

DOCUMENT RESUME

ED 358 852

IR 054 458

TITLE Standards for Accreditation of Master's Programs in  
Library & Information Studies.

INSTITUTION American Library Association, Chicago, IL. Office for  
Accreditation.

REPORT NO ISBN-08389-7628-X

PUB DATE 28 Jan 92

NOTE 30p.

PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS \*Accreditation (Institutions); Higher Education;  
\*Information Science Education; Institutional  
Evaluation; \*Library Education; \*Library Schools;  
\*Masters Programs; Professional Education;  
\*Standards

ABSTRACT

These standards for the accreditation of graduate programs of library and information studies leading to a master's degree are a result of review and revision of the "Standards for Accreditation 1972." Six areas are addressed: (1) Mission, Goals and Objectives; (2) Curriculum; (3) Faculty; (4) Students; (5) Administration and Financial Support; and (6) Physical Resources and Facilities. An afterword presents an abridged version of the commentary used during the revision process in order to enhance understanding of the scope and focus of the standards and to define key terms and phrases. The following are listed as important issues at the time of the revision (1989-1992): action orientation; definition of the field; discrimination; distance education; diversity; excellence; future focus; globalization; innovation; interaction with other fields of study and other campus units; management; multiple degree programs; ongoing evaluation processes; philosophy, principles, and ethics; research; specialization; technology; and users. (ALF)

\*\*\*\*\*

\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED358852

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Journal of  
 Information Studies  
 Volume 16  
 Number 1  
 1992

112054158

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY  
Prudence W. Dalrymple

**BEST COPY AVAILABLE**

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)"

---

---

*Standards for*  
**Accreditation**  
*of*  
**Master's Programs**  
*in*  
**Library &**  
**Information Studies**

---

---

*Adopted by*

**The Council of the American Library Association**

**January 28, 1992; Effective January 1, 1993**

ISBN: 08389-7628-X

© 1992 American Library Association

This publication is printed on acid-free, recycled paper.

Office for Accreditation  
American Library Association  
50 E. Huron St.  
Chicago, IL 60611

---

---

**A**ccreditation assures the educational community, the general public, and other agencies or organizations that an institution or program (a) has clearly defined and educationally appropriate objectives, (b) maintains conditions under which their achievement can reasonably be expected, (c) is in fact accomplishing them substantially, and (d) can be expected to continue to do so.

**A**ccreditation serves as a mechanism for quality assessment and quality enhancement with quality defined as the effective utilization of resources to achieve appropriate educational objectives.<sup>1</sup>

---

---

**T**he Council of the American Library Association (ALA) has designated the Committee on Accreditation "to be responsible for the execution of the accreditation program of the ALA and to develop and formulate standards of education..."<sup>2</sup> for graduate programs of library and information studies leading to a master's degree. The American Library Association Committee on Accreditation is recognized by the Council on Postsecondary Accreditation and by the U.S. Secretary of Education as the accrediting agency for these programs.

This document sets forth Standards for these programs. The phrase "library and information studies" is understood to be concerned with recordable information and knowledge and the services and technologies to facilitate their management and use. Library and information studies encompasses information and knowledge creation, communication, identification, selection, acquisition, organization and description, storage and retrieval, preservation, analysis, interpretation, evaluation, synthesis, dissemination, and management.

This definition incorporates a field of professional practice and associated areas of study and research. "School of library and information studies" means that unit organized and maintained by an institution of higher education for the purpose of graduate education in library and information studies.

These Standards are limited in their application to the evaluation of graduate programs of library and information studies that lead to a master's degree. As a prerequisite to accreditation of a program, the American Library Association requires that the parent institution be accredited by its appropriate institutional accrediting agency.

---

---

A school's mission is relevant to master's program review; when the school offers other educational programs, the contribution of those programs is also relevant. A school may seek accreditation for more than one graduate program of education in library and information studies leading to a master's degree; when that is done, the goals and objectives of each program and their interrelationships are to be presented.

The requirements of these Standards apply regardless of forms or locations of delivery of a program.

The American Library Association through the Committee on Accreditation protects the public interest and provides guidance for educators. Prospective students, employers recruiting professional staff, and the general public concerned about the quality of library and information services have the right to know whether a given program of education is of good standing. By identifying those programs meeting recognized standards, the Committee offers a means of quality control in the professional staffing of library and information services.

The Standards are indicative, not prescriptive, with the intent to foster excellence through the development of criteria for evaluating educational effectiveness. Throughout the Standards, the requirements for evaluation include assessments, not only of educational processes and resources, but also of the successful use of those processes and resources to achieve established objectives. Further, institutions seeking accreditation of master's degree programs in library and information studies have an obligation to use the results of their evaluations for broad-based, continuous program planning, development, and improvement.

These Standards describe the essential features of programs of education that prepare library and information

---

---

professionals. Within the context of the school's rights and obligations regarding initiative, experimentation, innovation, and individual programmatic differences, these Standards identify the indispensable components of library and information studies programs. These Standards are based on qualitative rather than quantitative measures. For the purposes of accreditation of educational programs, evaluation based on qualitative measures ultimately depends on the observation and judgment of experienced and capable evaluators.

The present document supersedes the *Standards for Accreditation 1972*. It is based upon a synthesis of the views that the Committee on Accreditation solicited during the review and revision process of 1988-1992.

The Committee on Accreditation has developed documents that guide the accreditation process. Educational policy statements are available from relevant professional organizations. Reference to these materials by schools as they plan, develop, and evaluate their programs is essential.

The Committee on Accreditation determines the eligibility for accredited status of a program on the basis of evidence presented by a school and of the report of a visiting team. The evidence supplied by the school in support of the Standards is evaluated against the statement of the school's mission and its program goals and objectives.

Program goals and objectives are fundamental to all aspects of master's degree programs and form the basis on which educational programs are to be designed and developed and upon which they are evaluated. Program objectives are stated in terms of educational results to be achieved.

---

---

Each of the Standards represents an essential component of master's degree programs in library and information studies. As a part of its evaluation, the Committee on Accreditation examines each of the component aspects; however, its final judgment is concerned with the totality of the accomplishment and the environment for learning. The decision regarding accreditation is approached from an evaluation of this totality rather than from a consideration of isolated particulars.

Unfair discrimination because of age, ancestry, color, creed, disability, gender, individual life style, marital status, national origin, race, religion, sexual orientation, or veteran status violates these Standards.

---

---

# The Standards

10

---

---

## I. MISSION, GOALS, AND OBJECTIVES

A school's mission and program goals are pursued, and its program objectives achieved, through implementation of a broad-based planning process that involves the constituency that a program seeks to serve. Consistent with the values of the parent institution and the culture and mission of the school, program goals and objectives foster quality education.

Program objectives are stated in terms of educational results to be achieved and reflect

- ❖ the essential character of the field of library and information studies; that is, recordable information and knowledge, and the services and technologies to facilitate their management and use, encompassing information and knowledge creation, communication, identification, selection, acquisition, organization and description, storage and retrieval, preservation, analysis, interpretation, evaluation, synthesis, dissemination, and management
- ❖ the philosophy, principles, and ethics of the field
- ❖ appropriate principles of specialization identified in applicable policy statements and documents of relevant professional organizations
- ❖ the value of teaching and service to the advancement of the field
- ❖ the importance of research to the advancement of the field's knowledge base

- 
- 
- ❖ the importance of contributions of library and information studies to other fields of knowledge
  - ❖ the importance of contributions of other fields of knowledge to library and information studies
  - ❖ the role of library and information services in a rapidly changing multicultural, multiethnic, multilingual society, including the role of serving the needs of underserved groups
  - ❖ the role of library and information services in a rapidly changing technological and global society
  - ❖ the needs of the constituencies that a program seeks to serve.

Within the context of these Standards each program is judged on the degree to which it attains its objectives. In accord with the mission of the school, clearly defined, publicly stated, and regularly reviewed program goals and objectives form the essential frame of reference for meaningful external and internal evaluation. The evaluation of program goals and objectives involves those served: students, faculty, employers, alumni, and other constituents.

---

---

## II. CURRICULUM

**T**he curriculum is based on goals and objectives and evolves in response to a systematic planning process. Within this general framework, the curriculum provides, through a variety of educational experiences, for the study of theory, principles, practice, and values necessary for the provision of service in libraries and information agencies and in other contexts.

The curriculum is concerned with recordable information and knowledge, and the services and technologies to facilitate their management and use. The curriculum of library and information studies encompasses information and knowledge creation, communication, identification, selection, acquisition, organization and description, storage and retrieval, preservation, analysis, interpretation, evaluation, synthesis, dissemination, and management.

### The curriculum

- ❖ fosters development of library and information professionals who will assume an assertive role in providing services
- ❖ emphasizes an evolving body of knowledge that reflects the findings of basic and applied research from relevant fields
- ❖ integrates the theory, application, and use of technology
- ❖ responds to the needs of a rapidly changing multicultural, multiethnic, multilingual society including the needs of underserved groups

- 
- 
- ❖ responds to the needs of a rapidly changing technological and global society
  - ❖ provides direction for future development of the field
  - ❖ promotes commitment to continuous professional growth.

The curriculum provides the opportunity for students to construct coherent programs of study that allow individual needs, goals, and aspirations to be met within the context of program requirements established by the school and that will foster development of the competencies necessary for productive careers. The curriculum includes as appropriate cooperative degree programs, interdisciplinary coursework and research, experiential opportunities, and other similar activities. Course content and sequence relationships within the curriculum are evident.

When a program includes study of services and activities in specialized fields, these specialized learning experiences are built upon a general foundation of library and information studies. The design of specialized learning experiences takes into account the statements of knowledge and competencies developed by relevant professional organizations.

The curriculum, regardless of forms or locations of delivery selected by the school, conforms to the requirements of these Standards.

The curriculum is continually reviewed and receptive to innovation; its evaluation is used for ongoing appraisal, to make improvements, and to plan for the future. Evaluation of the curriculum includes assessment of students' achievements and their subsequent accomplishments. Evaluation involves those served by the program: students, faculty, employers, alumni, and other constituents.

---

---

### III. FACULTY

The school has a faculty capable of accomplishing program objectives. Full-time faculty members are qualified for appointment to the graduate faculty within the parent institution and are sufficient in number and in diversity of specialties to carry out the major share of the teaching, research, and service activities required for a program, wherever and however delivered. Part-time faculty, when appointed, balance and complement the teaching competencies of the full-time faculty. Particularly in the teaching of specialties that are not represented in the expertise of the full-time faculty, part-time faculty enrich the quality and diversity of a program.

The school demonstrates the high priority it attaches to teaching, research, and service by its appointments and promotions; by encouragement of innovation in teaching, research, and service; and through provision of a stimulating learning and research environment.

The school has policies to recruit and retain faculty from multicultural, multiethnic, and multilingual backgrounds. Explicit and equitable faculty personnel policies and procedures are published, accessible, and implemented.

The qualifications of each faculty member include competence in designated teaching areas, technological awareness, effectiveness in teaching, and active participation in appropriate organizations.

For each full-time faculty member the qualifications include a sustained record of accomplishment in research or other appropriate scholarship.

---

---

The faculty hold advanced degrees from a variety of academic institutions. The faculty evidence diversity of backgrounds, ability to conduct research in the field, and specialized knowledge covering program content. In addition, they demonstrate skill in academic planning and evaluation, have a substantial and pertinent body of relevant experience, interact with faculty of other disciplines, and maintain close and continuing liaison with the field. The faculty nurture an intellectual environment that enhances the accomplishment of program objectives. These characteristics apply to faculty regardless of forms or locations of delivery of programs.

Faculty assignments relate to the needs of a program and to the competencies and interests of individual faculty members. These assignments assure that the quality of instruction is maintained throughout the year and take into account the time needed by the faculty for teaching, student counseling, research, professional development, and institutional and professional service.

Procedures are established for systematic evaluation of faculty; evaluation considers accomplishment and innovation in the areas of teaching, research, and service. Within applicable institutional policies, faculty, students, and others are involved in the evaluation process.

---

---

## IV. STUDENTS

**T**he school formulates recruitment, admission, financial aid, placement, and other academic and administrative policies for students that are consistent with the school's mission and program goals and objectives; the policies reflect the needs and values of the constituencies served by a program. The school has policies to recruit and retain a multicultural, multiethnic, and multilingual student body from a variety of backgrounds. The composition of the student body is such that it fosters a learning environment consistent with the school's mission and program goals and objectives.

Current, accurate, and easily accessible information on the school and its program is available to students and the general public. This information includes announcements of program goals and objectives, descriptions of curricula, information on faculty, admission requirements, availability of financial aid, criteria for evaluating student performance, assistance with placement, and other policies and procedures. The school demonstrates that it has procedures to support these policies.

Standards for admission are applied consistently. Students admitted to a program have earned a bachelor's degree from an accredited institution; the policies and procedures for waiving any admission standard or academic prerequisite are stated clearly and applied consistently. Assessment of an application is based on a combined evaluation of academic, intellectual, and other qualifications as they relate to the constituencies served by a program, a program's goals and objectives, and the career objectives of the individual. Within the framework of institutional policy and programs, the admission policy for a program ensures that applicants possess sufficient interest, aptitude, and qualifications to enable suc-

---

---

cessful completion of a program and subsequent contribution to the field.

Students construct coherent programs of study that allow individual needs, goals, and aspirations to be met within the context of program requirements established by the school. Students receive systematic, multifaceted evaluation of their achievements. Students have access to continuing opportunities for guidance, counseling, and placement assistance.

The school provides an environment that fosters student participation in the definition and determination of the total learning experience. Students are provided with opportunities to form student organizations and to participate in the formulation, modification, and implementation of policies affecting academic and student affairs.

The school applies the results of evaluation of student achievement to program development. Procedures are established for systematic evaluation of the degree to which a program's academic and administrative policies and activities regarding students are accomplishing its objectives. Within applicable institutional policies, faculty, students, staff, and others are involved in the evaluation process.

---

---

## V. ADMINISTRATION AND FINANCIAL SUPPORT

### Administration

**T**he school is an integral yet distinctive academic unit within the institution. Its autonomy is sufficient to assure that the intellectual content of its program, the selection and promotion of its faculty, and the selection of its students are determined by the school within the general guidelines of the institution. The parent institution provides the resources and administrative support needed for the attainment of program objectives.

The school's faculty, staff, and students have the same opportunity for representation on the institution's advisory or policy-making bodies as do those of comparable units throughout the institution. The school's administrative relationships with other academic units enhance the intellectual environment and support interdisciplinary interaction; further, these administrative relationships encourage participation in the life of the parent institution.

The executive officer of a program has title, salary, status, and authority comparable to heads of similar units in the parent institution. In addition to academic qualifications comparable to those required of the faculty, the executive officer has leadership skills, administrative ability, experience, and understanding of developments in the field and in the academic environment needed to fulfill the responsibilities of the position. The school's executive officer nurtures an intellectual environment that enhances the pursuit of the school's mission and program goals and the accomplishment of its program objectives; that environment also encourages faculty and student interaction with other academic units and promotes the socialization of students into the field.

---

---

The school's administrative and other staff are adequate to support the executive officer and faculty in the performance of their responsibilities. The staff contributes to the fulfillment of the school's mission and program goals and objectives. Within its institutional framework the school uses effective decision-making processes that are determined mutually by the executive officer and the faculty, who regularly evaluate these processes and use the results.

### Financial Support

**T**he parent institution provides continuing financial support sufficient to develop and maintain library and information studies education in accordance with the general principles set forth in these Standards. The level of support provides a reasonable expectation of financial viability and is related to the number of faculty, administrative and support staff, instructional resources, and facilities needed to carry out the school's program of teaching, research, and service.

Compensation for a program's executive officer, faculty, and other staff is equitably established according to their education, experience, responsibilities, and accomplishments and is sufficient to attract, support, and retain personnel needed to attain program goals and objectives.

Institutional funds for research projects, professional development, travel, and leaves with pay are available on the same basis as in comparable units of the institution. Student financial aid from the parent institution is available on the same basis as in comparable units of the institution.

The school's planning and evaluation process includes review of both its administrative policies and its fiscal policies and financial support. Within applicable institutional poli-

---

---

cies, faculty, staff, students, and others are involved in the evaluation process. Evaluation is used for ongoing appraisal to make improvements and to plan for the future.

---

---

## VI. PHYSICAL RESOURCES AND FACILITIES

**A** program has access to physical resources and facilities that are sufficient to the accomplishment of its objectives.

Physical facilities provide a functional learning environment for students and faculty; enhance the opportunities for research, teaching, service, consultation, and communication; and promote efficient and effective administration of the school's program, regardless of the forms or locations of delivery.

Instructional and research facilities and services for meeting the needs of students and faculty include access to library and multimedia resources and services, computer and other information technologies, accommodations for independent study, and media production facilities.

The staff and the services provided for a program by libraries, media centers, and information technology facilities, as well as all other support facilities, are sufficient for the level of use required and specialized to the degree needed. These facilities are appropriately staffed, convenient, accessible to the disabled, and available when needed, regardless of forms or locations of delivery of the school's program.

The school's planning and evaluation process includes review of the adequacy of access to physical resources and facilities for the delivery of a program. Within applicable institutional policies, faculty, staff, students, and others are involved in the evaluation process.

---

---

## Endnotes

<sup>1</sup> Gloria Chernay, *Accreditation and the Role of the Council on Postsecondary Accreditation* (Washington, DC: The Council on Postsecondary Accreditation, 1990), p. 3.

<sup>2</sup> American Library Association, *Handbook of Organization, 1991/92* (Chicago, IL: ALA, 1991), p. 7.

---

---

## AFTERWORD

**T**he *Standards for Accreditation of Master's Programs in Library and Information Studies* contained in this document resulted from a review and revision of the *1972 Standards for Accreditation*. The Standards address six areas: Mission, Goals and Objectives, Curriculum, Faculty, Students, Administration and Financial Support, and Physical Resources and Facilities.

The revision process was undertaken by a Subcommittee of the Committee on Accreditation which included members of the American Association of Law Libraries, American Library Association, American Society for Information Science, Association for Library and Information Science Education, Canadian Library Association, Medical Library Association, Special Libraries Association, and the Society of American Archivists.

In the course of developing these Standards, the members of the Standards Revision Subcommittee recognized the possible value of communicating their thinking to the reader, particularly in some key areas. An abridged version of the Commentary used during the revision process is included here in order to enhance the reader's understanding of the scope and focus of the Standards, and to define several key terms and phrases. References to specific terms can be located using the index.

The first section of the Standards describes the field of professional practice and its associated areas of study and research. It defines the phrases "library and information studies" and "school of library and information studies." These definitions are intended to allow a school to bring forward for the purposes of accreditation *any* master's degree program

---

---

(one or more than one) that addresses the field's areas of interest regardless of a degree's name, including for example, degrees entitled Master of Information Science, Master of Librarianship, Master of Arts in Library Science, Master of Information Resource Management, or other similar titles.

The unit called a "school" may be organized as an autonomous college within its university, as a department in a college, or otherwise, as appropriate within its institution.

While the Standards apply solely to programs of education at the master's degree level, the mission, and goals and objectives of any other programs offered by the school are relevant to the review of a master's degree program.

The Standards make it explicit that the location of the offering of a program or its components, or the means by which a program or its components are delivered, e.g., satellite, closed circuit television, are relevant to the accreditation process simply as one aspect of a total program. The Standards neither extol nor caution against distance education. For accreditation purposes, programs are evaluated in the same way regardless of locations or forms of delivery of a program.

The Standards are stated in the declarative and while ways to achieve quality are not detailed, a high quality program must be present for accreditation to be awarded. For example, the term "excellence" is used throughout to indicate that the Standards are intended to encourage the attainment of excellence in educational programs.

The Standards stress innovation, and encourage an active role and concern for future developments and growth in the field.

---

---

The Standards refer explicitly to using the results of ongoing evaluation processes. Accreditation is based upon an evaluation of a program's totality; thus, failure to meet any particular component of a standard may not result in failure to meet that standard. Similarly, failure to meet a single standard may not result in failure to achieve accredited status for a program.

Research as used in the Standards is understood to be (1) broad in its inclusiveness of scholarly activities of a wide variety; and (2) inclusive of communication of results through appropriate means.

When the word "faculty" is used the Standard applies to the faculty as a whole, including both "full-time" and "part-time" faculty members. Reference to a subset of the faculty is designated by referring specifically to "full-time" or "part-time" faculty members, or to "each" or "individual" faculty members.

The Standards include a broad-based statement regarding discrimination. This statement was developed from an analysis of a number of such statements used by universities, professional organizations, and libraries. The word "unfair" is used because educational programs do fairly discriminate for the purposes of special admissions, the awarding of scholarships, and similar actions.

The "multicultural, multiethnic, and multilingual" nature of society is referenced throughout the Standards because of the desire to recognize diversity when framing goals and objectives, designing curricula, and selecting and retaining faculty and students.

---

---

The most important issues at the time of the revision (1989-1992) were these: action orientation; definition of the field; discrimination; distance education; diversity; excellence; future focus; globalization; innovation; interaction with other fields of study and other campus units; management; multiple degree programs; ongoing evaluation processes; philosophy, principles and ethics; research; specialization; technology; users.

Assistance in obtaining materials used by the Committee on Accreditation (COA) is provided by the Office for Accreditation. These materials consist of documents used in the accreditation process, as well as educational policy statements developed by relevant professional organizations which can be used to inform the design and evaluation of a master's degree program.

We would appreciate your comments as to the value and impact of these *Standards*.

American Library Association  
Office for Accreditation  
50 East Huron Street  
Chicago, IL 60611  
Ph: 800-545-2433 e.: 2432  
Fax: 312-280-2433

---

---

## Index

### A

- Action orientation 11, 26
- Adjunct faculty. *See* Faculty
- Administration 17, 21, 23
- Admission 15, 25
- ALA. *See* American Library Association
- Alumni 10, 12
- American Library Association 2, 3, 22
- Assessment 1, 3, 12, 15
- Autonomy 17

### C

- Career 12, 15
- COA. *See* Committee on Accreditation
- Committee on Accreditation 2, 3, 4, 5
- Compensation 18
- Constituencies 10, 15
- COPA. *See* Council on Postsecondary Accreditation
- Council on Postsecondary Accreditation 2, 22
- Counseling 14, 16
- Courses. *See* Curriculum
- Curriculum 11, 12, 23

### D

- Degrees 14
- Discrimination 5, 26
- Distance education. 3, 12, 13, 14, 21, 24
- Distance learning. *See* Distance education

- Diversity 13, 14, 25, 26

### E

- Educational results 4, 9
- Employers 3, 10, 12
- Ethics 9, 26
- Evaluation 2, 3, 4, 5, 9, 10, 11, 12, 14, 15, 16, 18, 19, 21, 25, 26
- Excellence 3, 26
- Executive officer 17, 18
- Experimentation 4

### F

- Facilities 18, 21, 23
- Faculty 10, 12, 13, 14, 15, 16, 17, 18, 19, 21, 23, 25
- Field 2, 9, 10, 11, 12, 14, 16, 17, 26
- Funds 18
- Future 12, 19

### G

- Globalization 10, 12, 26
- Goals and objectives 3, 4, 9, 10, 11, 12, 15, 16, 17, 18, 23, 24
- Guidance. *See* Counseling
- Guidelines 17

### I

- Initiative 4
- Innovation 4, 12, 13, 14, 26
- Institution, parent 2, 9, 13, 17, 18

---

---

Instruction. *See* Teaching  
Interdisciplinary 9, 12, 14,  
17, 26

## J

Judgment 4, 5

## L

Librarianship. *See* Library  
and information studies  
Library and information  
science. *See* Library and  
information studies.

Library and information  
studies 2, 3, 4, 5, 9,  
10, 11, 12, 18, 23

Library service. *See* Service

## M

Management 2, 9, 11, 26

Mission. *See* Goals

Multicultural 10, 11, 13, 15,  
25

Multiethnic 10, 11, 13, 15,  
25

Multilingual 10, 11, 13, 15,  
25

## O

Objectives, educational 1

Outcomes. *See* Educational  
results

## P

Philosophy. *See* Principles

Physical resources. *See*  
Facilities

Placement 15, 16

Planning 3, 9, 11, 14,  
18, 21

Principles 9, 11, 18, 26

Public 1, 3, 15

## Q

Quality 1, 3, 9, 13, 14

## R

Research 2, 9, 11, 12, 13,  
14, 18, 21, 25, 26

## S

Salary 17

Scholarship. *See* Research

School 3, 4, 9, 10, 12, 13,  
15, 16, 17, 18, 21, 24

Service 2, 3, 9, 10, 11, 12,  
13, 14, 18, 21

Specialization 9, 12, 13, 14

Students 3, 10, 12, 14, 15,  
16, 17, 19, 21, 23, 25

## T

Teaching 9, 13, 14, 18, 21

Technology 9, 11, 21, 26

Totality 5

## U

Users 2, 8, 9, 11, 26

20

---

---

## Notes