



## World Library and Information Congress: 71th IFLA General Conference and Council

### "Libraries - A voyage of discovery"

August 14th - 18th 2005, Oslo, Norway

Conference Programme: <http://www.ifla.org/IV/ifla71/Programme.htm>

June 07, 2005

**Code Number:**

**051-E**

**Meeting:**

**108 Education and Training with Library Theory and Research**

### **Division VII Education and Research**

### **LIPER (Library and Information Professions and Education Renewal) Project in Japan.**

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### ***Abstract***

*Initiated in April 2003, the LIPER Project is a three-year research project which aims to study the history, current situation, and future prospects of LIS education, both in Japan and in foreign countries, in order to assess the need for a possible reform of the Japanese LIS education system. This paper describes the background and motivations of the LIPER project and outlines major research activities conducted within the framework of the LIPER project by members of four special teams: namely, the Education Team, the Public Library Team, the Academic Library Team, and the School Library Team.*

### **I. Introduction**

The LIPER (Library and Information Professions and Education Renewal) Project studies the history, current situations, and future prospects of LIS education systems and curricula in Japan with the goal of possible reform of Japanese LIS education in mind. Japan has more than 50 years of LIS education history; however, this will be the first time that a nation-wide study of this scale will be attempted. This paper will report on the background and motivation of the LIPER project as well as major research activities and preliminary findings of four special teams: the Education Team, responsible for identifying the current situation of LIS education programs, instructors, and students; the Public Library Team, responsible for identifying skills and knowledge required by public librarians as well as ways of acquiring and maintaining them; the Academic Library Team, responsible for identifying skills and knowledge required by academic librarians as well as ways of acquiring and maintaining them; and the School Library Team, responsible for developing an ideal image of school librarians and school media specialists.

## **II. Overview of LIS Education in Japan**

Japanese formal education of librarians aims to produce qualified librarians (shisho) and assistant librarians (shishoho) for public libraries as set out in the Japanese Library Law. On the other hand, the goal of the formal education of teacher-librarians (shisho-kyouyu) is to produce teachers who, in addition, also hold teacher-librarian certificate. There is no formal education system in place for other types of library and information professionals. No legal ground or qualification system has been established for information professionals in academic and special libraries.

### **1. Library Law**

Enacted in 1950, the Japanese Library Law [1], which, in actuality, describes public library law, classifies two levels of public library professional staff: the librarian, who engages in professional work, and the assistant librarian, who assists the librarian. According to Article 5 of the Library Law, a person is qualified as a librarian if s/he graduated a polytechnic, college, or university and completed a training program stipulated by Article 6 of the Law; or has had work experience as an assistant librarian for more than three years and has completed a training program stipulated in Article 6. Similarly, a person is qualified as an assistant librarian if s/he holds a qualification as a librarian; or graduated a high school and completed a training program stipulated in Article 6. According to the Article 6 of the Library Law, the training program for librarians and assistant librarians of public libraries is given by colleges or universities in compliance with the Minister of Education, Science, Sports and Culture (MEXT). Courses, credit units, and other necessary matters are specified by ordinance of the Ministry.

### **2. School Library Law**

The Japanese School Library Law, enacted in 1953, required every school (grades 1-12) to establish a school library as a reading and learning information center and to employ a teacher librarian, with a supplementary provision which stated that “the placement of a teacher librarian is optional for the time being.” [2] Many schools still had not placed teacher librarians until 1997 when the supplementary provision was revised to require all schools with twelve or more classes to place a teacher librarian by March 31 of 2003 [3]. According to Article 5 of the School Library Law, a 10-credit training program for teacher-librarians can be administered by colleges or universities in compliance with the Minister of MEXT.

### **3. Overview of LIS Education History in Japan**

In 1950, immediately after the enactment of the Library Law, the librarian training program was initiated by two universities: namely, Toyo University and Nihon University. The Japan Library School, the first comprehensive program for library education at the university level, was established in 1951 at Keio University, under the auspices of the American Library Association. The school added a two-year Master’s program in 1960, changed its name to the School of Library and Information Science in 1968 to emphasize the study of information, and introduced the first Japanese doctoral program in LIS in 1975 in order to produce highly qualified researchers and educators for the field [4].

Parallel developments were made at the national level when the National Junior College for Librarianship, established in 1954 by the Ministry of Education, was re-structured as the University of Library and Information Science in 1979, extending the education program devoted to LIS to four years. The university (actually a four-year college) added a two-year Master’s program in 1984, a doctoral program in 2000, and merged with the University of Tsukuba in 2002. This is currently the largest school of Library and Information Science in Japan.

As of 2004, 296 colleges and universities offer the librarian training program and produce, altogether, more than 10,000 qualified public librarians every year. Most of them offer the training program with the minimum 20 or more credits as stipulated by Article 6 of The Library Law, while some others provide full undergraduate degree programs in LIS. In addition, there are eight Master’s programs and four Doctoral LIS programs.

## **III. Curriculum and Recent Trends of LIS Education in Japan**

This section will introduce the types of courses offered and the basic curricular structure of formal LIS education in Japan. Recent trends in undergraduate LIS degree programs and graduate LIS programs will also be mentioned.

### **1. Curriculum for Librarianship**

Table 1 describes the basic curriculum of the training program for librarians as specified by the MEXT in 1996 [5]. Any student who takes all required courses and two elective courses (completing a minimum of 20 credits as requested by the ordinance) is eligible to obtain a qualification of librarian for public libraries. Approximately 20% of colleges and universities require students to take a minimum of 20 credits, and some 50% require 25 or less. The training program has been offered both as a college or university course during the regular academic year and as an intensive summer program. The latter type is attended mainly by full-time library staff seeking official qualifications.

### **2. Curriculum for Teacher Librarian**

Table 2 shows the curriculum of the training program for teacher-librarians as specified by the ordinance of MEXT in 1997 [6]. A student who takes these five courses in addition to completing a set of teacher's training courses is eligible to obtain a teacher-librarian certificate. The teacher-librarian training program has been offered both as a college or university course during the regular academic year and as an intensive summer program. The latter is attended mainly by full-time teachers who are sent by their schools to obtain the teacher-librarian certificate in order to fulfill the requirements specified by the supplementary clause of the revised School Library Law.

### **3. College/Department of Library and Information Science**

An increasing number of universities have established undergraduate LIS degree programs. These include The School of Library and Information Science at Keio University, The School of Library and Information Science at The University of Tsukuba, The Department of Library and Information Science at Aichi Shukutoku University, The Faculty of Culture and Information Resources of Surugadai University, The Department of Library, Archival and Information Studies at Tsurumi University, and The School of Socio Informatics at Chuo University, among others. Many of these universities, as well as teacher training institutions, offer specialized graduate courses in LIS. Doctoral programs in LIS are offered by Keio University, The University of Tsukuba, Aichi Shukutoku University, Kyoto University, and Tokyo University.

## **IV. Recent Market Trends in Japanese Librarianship**

Less than 10 % of those who obtain librarian certificates for public libraries actually obtain employment in public libraries [7]. This section describes the current situation of employment for librarians in Japan in public, school, and college/university libraries.

### **1. Public Libraries**

Most public libraries are managed either by the national government or by municipal governments that tend to hire fulltime personnel as general administrative staff. Thus, those who obtain the certificate of librarian through a training program need to pass the civil service examination in order to get public official status before they can obtain full-time employment at national or municipal libraries. As a result, as of 2004, 41.5% of full-time public library staff holds qualifications in librarianship (often obtained through intensive summer courses) [8]. Full-time library personnel are often required to move into departments other than libraries in order to develop the wide range of experience and administrative skills necessary for promotion to a higher position. Thus, qualification for librarianship does not necessarily help develop professional career development in the field of public libraries.

### **2. School Libraries**

Since 1997 (when the supplemental provision of the School Library Law was revised and all schools with more than 12 classes were required to deploy a teacher-librarian by March 31, 2003) many schools have started to employ teacher-librarians. In most cases, however, schools have asked existing teachers to obtain the teacher-librarian certificate through intensive summer courses rather than appoint new teacher-librarians. Thus, employment opportunities for new graduates are not necessarily increasing. The teacher-librarian remains a fulltime teacher and his/her teaching responsibilities are not reduced despite being appointed as a teacher-librarian. This makes it difficult for him/her to handle the range of professional tasks required at school libraries. In addition, an increasing number of schools have already been employing clerical staff in school libraries (performing collection development and lending school library materials) since the 1980s. Due to the fact that schools did not appoint teacher-librarians for a long period of time, newly appointed teacher-librarians are still feeling out their position with existing staff at school libraries. 84.9% of high schools, 44.1% of middle schools, and 39.7% of elementary schools

employed clerical staff in school libraries as of the year 2004. No information is available on the ratio of qualified librarians among those clerical staff.

### **3. College and University Libraries**

Japanese colleges/universities do not require library staff to hold the librarian certificate, freely hiring library staff through their own employment tests. This is because the current Library Law is intended for public libraries, and is considered insufficient for college/university libraries. Nevertheless, more than 50% of fulltime library staff at college/university libraries hold librarian certificates. Information professionals working at national universities have opportunities to move from one university to another and to develop their professional skills through gaining a variety of experience. Those who work at private colleges/universities, however, may not have such opportunities for transfer. Rather, they move to departments outside the library to gain experience or promotion. In addition, an increasing number of colleges/universities hire part-time staff and/or student assistants for routine tasks, or outsource some of the library services, resulting in a decrease in the number of full-time professional staff.

## **V. Research Framework and Preliminary Findings of the LIPER Project.**

This section reports on the goals, characteristics, structure, and interim results of the LIPER project.

### **1. Goals of the LIPER Project**

The LIPER project aims to investigate the emergent issue of restructuring the Japanese library and information professional education and training system by concentrating the efforts of representative researchers in relevant domains, consisting mainly of members of the Japan Society of Library and Information Science. The goal of the project is two fold as follows:

- (1) Assess the performance of educational and training systems and curriculums based on the past and present circumstances of information professionals working at libraries and related organizations such as information industries, information centers, museums, and archives.
- (2) Clarify the scope of professional skills and knowledge required for those working at libraries and related organizations, consider the roles and functions of educational and training institutions, and develop guidelines for future education and training systems, including a common examination, accreditation procedure, and evaluation method.

### **2. Characteristics of the LIPER Project**

The LIPER project is characterized as follows:

- (1) Develop an up-to-date LIS teaching/training program. This area has long been influenced by the growth of information technology. The progress of digital information technology in 1990s and its impact upon the whole society is of particular importance. With this in mind, the LIPER project will consider a new curriculum that takes into account not only the types of information technology relevant to library activities (bibliographic control, information retrieval, and database development) and services (provision of digital libraries, online journals, and digital reference services), but also relevant laws and regulations such as copyright and legal deposit, as well as collaboration through networking. Distant education and e-learning in networked environments will also be explored.
- (2) Contribute to solving a variety of problems inherent in the current education and training system of library and information professionals. Only two categories of library professionals have been taken into account by the formal education and training system: one includes the librarians and assistant librarians at public libraries, under the provision of the Library Law (enacted in 1950); the other is the teacher-librarian at school libraries, under the provision of the School Library Law (enacted in 1953 and revised in 1997). The structure of the former category has never been changed even though its curriculum has been revised several times by the ordinance of MEXT. Hence the current education and training system does not meet the contemporary needs of public library operation. On the other hand, the revision of the School Library Law in 1997 required the placement of teacher-librarians in every school. However, the position of education in the formal education system, the specialization of duties, and the contents of the curriculum for teacher-librarians is still problematic. Thus, the LIPER project will wrestle with the issues in the overall education and training of librarianship in general, without regard to specific varieties of libraries.
- (3) Drive toward restructuring LIS as the basis for the education and training of new information professionals. We recognize the contemporary paradigm shift in the organizational structure of Japan, including reformation of the higher education system. Based on this recognition, the LIPER project will consider librarianship and its education and training in relation to the entire professional system,

including an assessment of the possibility of establishing LIS professional schools at the graduate level, the analysis of professional systems in the areas of education, culture, psychology, and social welfare, and an examination of the education and training systems of archivists, curators, and information processing specialists as relevant to librarians.

In Japan, cross-sectional study of the education and training of information professionals has not been conducted for the past ten years, even though surveys of each area of the library profession have been conducted by designated professional associations. Meanwhile, a great deal of effort has been put forth to modernize LIS education and training all over the world. The International Federation of Library Associations (IFLA) published the "Guideline for Library/Information Educational Programs" in 2000 to propose basic issues for consideration in restructuring LIS education systems by each country. In England, the Library Association (LA) and the Institute of Information Scientists (IIS) were consolidated to form the Chartered Institute of Library and Information Professionals (CILIP), and defined a broad framework of areas of knowledge and practices in order to characterize the nature of library and information work. In North America, a three year research project, KALIPER, was conducted to determine the nature and extent of major curricular changes in LIS education across the region. The findings are expected to have a major impact on the future curriculum as well as the system of LIS education.

The LIPER project intends to study education and training system of LIS in response to these overseas movements and reflect them into Japanese situations. The KALIPER project is said to be the 21<sup>st</sup> Century version of the Williamson Report (1923) which had a major impact on the education of professional librarians in North America. The LIPER project seeks a comparable outcome in Japan.

### **3. Structure of the LIPER Project**

In Japan, the education and training of librarians has long been discussed separately for each type of library, as reflected by the Library Law and School Library Law. In order to minimize this limitation, the LIPER project is organized to structure vertical (Group A) and horizontal (Group B) sub-projects.

Group A consists of the following four subgroups:

- (1) The Education Team studies aspects of instructors, students, and curriculums, as well as the education and training of librarians and teacher librarians,
- (2) The Public Library Team studies the posting and career development systems of public libraries as well as the perception of public library staff of current education and training systems,
- (3) The Academic Library Team studies the posting and career development systems of college and university libraries as well as the perception of academic library staff of current education and training systems, and,
- (4) The School Library Team works to develop an ideal image of the school media specialist and explores its posting and career development systems.

Group B deals with a variety of issues such as the history of LIS education, professional trends in fields outside the library, the place of IT in existing curricula, and overseas trends in LIS education and training.

### **4. Study Procedure and Preliminary Findings**

This section describes research activities that have been conducted by sub-teams.

#### ***Education Team***

The following studies have been conducted by the education team:

- (1) Case study of educational programs: through a case study of 16 colleges and universities conducted in 2003 and 2004 in order to understand general trends in education systems and curricula of librarianship, several hypotheses were developed on educational programs, curricula, students, and instructors. These hypotheses were used as the bases for several surveys described below.
- (2) An in-class questionnaire survey of some 1,900 new students in the librarian training programs of 18 colleges/universities was conducted to identify the motivation of students in entering such programs as well as their perceived familiarity with libraries and books. The results show that respondents are book lovers, and that their past experiences in using libraries influenced their motivation to obtain librarian or teacher-librarian certificates.
- (3) A postal survey of 296 colleges/universities was conducted to assess the current situation of and recent changes in the curricula, teachers, and students of librarian and teacher-librarian training programs. 231 colleges/universities participated in the survey, which had a response rate of 78.0%. The results

concerning the librarian training program showed that over 10,000 new certified librarians are estimated to be produced every year. The number of students has not changed in recent years, but fewer graduates secure full-time library employment, while the number of those who get jobs as part-time librarians or in the IT industry is increasing. The number of units required to obtain the certificate for librarian varied among colleges/universities, but concentrated between 21 and 24 units. The results for teacher-librarian training programs showed that over 10,000 new certified teacher librarians are estimated to be produced yearly, and the number of students is increasing. Opportunities for graduates to get full-time and part-time teacher positions are increasing recently.

- (4) A postal survey of 833 faculty members (including adjuncts) was conducted to identify their perception of the current state of education and training programs and systems as well as their expectation for future changes. 322 (38.0%) of them responded. The result will be published in the fall of 2005.

#### ***Public Library Team***

This team has conducted the following studies:

- (1) Interviews of library directors, administrators, and general staff at eleven public libraries of various levels and locations were conducted in 2003-2004 in order to elicit perceptions, opinions, images and feelings toward the current education and training system of library professions in Japan. The interviewees were carefully chosen to represent variability in holding librarian certificates as well as length of experience in library work. The results show that a variety of opinions (with some conflicts) are held, and clarifications in the standards for knowledge and skills expected of public librarians are desired.
- (2) A postal survey of fulltime and part-time library staff was conducted in 2004 to identify their perception of knowledge and skills expected of public librarians. The sample of the survey was chosen using a stratified random sampling technique. 1,266 responses from 120 public libraries (response ratio is 68.6%) have been analyzed and findings will be reported in 2005.
- (3) Interviews of faculty members who spoke or wrote about education and training of librarians as well as of those who are familiar with this topic were conducted to check the reliability and validity of the survey findings. These results will also be published in 2005.

#### ***Academic Library Team***

This team conducted the following studies:

- (1) Focus group interviews were conducted at ten university libraries in 2003 and 2004. Four group interviews of directors, management personnel, mid-level staff, and new employees were performed at each university library. The director group identified the need for revising the current personnel system to include adequate education and training for IT skills and basic knowledge of subject areas. They recognized the need for a new qualification system for university library staff more advanced than the current certificate for public library professionals. The management personnel tended to emphasize general ability and education in professional skills in the employment of library staff. They perceived professional skills to be important without a clear explanation. They considered the current transfer system to be an obstacle to the cultivation of professional skills and criticized the present education and training system for academic library staff, but recognized the utility of the recent system of outsourcing some library services as a means of reducing operating costs. The mid-level personnel were irritated with the existence of too many potential career paths with no clear image of the current position; they perceived that the current personnel system of quick transfers and understaffing would prevent them from developing professional skills; they complained about the non-systematic nature of the current training system; and they considered subject knowledge and LIS knowledge to be the bases of the profession. New employees found meaning in their jobs through personal communication with users. They found it difficult to see the connection between professional tasks due to bureaucratic sectionalism, but were nonetheless highly motivated to develop advanced skills. They perceived current education and training as inadequate and sought on-the-job training and other opportunities for acquiring subject knowledge. In addition a newly developed, three-tiered employment system (including fulltime staff, part-time staff, and student assistants) was identified. The number of fulltime staff has been decreasing quickly, while part-time staff and student assistants are taking increasing responsibility for those tasks previously performed by fulltime staff. In fact, some small universities outsourced their library services entirely.
- (2) A survey of directors, managers, mid-level staff, and new employees of all 687 college/university libraries was conducted in 2004. The results shows that the knowledge and skills required for

university libraries tend to shift from those of collection development and organization to those of information services. Among available education and training systems, respondents prefer on-the-job training and collective training the most, followed by undergraduate education, and finally education at the graduate level or recurrent education.

### ***School Library Team***

This team considers functionality of a school library as indispensable in attaining the teaching goals of schools, and defines the role of “information and media specialists” who take on the overall information- and media-related responsibilities in schools including school library’s audio-visual materials and computers. The team explored this idea through the following studies:

- (1) Interviews of experts were conducted to examine the possibility of establishing a new role for information and media specialists. Five researchers in the area of educational technology who specialize in audio-visual and informatics education were interviewed. Results revealed the need for a new kind of professionals at schools who are not pure engineers but who have extensive knowledge and skills in media use and teaching. However, the interviewees recommended to extend the role of teacher-librarian already established by the School Library Law, because it could be very difficult, if not impossible, to establish a new type of professional in the current, fiscally austere school environment.
- (2) A postal survey of elementary, middle, and high schools was conducted to identify the kinds of tasks actually performed at schools in order to compare them with the hypothetical roles of information and media specialists. A questionnaire was sent to a sample of 1,042 schools, chosen by a stratified random sampling technique, and 364 schools responded with response ratio of 36.0%. The results identified the kinds of tasks widely performed by many schools and the low ratio of IT use among them. A comparison between schools with clerical staff and no clerical staff at libraries revealed that a larger proportion of schools with clerical staff in the library performed tasks such as reference services, recording user statistics of libraries, and publishing library newsletters. This finding confirmed that so-called library tasks are done by clerical library staff but not by teacher-librarians.
- (3) Focus group interviews were conducted with representatives of 6 schools identified by the survey as high or low in the utilization of IT in education. Themes of the interviews included the current situation of IT use in support for teaching, classes taken as a part of training programs, the need for funds for performing school library tasks, and opinions on the qualification and certification system of school library professionals. The results will be reported in 2005.

### ***Other Research Activities***

As a part of the group B research activities, we invited speakers from seven countries including the USA, the UK, Korea, China, Taiwan, Singapore, and Thailand. They reported on the current situation of LIS education, qualification systems for librarianship, recent changes in curriculums and job markets for certified librarians, and credit exchanges with near-by countries. Through presentation and discussion, we recognized that drastic changes are occurring in every country.

## **VI. Summary and Conclusion**

The objective of this paper has been to introduce the LIPER project with its background, goals, description, and procedures. The education and training system for public and school librarians currently established were described as the back ground of the LIPER project. Goals and framework of the project were specified with some research activities and preliminary findings. These findings will be compared through discussion among project members and will hopefully be synthesized into a coherent report which offers concrete recommendations. We hope to have a chance to report on the findings and recommendations of the project next year in Seoul at the IFLA conference in 2005.

## **Acknowledgement**

We wish to thank Professor Pors Niels Ole for giving us this opportunity to share our experiences by accepting this paper, and to all the participants and respondents in the various LIPER research projects for their precious time and help.

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Table 1: Curriculum for Librarianship as Specified by the Ordinance of MEXT in 1996

	Name of Courses	Unit	Description
Required Courses	Lecture on Lifelong Learning	1	Increase understanding on lifelong learning and social education while providing descriptions of the significance of and procedures for learning information provision and consultation for learning.
	Introduction to Libraries	2	Provide explanation on significance of libraries; types of libraries; function, problems and trends of libraries; library policy; related laws and regulations; relation between libraries and related organizations.
	Lecture on Library Management	1	Provide explanation on organizational structure, administration, operation, and a variety of plans with emphasis on libraries in the lifelong learning society.
	Lecture on Library Services	2	Provide explanation on the significance, characteristics, and procedures of library services in directly responding library users, while clarifying the characteristics of each of these services.
	Lecture on Information Services	2	Clarify the significance of information services in libraries and provide a general description of information services including reference and information retrieval services.
	Practice of Reference Services	1	Increase skills through practice in development and use of reference materials, as well as in answering reference questions.
	Practice of Information Retrieval	1	Cultivate skills through the practice of database retrieval.
	Lecture on Library Materials	1	Discuss characteristics of library materials as a whole, and explain their publication, distribution, acquisition, and various selection tools. Also refer to characteristics of new media and their uses.
	Lecture on Specialized Materials	2	Explain characteristics of materials in the humanities, social sciences, natural science, and technology in order to increase understanding of the relationship between the structure of knowledge of each domain and their materials.
	Lecture on Organization of Library Materials	1	Explain the significance, objectives, and procedures of organizing library materials while referring also to computerized library catalogues.
	Practice of Organization of Library Materials	2	Cultivate skills through the practice of organizing library materials.
	Lecture on Children's Services	1	Provide general description of a variety of services for children, management of children's room, and books for children. Refer also to services for young adults.
Selective Courses	History of Books and Libraries	1	Explain the history of books, printing, popularization, and distribution, while referring also to the historical development of libraries.
	Lecture on Special Materials	1	Provide explanations of a variety of special materials including local, government, audio-visual and other types of materials along with their production, distribution, evaluation, selection, and uses.
	Lecture on Communication	1	Provide explanations of characteristics and description of present day communication with a focus on inter-personal communication.
	Lecture on Information Machinery	1	Provide explanations of the functions, types, and uses of a variety of information machinery.
	Special Lecture on Libraries	1	Give explanations of a variety of issues in present day libraries.

Table 2: Curriculum for Teacher-Librarians as Specified by the Ordinance of MEXT in 1997

Course Name	Unit	Description	Contents
School Administration and School Libraries	2	Overview of school libraries including educational significance and management of school libraries.	<ol style="list-style-type: none"> <li>1. Philosophy of school libraries and its educational significance.</li> <li>2. Development of and issues in school libraries.</li> <li>3. School administration and school libraries.</li> <li>4. Management of school libraries.</li> <li>5. Role and training of teacher-librarians and their collaboration with other divisions.</li> <li>6. Selection, management and provision of school media collections.</li> </ol>
Organization of Media at School Libraries	2	Cultivate understanding and practical skills relevant to school library media.	<ol style="list-style-type: none"> <li>1. Types and characteristics of school media.</li> <li>2. Selection and structure of school media.</li> <li>3. Organization of school media including significance and functionality of classification systems, description of Japan Decimal Classification system, description of subject headings, significance and functionality of cataloging, description of the Nippon Cataloging Rules, and computerized cataloging.</li> <li>4. The variety of learning environments and arrangement of school libraries.</li> </ol>
Teaching and School Libraries	2	Increase understanding of the use of media in school libraries	<ol style="list-style-type: none"> <li>1. The curriculum and school libraries.</li> <li>2. Selection of school media in relation to the level of student development.</li> <li>3. Cultivation of students' school media usage skill.</li> <li>4. Practical use of media in the learning process.</li> <li>5. Use of school libraries in teaching.</li> <li>6. Information services including reference service.</li> <li>7. Support for and work on teachers' use of school media.</li> </ol>
Reading and Human Development	2	Cultivate understanding of philosophical and practical aspects of reading in education in relation to the level of student development	<ol style="list-style-type: none"> <li>1. Significance and purposes of reading.</li> <li>2. Reading and cultivation of the mind.</li> <li>3. Guidance and planning of reading in relation to the levels of student development.</li> <li>4. Types and usage of children's books.</li> <li>5. Pedagogy for reading, including book talk and story telling.</li> <li>6. Collaboration with parents, community and public library</li> </ol>
Using Information Media	2	Increase understanding of characteristics and usage of a variety of information media in school libraries.	<ol style="list-style-type: none"> <li>1. Humans and the advanced information society.</li> <li>2. Characteristics and selection of information media.</li> <li>3. Use of audio-visual media.</li> <li>4. Use of computers including educational software, databases, IR systems, and IR and information provision through the Internet.</li> <li>5. School library media and copyright.</li> </ol>