the professional librarians of Keio University receive the status of academic members of the University because of their indispensable and significant role as educators.
- C. Others
- 13. That additional professional literature,

especially in the newly expanded field of information science, be added to the School of Library and Information Science Library as soon as possible, also a reader-printer for microfilm, and additional audio-visual materials be added to support new courses as curriculum changes are made.

14. That the space for the School of Library and Information Science Library be enlarged as soon as possible to provide adequate space for books as well as for readers.⁵⁾

II. Revision of the Undergraduate Program

In revising the curriculum, we had to bear in mind the demands of libraries and information centers where we place our graduates. We also had to consider the regulations of the University and work out a revision within the framework of the Faculty of Letters.

Most of the graduates of the School have in recent years been placed in academic libraries or in specialized document-handling centers. Others have found positions in public libraries, and a very few have been employed by school libraries. In the undergraduate program of the School, the main objective has been to give students basic principles and theories of library and information science rather than to give them practical skills and techniques which they can put to use immediately on placement. They may not have mastery of all aspects of their employers' needs, but in several years they will develop the required skills and techniques on the basis of the knowledge of library and information science acquired in the School.

Our emphasis on principles and theoretical aspetcs in education for library and information science is well and good, say our critics, but training in practical skills and techniques seems to be neglected. Understandably in a country like Japan with not many highly developed libraries, we often hear such reproachful questions from staff members of libraries and information centers as "How much effort does the School of Library and Information Science make to meet the practical demands of society?"

or "Is the School of Library and Information Science carrying on education apart from realities?" To such criticisms we must answer that we are giving students bases for the fundamentals essential for their functioning as librarians and information specialists but are not turning out college librarians, special librarians, catalogers or reference librarians to work with specific institutions. If our graduates have basic skills and techniques supported by theoretical knowledge, they are capable of comprehending the needs and problems of an institution, analyzing them objectively and dealing with them in the light of tested theories and practices.

Although librarianship requires professional status, it is too much to require that an undergraduate program have development of such status as its objective. It is more logical to regard the objective of education on the undergraduate level as "sub-professional" and that on the graduate level as "professional." Even in the sub-professional training, instead of putting emphasis on mere skills and techniques that will soon become out-of-date in our rapidly changing society, we should give students not only fundamental knowledge and basic theories in library and information science but also mission-oriented enthusiasm.

When we analyze the needs of students who wish to study at the School, we find that many of them are interested in seeking jobs in the so-called "knowledge industry," from which we receive requests on manpower with knowledge of information flow and processing. To satisfy their needs and demands, we ought to consider a place in the curriculum for basic knowledge applicable to fields peripheral to traditional library science.

The faculty members are in agreement that the structure of the curriculum of library and information science can be broken down into the following pattern as charted in Fig. 1:

- 1. a group of courses which give theoretical, basic and general knowledge of library and information science,
- 2. a group of courses on the analysis, design and evaluation of information systems and

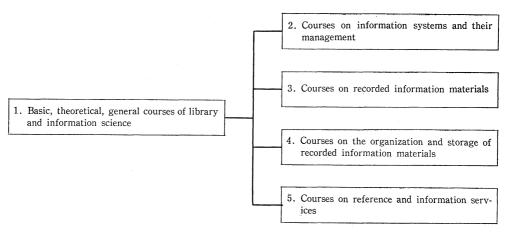


Fig. 1. Theoretical Structure of Course Groups

- on the management of library systems,
- a group of courses on recorded materials, information media or sources of information,
- 4. a group of courses on the organization of recorded materials and the filing and storage of information, and
- 5. a group of courses on reference and information services or literature searching and information retrieval.

Group 1 may consist of such courses as "Principles of Library and Information Science," "History of Communication and Information Media," "History of Library and Information Science," "Research Methods in Library and Information Science."

Group 2 may be formed of such courses as "Analysis and Design of Information Systems," "Information Needs of Users," "The Administration and Management of Libraries and Information Centers," and courses in management of specific types of libraries or information agencies.

Group 3 may include such courses as "Recorded Materials and Sources of Information," "Methods of Recording," "General Reference Materials," and courses on sources of information in the humanities, the social sciences, and science and technology, "Audio-visual Media," "Literature for Children."

Group 4 may cover such course as "Organi-

zation of Recorded Materials," "Files of Information," "Subject Analysis for Indexing."

Group 5 is made up of such courses as "Reference and Information Services," "Methods of Literature and Information Search," and also "Literature Search" courses in specific subject fields.

It should be noted, however, that some courses, such as "Information Storage and Retrieval", "Sources of Information and Information Services," will stretch over two groups—Groups 3 and 5 or Groups 4 and 5 respectively.

With the theoretical basis of the structure of the curriculum of library and information science established, we were able to undertake the planning of a new, revised curriculum for the undergraduate program. At that stage, we found that we could not avoid considering various factors influencing revision, such as the quality and size of the existing fuculty, facilities and equipment, funds, and circumstance around the School.

The objectives of the revision were formulated as follows:

- 1. To enable the students to take basic, general and introductory courses in the earlier period so that they may understand the outline of and relations among the groups of courses in library and information science.
- 2. To give the junior students enough prac-

- tical experience so that they will easily and concretely understand problems.
- 3. To give the senior students ample time to consider and study problems in library and information science.
- 4. To give more flexibility in the election of courses of interest by reducing the number of required courses and increasing the number of elective courses without changing the number of units of credit required for the degree and graduation.
- 5. To provide new courses entitled "Seminars in Library and Information Science" in which the senior students are guided to develop individual studies towards senior theses, with each seminar course directed by a full-time faculty member and with students are divided into small groups according to their fields of interest so that each student may receive intensive instruction and guidance.
- 6. To avoid giving too specific titles to any courses, because even a slight change in course titles requires a revision of the University Regulations.

As a result of taking the above objectives into careful consideration, the structure of the revised curriculum was so decided that Group 3 and 5 mentioned in the foregoing section were to be combined, as shown in Fig. 2.

Sophomores who are newly enrolled in the School are required to take the two basic general courses, "Principles of Library and Information Science," and "Readings and Colloquia of Basic Literature," and one course from each of the three other groups, "Information Systems: Principles," "General Reference Materials and Information Sources", and "Organization of Recorded Materials: Principles." They are all one-year courses with a total of 18 units of credit.

On the junior level, students are required to take "History of Books and Libraries," "Selection of Recorded Materials," "Information Systems: Administration," "Reference and Information Services," and "Organization of Recorded Materials: Methods," credited with a total of 10 units.

During the two years of the junior and senior

levels, students must elect at least two courses from the group on "Management of Information Systems," at least three courses from the group on "Recorded Materials," and at least two courses from the group on "Organization of Recorded Materials," and "Information Storage and Retrieval."

Over and beyond the required and elective courses listed above, students are guided to elect in their fourth year one of the "Special Courses" such as: "Library Facilities," "Japanese and Chinese Classic Materials," "Children's Literature," "Literature Search." Also in the fourth year, students are to take a Seminar (or directed individual studies towards the senior thesis) in which they are divided into small groups.

To shed some light on some courses the contents of which are not clearly stated in their titles, courses I, II, III, IV, V, and VI of "Management of Information Systems" handle respectively "academic libraries and research information centers," "special libraries and information centers," "public libraries or community information centers," "school libraries or educational media centers," "children's libraries," and "information networks." Courses I, II, and III of "Recorded Materials" explain respectively sources of information in the social sciences, science and technology, and the humanities; course IV andio-visual media and reprography; course V literature for children, and course VI the literature in a specific field such as medical science, technology, and business information. The Seminars for the senior students may be divided according to the following categories: "Library and Information Systems and Networks," "General and Public Libraries," "Books and Libraries for Children," "Academic and Research Information Systems," "Science and Technology Information," Information Services," "Transformation and Storage of Information," "Data Processing in Libraries."

To receive the University's Degree of Bachelor, students must, in addition to the general education course requirements, complete a total of not less than 72 units, of which 28 units are required courses and at least 18 units are

Revisions of Curricula and New Ph.D. Program at SLIS

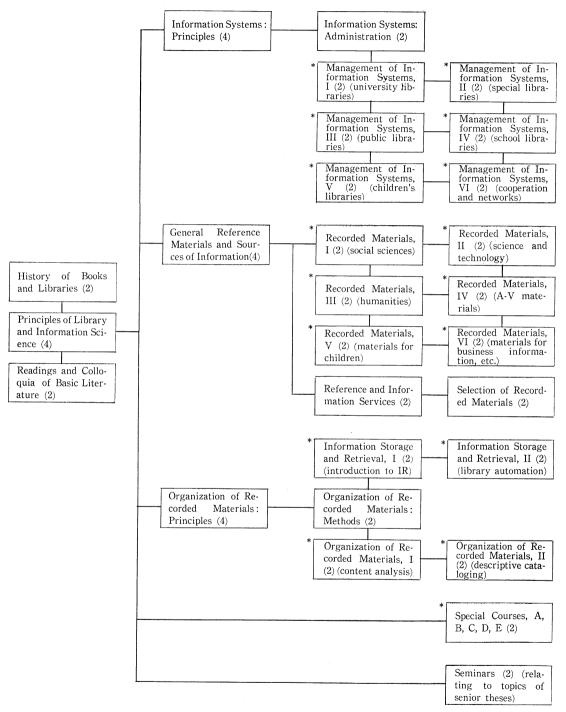


Fig. 2. Structure of the Revised Undergraduate Curriculum Note 1. The courses with asteriscs (*) are elective.

Note 2. The numbers in parentheses are units of credit.

elective courses in library and information science, and at least 26 units of elective courses must be selected from the pool of approved courses of the Faculty of Letters, the Computer Research Center, etc. of the University. Students should plan to spend two weeks in an observation and practice assignment in an outstanding library or information center and will submit a senior thesis.

Sooner or later, of course, the time will come when we must undertake another revision of the curriculum. It is believed, however, that the structure of the current curriculum of the undergraduate program will endure for years and that we shall be able to make minor changes in the contents of courses without involvement in the red tape of changing the University Regulations. What we have to do in the coming years is to re-examine and refine the contents of each course in relation to the current curriculum structure.

III. Structure of the Master's Program

In the 1965-66 academic year a small preparatory committee on the Master's program was formed under the directorship of Professor Takashi Hashimoto. The committee examined the undergraduate program at that time and found considerable shortages in the areas of theoretical approaches to information science, content analysis or indexing and abstracting, and mechanized information storage and retrieval. The committee was inclined to make up for these shortages in the undergraduate curriculum by including the subjects concerned in the Master's program.

After almost a year of examination and discussion of draft plans, the committee concluded a final plan and submitted it to Director Hashimoto. This was accepted by the faculty of JLS early in the 1966-67 academic year. Then all necessary procedures for approval were followed; submission to and acceptance by a meeting of the Faculty of Letters, approval by the Committee of the Deans of Graduate Scools at Keio, and submission for approval to the Keio University Council. With all these required

steps in Keio taken, an application for establishment of the Master's program in library and information science at Keio, the first such program in this country, was submitted to the Ministry of Education in November of 1966.

The application document with necessary appendices was first examined by the University Chartering Committee in early 1967, and then a group of the Chartering Committee members visited Keio University, explored the collection of books and other materials in relation to education for library and information science, facilities and equipment such as seminar rooms, laboratory, the Computer Research Center, necessary for graduate instruction, and inquired about matters not clear in the document.

The final approval for the establishment of the Master's program in library and information science was received from the Ministry of Education on March 29, 1967.

Up to ten students were to be allowed to enroll annually in the two-year Master's program, making a maximum of twenty in school from the second year.

When the Master's program was opened in April of 1967, the graduate student enrolling for it was required to have completed some prerequisite courses in the undergraduate program, to complete not less than 32 units from the courses listed below, to be on the campus for at least two years, to pass final examinations, and to submit a Master's thesis:

- "Information Science, General" (4)
- "Structure of Information, I, II & Seminar" (2 each)
- "Research Methods in Humanities and the Social Sciences," and "Research Methods in Science and Technology" (4 each)
- "Information Systems: Advanced" (4), and "Seminars, I & II" (2 each)
- "Mechanization in Information Handling" (4)
- "Information Retrieval, I" (4), "II and III" (2 each), and "Seminars, I, II & III" (2 each) (The numbers in parentheses are units of credit)

As had been done with the undergraduate curriculum, the graduate program for the Master's degree was reviewed and expanded in 1972.

The following four courses were added:

- "Information Science, Seminar" (2),
- "Information Media" (4) and its "Seminar" (2), and
- "Mechanization in Information Handling, Seminar" (2).

At the same time, the credit units for the following two courses were reduced from 4 to 2:

"Research Methods in the Humanities and the Social Sciences," and "Research Methods in Science and Technology."

In the Master's curriculum, the following

grouping may be made:

- Group 1, or basic principles: "Information science, General," and its "Seminar," "Structure of Information, I and II," and their "Seminar."
- Group 2, or information systems and management courses: "Information Systems," and its "Seminars, I and II," and "Research Methods, I and II."
- Group 3, or information media courses: "Information Media" and its "Seminar."

Group 4, or information storage and retrieval

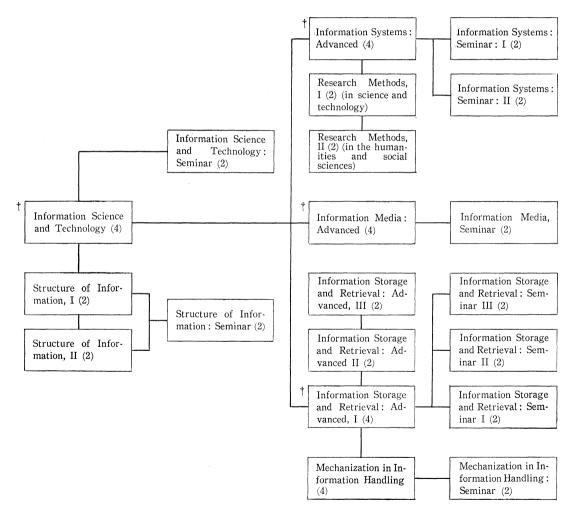


Fig. 3. Structure of the Revised Master's Curriculum

Note 1. The courses with crosses (†) are main, core courses.

Note 2. The figures in parentheses are units of credit.

courses: "Information Retrieval, I, II and III," their "Seminars, I, II, and III" and "Mechanization in Information Handling," and its "Seminar."

The structure of the present Master's curriculum is shown in Fig. 3.

While the new Ph.D. program was being discussed and planned in the 1973-74 academic year, it became evident that there were some unbalanced aspects in the Master's curriculum, but it was decided to postpone action on them until after experience with the new Ph.D. program.

The unbalance we became aware of and the aspect needing revision are the insufficient development in Group 3 compared with Group 4 and the need for refinement of the contents of courses in Group 4.

IV. New Ph.D. Program

It was recommended in the Parker-Mohrhardt Report to Dr. Sato, then President of Keio University, "that during the next flive years, SLIS continue to add advanced courses to the curriculum in order that a Ph.D. program can be offered in library and information science to a few carefully selected, highly qualified students to provide the country with more teachers of these subjects." ⁶⁵

A small preparatory committee, consisting of some of the full-time professors teaching the courses in the Master's program at SLIS, was organized in the summer of 1973, and at the beginning each member collected necessary information and prepared himself for group discussions. The committee's efforts were accelerated early in 1974, resulting in adoption on April 17, 1974, of a formal proposal for a Ph.D. program in library and information science at SLIS. The proposal was approved first at a Faculty Meeting of the School and then submitted to the Committee of Deans of Graduate Programs in Keio. On approval by the Deans' Committee, it was sent to the Keio University Council, which approved it on September 20, 1974. After all necessary steps in Keio were over, the application for approval

of the opening of the Ph.D. program at SLIS was submitted to the University Chartering Committee in November of 1974. The Chartering Committee selected a few specialists to examine and check the application and all related documents. After their thorough survey and checking at the end of January of 1975, the application was passed on to a special group of Chartering Committee members, who visited Keio to look into various aspects of SLIS on March 17. It was on March 25 that Keio University received the approval for inaugurating the Ph.D. program of library and information science as of April 1, 1975, with a request that some younger full-time members be added to the faculty.

Not more than two candidates may enroll annually in the three-year Ph.D. program, so that not more than six will be working for their doctorates at the same time.

The Ph.D. candidate enrolled in SLIS is required to have completed a Master's program in library and information science, to complete not less than 20 units from the courses listed below, to be resident on the campus for at least three years, and to pass final examinations before he submits a doctoral dissertation.

Group 1, information system courses:

"Special Research Course on Information Systems, I" (4), "II and III" (2 each), and "Seminars, I and II" (4 each)

Group 2, information media courses:

"Special Research Course on Information Media, I" (4), "II and III" (2 each), and "Seminars, I and II" (4 each)

Group 3, information processing courses:

"Special Research Course on Information Processing, I" (4), "II and III" (2 each), and "Seminars, I and II" (4 each)

(The numbers in parentheses are units of credit)

The structure of the Ph.D. curriculum is shown in Fig. 4.

The contents of courses in these groups can be exemplified by the first group, on information systems. In this group, the main, fundamental course is "Special Research Course on Information Systems, I," which covers theoretical

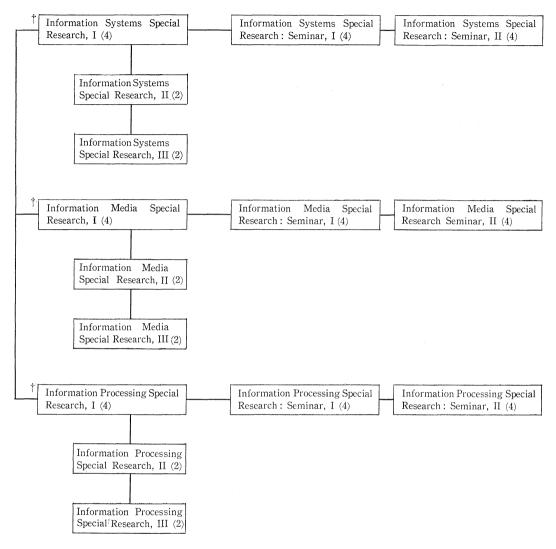


Fig. 4. Structure of 3 Groups of Courses in the New Ph.D. Program Note 1. The courses with crosses (†) are main, core courses.Note 2. The number in parentheses are units of credit.

and applied topics in research on the analysis, design and evaluation, and administration, management and control of information systems and networks. The contents of the course can be flexible and adjustable to the individual student's interest. "Special Research Course on Information Systems, II" is for designing problems of international, multinational, national and/or local information systems and

networks. Dr. Masao Kotani has been invited to teach the course. "Special Research Course on Information Systems, III" is concerned with mathematical approaches to problems of information systems evaluation, covering a wider range than bibliometrics. It is appropriate to call it *info-metrics*, because it is concerned with not only bibliometric analysis and control but also mathematical analysis, control

and design of man-machine components of information systems. Prof. Tarow Indow, an eminent psychologist, has been invited to guide and instruct students who wish to take this course. "Special Research Course on Information Systems: Seminars, I & II" must be considered as a pair or combination because the student concentrating on any research work in this area is to be guided and instructed in this couple of seminars toward a Ph.D. dissertation. In other words, a Ph.D. candidate who wants to make his dissertation in the area of information systems and networks should take both of these "Seminars."

Since the opening of the School, then called the Japan Library School, in the spring of 1951, there have been repetitions of trials and errors concerning the curriculum, even though it had been thought that thorough investigation and examination had been made before each revision. And we will come to another time for revision in the not too distant future, since it has already been noted that there are some deficiencies at least in the structure of the Master's curriculum. The next revision, however, probably will not be made until after careful observation of the Ph.D. program as well as the undergraduate one.

It should be noted that the Standards of Education for Library Science set up twenty years ago are undergoing revision by a committee of the Japan University Accrediting Association. National library and information systems and their networks have been discussed and planned by several Governmental agencies. It is not unlikely that a few colleges or universities will develop schools of library and information science before long.

Thus the circumstances of the School are still changing, but the writer believes that our concept of library and information science, combining library science and information science into a unified system instead of being collateral, continues to be valid and correct. This concept of library and information science and the reasons for unifying the two into one discipline have been clearly stated in the School's current *Catalogue* as follows:

The concept of "library and information science" is quite new to our society and its meaning is not always clearly understood.... Library science is defined as the total body of knowledge needed for the collecting, organizing, and preserving of the recorded materials which are the products of man's intellectual and emotional experience and activities, and for making this knowledge available to all who have use for it. Library science studies the technological aspects of applying basic knowledge and theory to real situations. Late in the 19th century, the systematization of knowledge and its applications began to be realized on their present scale. Along with the development of related fields of scholarship, library science has tried to establish a firm scientific system of knowledge through rigorous examination of its content. Since the second World War, however, a more thoroughgoing scientific approach to library science has become essential in meeting the expanding needs of science and technology, and, indeed, the broader needs of society.

At this point, attention must be given to the significant relationship of the modern ideas of "information" to the more traditional concepts concerning the handling of the products of man's intellectual and emotional experience and activities. It should be recognized that the systematic collection and orgnization of recorded materials, and making them available for use, as practiced by librarians, has a common base with the newer processes of compression, transformation, and transmission of information as undertaken by today's information scientists.

Consequently, the content of library science and that of information science are not only concerned with common problems in their basic researches but are interdependent in their technological approach. In information science, however, the techniques employed in the physical organization and preservation of recorded materials and their management in an appropriate organization are based on the requirements for handling highly detailed and fragmented elements of information,

rather than on those employed by traditional library science with its primary concern with the classification of main subjects.

Today's needs for the communication of information require an approach which embraces both library science and information science. Moreover, these two sciences must be inseparably integrated. Our School has decided therefore to adopt a new name and thereby to indicate our intention to direct our teaching and research, in both their academic and practical aspects, toward the informational needs of modern society, without losing sight of the continuing needs and interests of individuals which can best be met through the more traditional forms of library service.

With the rounding out of the School's first quarter-century in the 1975-76 academic year, we need to meditate again on what we have not achieved, though we have done much, and in the first year of the second quarter-century

of its life we must consider a long-range plan for the School based on our past experience.

- Sawamoto, T. "Keio University School of Library and Information Science; its past, present and future," *Library and information* science, no. 9, 1971. p. 16-18.
- 2) Ibid., p. 22,
- Keio University President Saku Sato's letters to Dr. J. George Harrar, President of the Rockefeller Foundation, and Dr. Fred C. Cole, President of the Council on Library Resources, dated July 22, 1971.
- 4) Ibid., enclosure.
- 5) Parker, Dorothy, and Mohrhardt, Foster E. A review of the Schoal of Library and Information Science, Keio University (A report submitted to President Saku Sato of Keio University on March 13, 1972) p. 45-48.
- 6) Ibid., p. 45.
- Keio University School of Library and Information Science. Catalogue 1968-1970, 1970-1972,1972-1974, 1974-1976 [1968, 1970, 1972 and 1974 respectively] p. 7 and 9.