ABSTRACT
        This document contains validated activities and
competencies needed by information professionals working in an
information center/clearinghouse. The activities and competencies are
organized according to the functions which information center
professionals perform: acquisitions; thesaurus development and
control; indexing/abstracting; reference/information analysis; and
publications and product management. Within each function,
competencies are grouped under the categories of Knowledge, Skills,
and Attitudes, and three professional levels are dealt with: entry
level (0-3 years experience), mid-level (4-9 years experience), and
senior level (10 or more years experience). (THC)

NEW DIRECTIONS IN LIBRARY AND
INFORMATION SCIENCE EDUCATION
FINAL REPORT
VOLUME 2.7
INFORMATION CENTER/CLEARINGHOUSE
PROFESSIONAL COMPETENCIES

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VOLUME TWO: SPECIFIC COMPETENCIES

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INTRODUCTION

This document contains validated activities and competencies needed by information professionals working in an information center/ clearinghouse. The following operational definition of competency was developed:

> A competency is a generic knowledge, skill or attitude of a person that is causally related to effective behavior as demonstrated through external performance criteria, where:
>
> ● Knowledge is having information about, knowing, understanding, being acquainted with, being aware of, having experience of, or being familiar with something, someone, or how to do something.
>
> ● Skill is the ability to use one's knowledge effectively.
>
> ● Attitude is a mental or emotional approach to something, or someone.

We have identified several types of knowledge that are necessary to perform information work satisfactorily as follows:

● __Basic knowledge__ in such areas as language, communication, arithmetic operations, etc.

● __Subject knowledge__ of primary subject fields of users served such as medicine, chemistry, law, etc.

● __Library and information work environments__ such as the information community, its participants and their social, economic and technical interrelationships, etc.

● __Knowledge of what work is done__ such as the activities required to provide services and produce products, etc.

● __Knowledge of the organization or user community served__ such as the mission, goals, and objectives of the user or the organization, user's information needs and requirements, etc.

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There appear to be three kinds of skills necessary to perform information work satisfactorily including:

- **Basic skills** such as cognitive, communication, analytical, etc.

- **Skills related to each specific activity** being performed such as negotiation of reference questions, evaluation of search outputs, etc.

- **Other skills** such as managing time effectively, budgeting and making projections, etc.

Attitudes of information professionals are found to be extremely important to work performance. We have found it useful to subdivide attitudes into:

- **Dispositional attitudes** toward one's profession, the organization served, one's work organization, and other people such as users and co-workers.

- **Personality traits/qualities** such as confidence, inquisitiveness, sense of ethics, flexibility, etc.

- **Attitudes related to job/work/organization** such as willingness to accept responsibility, willingness to learn, desire to grow, etc.

The activities and competencies are organized according to the functions which information professionals perform, and by professional level as displayed in Figure 1. The competencies are cumulative across professional level, i.e., competencies of mid-level professionals include entries shown at the mid-level as well as those at the entry level, etc.

It is important to understand the distinction between functions performed and positions or job titles. Our rationale behind the functional approach was that we were more concerned with what information professionals do than with what they are called. In a single-person center, therefore, the information professional will undoubtedly perform more than a single function. In using and interpreting the competency data in this document, it is important to consider the functions being performed by

FUNCTIONS	ACTIVITIES		KNOWLEDGE		SKILLS		ATTITUDES	
	Essential Versus Desirable	More versus Less Important in Future	Essential Versus Desirable	More versus Less Important in Future	Essential Versus Desirable	More versus Less Important in Future	Essential Versus Desirable	More versus Less Important in Future
	ENTRY LEVEL	ENTRY LEVEL	ENTRY LEVEL	ENTRY LEVEL	ENTRY LEVEL	ENTRY LEVEL	ENTRY LEVEL	ENTRY LEVEL
	MID LEVEL	MID LEVEL	MID LEVEL	MID LEVEL	MID LEVEL	MID LEVEL	MID LEVEL	MID LEVEL
	SENIOR LEVEL	SENIOR LEVEL	SENIOR LEVEL	SENIOR LEVEL	SENIOR LEVEL	SENIOR LEVEL	SENIOR LEVEL	SENIOR LEVEL

Figure 1   Organization of Activities and Competencies

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professionals and the activities being performed to determine which competencies are appropriate. The functions identified for information professionals working in information centers/clearinghouses are:

- acquisitions
- thesaurus development and control
- indexing/abstracting
- reference/information analysis
- publications and product management.

Three professional levels were defined as follows:

- entry level (up to 3 years of professional experience)
- mid level (4-9 years of professional experience)
- senior level (10 or more years of professional experience).

The activities performed are listed first and numbered sequentially. The actual assignment of individual activities to subcategories of the major activities and to the functions varies from one worksetting to another. The organization of activities that we developed provided us with the "best fit" case. Indented and unnumbered activities are essentially paraprofessional activities which, in small organizations, may be performed by professionals.

The activities are followed by the validated sets of knowledge, skills and attitudes. Two versions of each of the lists are provided. The first set have those competencies designated by the validators as essential in bold face print, and those designated as desirable in regular face print. The level of emphasis is denoted by asterisks as follows:

*   denotes each competency rated as essential or desirable by 50-70 percent of the validators of that competency

**   denotes each competency rated as essential or desirable by 71-84 percent of that validators of that competency

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*** denotes each competency rated as essential or desirable by 85-100 percent of the validators of that competency.

The second set of knowledge, skills, and attitudes have competencies designated by the validators as becoming more or less important in the future. Again, the level of emphasis is denoted by asterisks as follows:

* denotes each competency rated by 1-20 percent of those who validated it (as essential, desirable, or not applicable) as becoming more or less important in the future

** denotes each competency rated by 21-40 percent of those who validated it (as essential, desirable, or not applicable) as becoming more or less important in the future

*** denotes each competency rated by 41-100 percent of those who validated it (as essential, desirable, or not applicable) as becoming more or less important in the future

● denotes competencies rated as currently not applicable which have also been rated as becoming more important in the future.

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INFORMATION CENTER/CLEARINGHOUSE COMPETENCIES

ACQUISITIONS

ACQUISITION	ENTRY LEVEL

Selection

1. Develop a good understanding of the information center's/clearing-house's policies and guideliness for data collection

2. Receive citations from organization staff for serials/numbered series, selected monographs, reports, conference and workshop proceedings, audiovisuals, unpublished materials, free materials, research in progess, etc.

3. Select materials to order from publishers' catalogs, book reviews, bibliographies, etc.

4. Examine shipments of unsolicited materials (blanket orders/on-approval shipments, deposited materials, gifts, etc.) to select which items are suitable for retention; annotate processing slips for each item as required

5. Assign processing priorities to all material selected for processing

6. Maintain a statistical record of selection and the usefulness of various selection tools

Verification and Ordering

7. Determine source of procurement for each item ordered (jobber, direct, gift, exchange, etc.)

8. Supervise ordering/claiming of materials:

> verify and locate additional bibliographic data as required; refer problems to supervisor
> search records to determine if material is already on order/ requested
> prepare/input subscription and non-subscription orders/requests, including the proper "ship to" addresses for materials to be indexed off-site
> prepare/generate purchase orders, if required
> prepare order/request documentation for mailing, or place orders/ requests online with the appropriate suppliers
> forward order documentation to the fiscal control staff for coordination and mailing, if required
> claim outstanding orders/requests
> claim missing issues of serials/numbered series
> cancel orders, as required
> re-issue orders/requests to different sources as required

Verification and Ordering (cont'd)

8. Supervise ordering/claiming of materials (cont'd):

   order/request replacement copies of damaged/lost materials
   process subscription renewals
   maintain a statistical record of ordering operations

9. Supervise ordering/requesting sample issues of serials/numbered series for review by selection staff

10 Search for trade and non-trade bibliographic information that technicians are unable to locate; refer problems to higher level staff, as appropriate

Receipt Processing

11. Supervise receipt processing of all types of materials:

   sort incoming items, as appropriate
   search appropriate file to locate the records
   refer to the supervisor items which differ bibliographically from the item ordered/requested
   update records with receipt of individual items/issues/numbers/ parts
   create records for unsolicited materials which are to be processed
   flag serial records for gap filling, as required
   assign an accession number or other locator information to each item received
   record/affix locator information on each piece; may be bar code/OCR label to allow for tracking of materials from time of receipt through completion of the processing cycle
   input bibliographic data (standard journal title abbreviation, volume, issue or bibliographic information for monographs, etc.) on the indexing form/record for each item received; (this activity may involve transfer of data from one automated file to another, rather than actual data input on the indexing form/record)
   mark materials with the organization's identification
   affix security labels, if required
   place new serial titles on the appropriate shelf for special file maintenance
   place serials which have title changes on the appropriate shelf for file maintenance
   place materials for indexing on the appropriate trucks
   deliver trucks to proper locations
   send form letters to acknowledge deposited materials/gifts, if appropriate

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Receipt Processing (cont'd)

11. Supervise receipt processing of all types of materials (cont'd):

> annotate receipt on packing slips/invoice copies, if received, and
> forward to the fiscal control unit
> annotate packing slips/invoice copies for damaged/imperfect or
> unwanted hardbound series; forward documentation to the fiscal
> control unit
> prepare damaged/imperfect materials, incorrectly supplied
> materials, and unwanted materials for return to suppliers, if
> appropriate
> place surplus materials in specified area to await proper disposal
> maintain record of receipt processing statistics

File Maintenance

12. Supervise creation and maintenance of records for non-serial materials

> input orders/requests, unsolicited receipts
> update records based on correspondence received and actions taken
> update records with receipt, return and disposal information
> delete records at appropriate levels
> maintain statistical records of file creation and maintenance
> operations

13. Supervise creation and maintenance of serial records:

> input records for new serial titles
> update records with data re: cancellations, reissues, claims, and
> gap filling
> update records for newly-received titles with indexing assignment
> (in-house or contract), standard title abbreviation, ISSN,
> frequency, etc.
> update records with data re: change in frequency, change of title,
> change in publisher, cessation, change of indexing assignment
> input new records for newly changed titles
> input cross reference records as required
> remove records from the active file when appropriate
> delete records when appropriate
> maintain statistical records of file creation and maintenance
> operations

ACQUISITIONS   ENTRY LEVEL

Other

14. Handle problems related to selection, ordering and receipt processing
    of all types of materials and to overall maintenance of the records;
    refer problems to higher level staff, as appropriate.

15. Conduct business by phone, when appropriate

16. Write memos and letters, as required

17. Prepare manuals of procedures

18. Make recommendations to the section manager for improvement in
    operations of the unit/section

19. Attend and participate in staff meetings

20. Provide an overview of the operations of the unit/section to visitors,
    as requested

21. Supervise technicians and other paraprofessional staff

22. Work to develop "esprit de corps" among staff supervised

23. Assist section manager in writing job descriptions for self and for
    staff supervised

24. Assist section manager in developing performance standards for self and
    for staff supervised

25. Assist section manager in the review and performance evaluation of
    staff supervised

26. Assist in the selection of new technicians and paraprofessionals

27. Keep abreast of developments in the information field, library
    practice, or legislation that affect acquisition and processing of
    serials/numbered series, monographs, conference proceedings, audio-
    visuals, unpublished materials, etc.

28. Attend professional meetings and prepare reports for dissemination to
    staff

29. Develop professional contacts both within and outside the organization

ACTIVITIES

Selection

30. Keep abreast of changing information needs in the subject field(s) which the center/clearinghouse supports; notify staff of any changes

Verification and Ordering

31. Develop procedures for the verification and ordering of serials/ numbered series and/or other materials selected for processing

32. Supervise the maintenance of an address file of procurement sources

33. Draft form letters for acknowledging deposited materials/gifts, requesting deposit of materials, ordering serials and other materials, claiming/cancelling orders, claiming missing issues, ordering replacement issues, etc.

34. Work with the appropriate fiscal office to schedule purchases of materials and renewal of subscriptions in order to operate within the budget

35. Work with the appropriate fiscal office to develop procedures for the handling of the final steps in ordering and invoice processing

36. Identify sources for filling gaps

Receipt Processing

37. Develop procedures for receipt processing of all types of materials

File Maintenance

38. Develop procedures for maintenance of records for order/receipt control of serial and non-serial materials

39. Make preliminary selection of forms and/or develop draft record formats for all section files

Fiscal Control

40. Work with the appropriate fiscal office of the parent organization to identify requirements and develop draft procedures for purchasing materials and services (e.g., open ended subscriptions, dealer check-in)

ACQUISITIONS   MID LEVEL

Fiscal Control (cont'd)

41. Work with the appropriate fiscal office to develop procedures for proper packing slip/invoice handling and receipt certification by section staff

42. Assist the appropriate fiscal office in resolving any problems related to payment for materials

43. Remain aware of the expenditures and balances in the materials account(s); notify the section manager of situations which may require special action

44. Develop projected budget requirements for purchasing materials for the new fiscal year

Other

45. Assess performance of existing equipment/systems/services used in the section and investigate capabilities of other equipment/systems/ services

46. Recommend acquisition of new/additional equipment/systems/services

47. Train staff in operation and in-house maintenance of equipment/systems

48. Supervise in-house operation and maintenance of equipment/systems

49. Gather information for maintenance contracts on equipment/systems

50. Draft statements of work for contract proposals for services, systems, equipment and/or maintenance

51. Evaluate contractors' proposals

52. Train and supervise entry level staff

53. Assist in the selection of new professional staff

54. Write articles for professional journals/newsletters when appropriate

ACTIVITIES

ACQUISITIONS   SENIOR LEVEL

Selection

55. Select and maintain an up-to-date collection of selection tools and aids to bibliographic verification

56. Work with senior level staff from the indexing/abstracting and reference/information analysis sections to formulate draft selection policies for all types of materials to be processed (fully or selectively) by the center/clearinghouse so that it may function as an information resource in the subject field(s); recommend revisions to the policies as required

57. Prepare draft selection guidelines to be used by section staff as an aid to interpreting selection policies; draft revisions as required

58. Periodically review staff selections to ensure more uniform interpretation of the selection policies; conduct training sessions as required

59. Together with senior level reference/information analysis staff, indexing/abstracting staff and thesaurus control staff, identify organizations/institutions which produce information in the subject field(s) which the center/clearinghouse supports

60. Work with senior level reference/information analysis staff to evaluate the existing data collection(s) and identify areas of weakness

61. Prepare lists of materials to be purchased or requested in order to upgrade areas of weakness in the data collection(s)

62. Together with reference/information analysis staff, compile lists of reference books and standard works that comprise a basic collection in each major subject area. New editions of these materials are purchased automatically

Receipt Processing

63. Work with senior staff of the indexing/abstracting section to establish procedures and resolve problems related to the timely receipt of materials for indexing and the input of bibliographic data on indexing forms/records by section staff

64. Work with senior staff and quality and production control staff of the indexing/abstracting section, reference/information analysis staff and data processing staff to develop plans and procedures for using the acquisitions files for tracking materials from the time of receipt through completion of the processing workflow

ACTIVITIES

ACQUISITIONS   SENIOR LEVEL

Publications Support

65. Work with senior staff of the indexing and publications management sections to develop procedures and resolve problems related to the regular publication of lists of materials indexed

66. Work with section staff to produce for publication the list of materials currently indexed; include standard journal title abbreviations, ISSNs, references from former title to current title for recent title changes, and standard bibliographic citations for all other materials indexed

Other

67. Function as a technical expert in all matters related to selection and acquisition of materials for processing

68. Interview dealers' representatives to learn about the particular services they offer

69. Identify dealers who have a good performance record in supplying irregular serials, congress proceedings, and other materials which are difficult to acquire

70. Assist the section manager in negotiating with dealers' representatives to obtain the required level of service in acquiring and/or processing materials

71. Evaluate dealers' performance and report to section manager

72. Draft documentation to support cooperative agreements with organizations/institutions which produce information in the subject field(s) of interest to the center/clearinghouse; request deposit of copyrighted and uncopyrighted materials, particularly fugitive documents (e.g., unpublished documents, project reports, preprints, texts of speeches, conference papers, curriculum guides, instructional materials)

73. Evaluate the participation of primary information producers in depositing unpublished and non-trade materials with the center/ clearinghouse; suggest methods to effect increased cooperation from them

74. Draft section procedures and policies; draft revisions as required

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ACQUISITIONS   SENIOR LEVEL

Other (cont'd)

75. Flowchart and document section procedures

76. Assist section manager in on-going systems analysis of the section

77. Analyze statistics for all operations in the section and prepare draft statistical reports

78. Train and supervise mid level staff

79. Assist section manager in preparing the annual budget for section operations

80. Function as section manager in his/her absence

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

ACQUISITIONS   ENTRY LEVEL

Basic knowledge

*** knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

* knowledge of the primary subject field of users served (e.g., educa-
    tion, medicine, chemistry, law, etc.)
*** knowledge in greater depth in specific subjects (e.g., science, math,
    and environmental education; handicapped and gifted children;
    reading and communication skills, etc.)
* knowledge of foreign languages

Library & Information Science Knowledge (Generic)

* knowledge of definition, structure, and formats of information
* knowledge of alternative approaches to the organization of information
  knowledge of alternative approaches to retrieval of information
* knowledge of available and emerging information technologies and their
    applications
* knowledge of how to learn on an ongoing basis

Knowledge about information work environments

" knowledge of the expanding information community, its participants and
    their interrelationships (social, economic, technical, etc.)
* knowledge of the functions performed within the various work settings
    and the services and products offered
  knowledge of the users of the services and products, their character-
    istics and information habits

Knowledge of what work is done

** knowledge of the acquisitions function, the range of services and
    products offered (both actual and potential)
* knowledge of the activities that are required to offer the services and
    produce the products
* knowledge of the various resources that are necessary to support the
    activities
** knowledge of acquisitions tools and sources of bibliographic
    information
** knowledge of acquisitions methods and techniques
* knowledge of performance expected and how it can be measured
* knowledge of job responsibilities and working conditions (e.g., range
    of duties, probable compensation, benefits, etc.)

KNOWLEDGE

ACQUISITIONS   ENTRY LEVEL

Knowledge of how to do work

* knowledge of how to perform the various activities (e.g., request sam-
    ple issues of selected serials/numbered series, supervise ordering/
    requesting of published and unpublished materials, audiovisual
    materials, etc.)
* knowledge of how to use the acquisitions tools and sources of biblio-
    graphic information
* knowledge of how to apply the acquisitions methods and techniques
  knowledge of personnel procedures

Knowledge of the organization and the specific work unit

** knowledge of the mission, goals and objectives of the organization
** knowledge of the structure of the organization and the role of the
    acquisitions section within the organization
** knowledge of the various projects and key personnel within the
    organization
* knowledge of the policies and procedures relevant to section operations
* knowledge of the various resources available within the organization
    (e.g. personnel, equipment, etc.)
* knowledge of the users' information needs and requirements

ACQUISITIONS   MID LEVEL

** greater depths of knowledge specified above
*** knowledge of the operations of other sections in the organization and
    how they relate to acquisitions
   knowledge of available vendor-supplied systems, services and products
    to support acquisitions
* knowledge of the contracting process, both in general and within the
    organization
* knowledge of evaluation methods and techniques to evaluate systems,
    services and products

*** greater depths of knowledge specified above
*** knowledge of producers of unpublished and non-trade materials in
        specific subject areas
   * knowledge of public relations techniques
     knowledge of statistical description, analysis, interpretation and
        presentation
  ** knowledge of the costs associated with resources (materials, personnel,
        space, etc.)
  ** knowledge of cost analysis and interpretation methods
  ** knowledge of methods of resource allocation
   * knowledge of standards, measures and methods for evaluating personnel
   * knowledge of alternative management structures and their implications
        for the operation of the section
   * state-of-the-art knowledge of library research and practice as it
        relates to the acquisition of print and non-print materials and the
        support of data collection in specific subjects

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

ACQUISITIONS   ENTRY LEVEL

Basic knowledge

* knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

** knowledge of the primary subject field of users served (e.g., educa-
      tion, medicine, chemistry, law, etc.)
*** knowledge in greater depth in specific subjects (e.g., science, math,
      and environmental education; handicapped and gifted children;
      reading and communication skills, etc.)
** knowledge of foreign languages

Library & Information Science Knowledge (Generic)

** knowledge of definition, structure, and formats of information
** knowledge of alternative approaches to the organization of information
** knowledge of alternative approaches to retrieval of information
• ** knowledge of alternative approaches to information management
*** knowledge of available and emerging information technologies and their
      applications
• * knowledge of completed and ongoing research in the field and its
      applicability to practice
• * knowledge of career opportunities
*** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

** knowledge of the expanding information community, its participants and
      their interrelationships (social, economic, technical, etc.)
• ** knowledge of the variety of work settings and their organizational
      structures
** knowledge of the functions performed within the various work settings
      and the services and products offered
** knowledge of the users of the services and products, their character-
      istics and information habits

Knowledge of what work is done

** knowledge of the acquisitions function, the range of services and
      products offered (both actual and potential)
* knowledge of the activities that are required to offer the services and
      produce the products

ACQUISITIONS   ENTRY LEVEL

Knowledge of what work is done (cont'd)

** knowledge of the various resources that are necessary to support the
   activities
** knowledge of acquisitions tools and sources of bibliographic
   information
* knowledge of acquisitions methods and techniques
** knowledge of performance expected and how it can be measured
* knowledge of job responsibilities and working conditions (e.g., range
   of duties, probable compensation, benefits, etc.)

Knowledge of how to do work

** knowledge of how to perform the various activities
** knowledge of how to use the acquisitions tools and sources of biblio-
   graphic information
** knowledge of how to apply the acquisitions methods and techniques
** knowledge of personnel procedures

Knowledge of the organization and the specific work unit

* knowledge of the mission, goals and objectives of the organization
* knowledge of the structure of the organization and the role of the
   acquisitions section within the organization
** knowledge of the various projects and key personnel within the
   organization
* knowledge of the policies and procedures relevant to section operations
** knowledge of the various resources available within the organization
   (e.g. personnel, equipment, etc.)
** knowledge of the users' information needs and requirements

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ACQUISITIONS   MID LEVEL

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* greater depths of knowledge specified above
** knowledge of the operations of other sections in the organization and
   how they relate to acquisitions
** knowledge of available vendor-supplied systems, services and products
   to support acquisitions
** knowledge of the contracting process, both in general and within the
   organization
*** knowledge of evaluation methods and techniques to evaluate systems,
   services and products

ACQUISITIONS   SENIOR LEVEL

* greater depths of knowledge specified above
** knowledge of producers of unpublished and non-trade materials in specific subject areas
** knowledge of public relations techniques
** knowledge of statistical description, analysis, interpretation and presentation
** knowledge of the costs associated with resources (materials, personnel, space, etc.)
** knowledge of cost analysis and interpretation methods
*** knowledge of methods of resource allocation
* knowledge of standards, measures and methods for evaluating personnel
** knowledge of alternative management structures and their implications for the operation of the section
* state-of-the-art knowledge of library research and practice as it relates to the acquisition of print and non-print materials and the support of data collection in specific subjects

COMPETENCIES VALIDATED AS ESSENTIAL VERSUS DESIRABLE

ACQUISITIONS   ENTRY LEVEL

Basic Skills

*** literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

    Ability to:

  * perform each activity
  * establish rapport with colleagues
  * communicate well by written, verbal and non-verbal means
 ** conduct meetings with individuals and groups
  * make decisions and recommendations based on available information
  * work independently and in groups
 ** develop criteria for evaluation
  * make effective, timely, and well-informed decisions
  * isolate and define problems and develop the necessary criteria and
      action for their solution
 ** manage time effectively

ACQUISITIONS   MID LEVEL

Skills Related to Each Specific Activity

*** Skills listed above are developed to a greater extent

    Ability to:

  * perceive the needs of the organization and not just the section
  * anticipate long-range needs of the section
  * design systems and procedures to improve section operations
    arbitrate and negotiate

ACQUISITIONS   SENIOR LEVEL

*** Skills listed above are developed to a greater extent

    Ability to:

  * apply methods of measurement and evaluation
 ** budget and make projections
*** optimize the use of section and organizational resources

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

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ACQUISITIONS   ENTRY LEVEL

Basic Skills

* literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:

* perform each activity
** establish rapport with colleagues
** communicate well by written, verbal and non-verbal means
● * conduct an interview
** conduct meetings with individuals and groups
● * collect, analyze and interpret data
* make decisions and recommendations based on available information
● ** supervise staff
* work independently and in groups
** develop criteria for evaluation
*** make effective, timely, and well-informed decisions
** isolate and define problems and develop the necessary criteria and
       action for their solution
** manage time effectively

ACQUISITIONS   MID LEVEL

Skills Related to Each Specific Activity

* Skills listed above are developed to a greater extent

Ability to:

** perceive the needs of the organization and not just the section
*** anticipate long-range needs of the section
* design systems and procedures to improve section operations
** arbitrate and negotiate

ACQUISITIONS SENIOR LEVEL

---

* Skills listed above are developed to a greater extent

Ability to:

* apply methods of measurement and evaluation
* budget and make projections
** optimize the use of section and organizational resources

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

ACQUISITIONS

Dispositional Attitudes

  Attitudes Toward Institutions

 * Respect for profession
** Respect for the section
** Respect for the parent organization

  Attitudes Toward Other People

    Toward Users

*** Respect users
  * Like people in general
  * Like to help people
  * Like to meet people
  * Like to make others feel comfortable
  * Sensitive to others' needs

    Toward Others in the Workplace

 ** Respect co-workers
  * Like to work with others/as a team
  * Like to work on own
*** Willingness to draw upon and share knowledge and experience with
      others
  * Supportive of co-workers
    Enjoy managing/supervising others

Personal Qualities

*** Alertness
 ** Assertiveness
  * Compassion/Kindness
*** Confidence
  * Cheerfulness
*** Dependability
  * Determination/Tenacity
  * Diplomacy
  * Emotional stability
  * Fairness
  * Flexibility/Versatility
  * Imagination
    Inquisitiveness
*** Leadership ability
  * Neatness
  * Need for achievement

ACQUISITIONS

Personal Qualities (cont'd)

    * Objectivity
    * Open-mindedness
    * Optimism/Positive attitude
    * Organization
    * Patience
    * Physical endurance
    * Resourceful
    * Sensitive/Thoughtful
    * Sense of humor
    * Sense of ethics
   ** Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

*** Willingness to take/accept responsibility
  * Willingness to take initiative
  * Willingness to respond to authority, apply and follow policy
  * Realization that there is no single "right" way to achieve the goals of
       the section/organization
  * Desire to learn/try
  * Willingness to fail
*** Willingness to ask questions
  * Desire to work to best of ability
 ** Responsiveness to time constraints
*** Accuracy
    Willingness to get hands dirty
*** Attention to detail
    Willingness to do clerical tasks
*** Desire to follow-through
  * Service orientation
  * Organizational identity
 ** Willingness to promote parent organization and its services
  * View of parent organization as part of a larger information environment
  * Ability to see broad picture
*** Ability to sacrifice short-term gains for long-term goals
 ** Political sense
  * Curiosity
  * Variety of interests
  * Desire to grow personally
  * Desire to grow professionally
  * Desire to remain current in specific and general subject field
  * Positive attitude toward job

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

ACQUISITIONS

Dispositional Attitudes

Attitudes Toward Institutions

* Respect for profession
* Respect for the section
* Respect for the parent organization

Attitudes Toward Other People

Toward Users

* Respect users
* Like people in general
* Like to help people
* Like to meet people
* Like to make others feel comfortable
** Sensitive to others' needs

Toward Others in the Workplace

* Respect co-workers
* Like to work on own
** Willingness to draw upon and share knowledge and experience with others
* Supportive of co-workers
* Enjoy managing/supervising others

Personal Qualities

* Alertness
* Assertiveness
* Determination/Tenacity
* Flexibility/Versatility
** Imagination
* Leadership ability
* Neatness
* Resourceful

ACQUISITIONS

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

* Willingness to take/accept responsibility
** Willingness to take initiative
* Willingness to respond to authority, apply and follow policy
* Realization that there is no single "right" way to achieve the goals of
    the section/organization
* Desire to learn/try
* Willingness to fail
* Willingness to ask questions
* Desire to work to best of ability
* Responsiveness to time constraints
* Accuracy
* Willingness to get hands dirty
* Attention to detail
* Willingness to do clerical tasks
* Desire to follow-through
** Service orientation
* Organizational identity
* Willingness to promote parent organization and its services
* View of parent organization as part of a larger information environment
* Ability to see broad picture
* Ability to sacrifice short-term gains for long-term goals
* Desire to grow personally
* Desire to grow professionally
* Desire to remain current in specific and general subject field
* Positive attitude toward job

INFORMATION CENTER/CLEARINGHOUSE PROFESSIONAL COMPETENCIES:

THESAURUS DEVELOPMENT AND CONTROL

THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Development

1. Determine the method (manual or automated) and procedures by which the thesaurus data will be compiled

2. Determine the data elements to be included for each subject term

3. Design the forms to be used for data collection

4. Develop a basic list of terms in the selected subject field(s) through review of basic texts, reference works, abstracting and indexing tools, existing thesauri in the field(s), etc.

5. Categorize the terms and develop taxonomies

6. Review the term lists for semantic and syntactic consistency

7. Develop written guidelines to ensure that the semantic and syntactic consistency may be maintained as the thesaurus is updated

8. Develop written guidelines concerning the nature and structure of the various types of cross references

9. Complete data entry forms for cross-references for hierarchically, horizontally, and otherwise related terms

10. Add annotations to subject terms, as required

11. Supervise the production of the alphabetical listing of subject terms and cross references and the listing of taxonomies

12. Review and correct term lists

13. Submit the term lists to subject experts for review, if appropriate

14. Supervise the correction of the master term lists

15. Prepare introductory material to be included in the printed thesaurus

16. Work with publications management staff and data processing staff (if appropriate) to arrange for publication of the thesaurus

17. Perform proofreading of assigned sections of the thesaurus, as required

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THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Control

18. Review suggestion forms received from indexing and reference/ information analysis staff for changes/additions to the approved thesaurus

19. Review assigned taxonomies on a regular basis to determine if changes/ additions to the approved listings should be recommended

20. Check the subject literature and the indexing database for use of the suggested/questioned terms

21. Evaluate findings and determine the appropriate action to be taken: recommend establishment of a new subject term; recommend a change in an existing term; recommend replacement of an existing subject term by a new subject term; recommend conversion of a cross reference term to an approved thesaurus term; recommend establishment of a new cross reference term: recommend restructuring of an entire area of the taxonomy; recommend no change in the existing term, etc.

22. Prepare appropriate documentation to support each recommendation

23. Prepare appropriate data entry forms for each recommended addition/ change to the thesaurus

24. Submit documentation re: changes to the thesaurus to the section manager for review and circulation to section staff and appropriate in-house staff

25. Attend and participate in meetings to discuss and act on proposed changes to the thesaurus

26. Supervise input of approved changes/additions to the master thesaurus database

27. Prepare introductory material to be included in each new edition of the thesaurus

28. Work with publications management staff and data processing staff (if appropriate) to develop procedures and establish schedules for the regular publication of new editions of the thesaurus

29. Work with senior staff of the indexing section and data processing staff to develop procedures for regular maintenance of the subject headings in the indexing database which have been changed in or deleted from the thesaurus database

30. Perform proofreading of assigned sections of new editions of the thesaurus, as required

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THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Other

31. Function as an expert in assigned subject areas

32. Establish and maintain contact with subject experts in the field who are working in assigned subject areas and who may supply expert advice upon request

33. Maintain an up-to-date collection of reference works in assigned subject areas to support subject reference needs

34. Attend professional meetings in assigned subject areas and in the information field; prepare reports for dissemination to staff

35. Keep abreast of developments in the information field that affect thesaurus development

36. Develop contacts with other information professionals both within and outside the parent organization

37. Together with senior level staff from acquisitions, reference/ information analysis, and indexing/abstracting sections, identify organizations/institutions which produce information in the subject field(s) which the information center/clearinghouse supports

38. Participate in in-house committees which require specific subject and/or language expertise

39. Perform special studies, as assigned

40. Forward recommendations for materials to be acquired to the selection/ acquisition staff

41. Conduct business by phone, when appropriate

42. Write memos and letters, as required

43. Maintain a record of work performed

44. Make recommendations to the section manager for improvement in operation of the section

45. Attend and participate in staff meetings

46. Provide as overview of the operations of the section to visitors, as requested

47. Train and supervise support staff, as required

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THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Other (cont'd)

48. Work to develop "esprit de corps" among co-workers and staff supervised

49. Assist section manager in writing job descriptions for self and for staff supervised

50. Assist section manager in developing performance standards for self and for staff supervised

51. Assess performance of existing equipment/systems used in the section and investigate capabilities of other equipment/systems

52. Recommend acquisition of new/additional equipment/systems

53. Train section staff in operation and maintenance of equipment/systems

54. Draft statements of work for contract proposals for services, systems, equipment and/or maintenance

55. Evaluate contractor's proposals

56. Write articles for professional journals/newsletters

57. Draft statements of section procedures and policies; draft revisions as required

58. Flowchart and document section procedures

59. Prepare manuals of procedures

60. Assist section manager in on-going systems analysis of the section

61. Analyze statistics for all operations in the section and prepare draft statistical reports

62. Assist section manager in preparing the annual budget for section operations

63. Function as section manager in his/her absence

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Basic knowledge

*** knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

*** knowledge of the primary subject field of users served (e.g.,
        education, medicine, chemistry, law, etc.)
*** knowledge in greater depth in specific subjects, (e.g., science, math,
        and environmental education; handicapped and gifted children;
        reading and communication skills, etc.)
 ** knowledge of foreign languages

Information Science Knowledge (Generic)

 ** knowledge of definition, structure, and formats of information
  * knowledge of alternative approaches to the organization of information
  * knowledge of alternative approaches to retrieval of information
  * knowledge of alternative approaches to information management
    knowledge of available and emerging information technologies and their
        applications
 ** knowledge of completed and ongoing research in the field and its
        applicability to practice
*** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

    knowledge of the expanding information community, its participants and
        their interrelationships (social, economic, technical, etc.)
    knowledge of the variety of work settings and their organizational
        structures
  * knowledge of the functions performed within the various work settings
        and the services and products offered
  * knowledge of the users of the services and products, their character-
        istics and information habits

Knowledge of what work is done

*** knowledge of the thesaurus development and control functions, the range
        of services and products offered (both actual and potential)
  * knowledge of the activities that are required to offer the services and
        produce the products
 ** knowledge of the various resources that are necessary to support the
        activities
*** knowledge of reference tools in specific subject areas

THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Knowledge of what work is done (cont'd)

*** knowledge of methods and techniques for thesaurus development and
      control
 ** knowledge of performance expected and how it can be measured
  * knowledge of job responsibilities and working conditions (e.g., range
      of duties, probable compensation, benefits, etc.)

Knowledge of how to do work

*** knowledge of how to perform the various activities (e.g., develop basic
      list of terms in selected subject fields, develop taxonomies,
      complete data entry forms for cross- references, access and update
      the system, etc.)
*** knowledge of how to use specific tools for thesaurus development and
      control
*** knowledge of how to apply the methods and techniques of thesaurus
      development and control
  * knowledge of proofreading techniques and procedures
    knowledge of personnel procedures
  * knowledge of evaluation methods and techniques to evaluate systems,
      services and products
  * knowledge of statistical description, analysis, interpretation and
      presentation
 ** knowledge of available systems, services and products to support
      thesaurus development and control
  * knowledge of the costs associated with resources (materials, personnel,
      space, etc.)
  * knowledge of cost analysis and interpretation methods
    knowledge of methods of resource allocation
  * knowledge of alternative management structures and their implications
      for the operation of the section
 ** state-of-the-art knowledge of research and practice in thesaurus
      development and control techniques

Knowledge of the organization and specific work unit

 ** knowledge of the mission, goals and objectives of the organization
  * knowledge of the structure of the organization and the role of the
      section within the organization
  * knowledge of the various projects and key personnel within the
      organization
  * knowledge of the policies and procedures relevant to section operations
 ** knowledge of the various resources available within the organization
      (e.g., personnel, equipment, etc.)
*** knowledge of how the thesaurus terms are used by indexers
 ** knowledge of the operations of other sections in the organization and
      how they relate to thesaurus development and control

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

KNOWLEDGE

THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Basic knowledge

  * knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

  ** knowledge of the primary subject field of users served (e.g.,
       education, medicine, chemistry, law, etc.)
  ** knowledge in greater depth in specific subjects, (e.g., science, math,
       and environmental education; handicapped and gifted children;
       reading and communication skills, etc.)
  * knowledge of foreign languages

Information Science Knowledge (Generic)

  * knowledge of definition, structure, and formats of information
  * knowledge of alternative approaches to the organization of information
  ** knowledge of alternative approaches to retrieval of information
  ** knowledge of alternative approaches to information management
  ** knowledge of available and emerging information technologies and their
       applications
  * knowledge of completed and ongoing research in the field and its
       applicability to practice
  * knowledge of career opportunities
  ** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

  ** knowledge of the expanding information community, its participants and
       their interrelationships (social, economic, technical, etc.)
  ** knowledge of the variety of work settings and their organizational
       structures
  ** knowledge of the functions performed within the various work settings
       and the services and products offered
  *** knowledge of the users of the services and products, their character-
       istics and information habits

Knowledge of what work is done

  * knowledge of the thesaurus development and control functions, the range
       of services and products offered (both actual and potential)
  * knowledge of the activities that are required to offer the services and
       produce the products
  * knowledge of the various resources that are necessary to support the
       activities
  * knowledge of reference tools in specific subject areas

THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Knowledge of what work is done (cont'd)

* knowledge of methods and techniques for thesaurus development and control
* knowledge of performance expected and how it can be measured
* knowledge of job responsibilities and working conditions (e.g., range of duties, probable compensation, benefits, etc.)

Knowledge of how to do work

* knowledge of how to perform the various activities (e.g., develop basic list of terms in selected subject fields, develop taxonomies, complete data entry forms for cross- references, access and update the system, etc.)
* knowledge of how to use specific tools for thesaurus development and control
* knowledge of how to apply the methods and techniques of thesaurus development and control
* knowledge of proofreading techniques and procedures
* knowledge of personnel procedures
* knowledge of the contracting process, both in general and within the organization
** knowledge of evaluation methods and techniques to evaluate systems, services and products
* knowledge of public relations techniques
** knowledge of statistical description, analysis, interpretation and presentation
** knowledge of available systems, services and products to support thesaurus development and control
* knowledge of the costs associated with resources (materials, personnel, space, etc.)
* knowledge of cost analysis and interpretation methods
* knowledge of methods of resource allocation
* knowledge of standards, measures and methods for evaluating personnel
* knowledge of alternative management structures and their implications for the operation of the section
** state-of-the-art knowledge of research and practice in thesaurus development and control techniques

Knowledge of the organization and specific work unit

* knowledge of the mission, goals and objectives of the organization
* knowledge of the structure of the organization and the role of the section within the organization
* knowledge of the various projects and key personnel within the organization

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Knowledge of the organization and specific work unit (cont'd)

* knowledge of the policies and procedures relevant to section operations
* knowledge of the various resources available within the organization (e.g., personnel, equipment, etc.)
** knowledge of how the thesaurus terms are used by indexers
* knowledge of the operations of other sections in the organization and how they relate to thesaurus development and control

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

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THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Basic Skills

*** literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

   Ability to:

*** perform each activity
*** apply consistently the guidelines for thesaurus development and control
*** locate and use appropriate reference tools to provide subject support
       in thesaurus development and control
*** perceive the information needs of the thesaurus user
 * establish rapport with colleagues
*** communicate well by written, verbal and non-verbal means
 * collect, analyze and interpret data
** make decisions and recommendations based on available information
** work independently and in groups
 * perform sedentary work
 * develop criteria for evaluation
** make effective, timely, and well-informed decisions
** isolate and define problems and develop the necessary criteria and
       action for their solution
** manage time effectively
    conduct meetings with individuals and groups
    arbitrate and negotiate
 * anticipate long-range needs of the section
 * design systems and procedures to improve section operations
    apply methods of measurement and evaluation
    budget and make projections
** optimize the use of organizational and section resources

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COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

55

THESAURUS DEVELOPMENT & CONTROL   SENIOR LEVEL

Basic Skills

* literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:

* perform each activity
* apply consistently the guidelines for thesaurus development and control
** locate and use appropriate reference tools to provide subject support
    in thesaurus development and control
** perceive the information needs of the thesaurus user
* establish rapport with colleagues
* communicate well by written, verbal and non-verbal means
* make decisions and recommendations based on available information
* work independently and in groups
* perform secretary work
* develop criteria for evaluation
* make effective, timely, and well-informed decisions
* isolate and define problems and develop the necessary criteria and
    action for their solution
* manage time effectively
* conduct an interview
* conduct meetings with individuals and groups
* supervise staff
* arbitrate and negotiate
*** anticipate long-range needs of the section
** design systems and procedures to improve section operations
* apply methods of measurement and evaluation
** budget and make projections
* optimize the use of organizational and section resources

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COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

57

THESAURUS DEVELOPMENT & CONTROL

Dispositional Attitudes

Attitudes Toward Institutions

* Respect for profession
* Respect for the thesaurus development and control section
* Respect for the parent organization

Attitudes Toward Other People

Toward Users

** Respect users
** Like people in general
 * Like to help people
   Like to meet people
** Like to make others feel comfortable
 * Sensitive to others' needs

Toward Others in the Workplace

** Respect co-workers
 * Like to work with others/as a team
 * Like to work on own
 * Willingness to draw upon and share knowledge and experience with others
 * Supportive of co-workers

Personal Qualities

** Alertness
 * Assertiveness
 * Compassion/Kindness
 * Confidence
 * Cheerfulness
*** Dependability
 * Determination/Tenacity
   Diplomacy
** Emotional stability
 * Fairness
 * Flexibility/Versatility
 * Imagination
 * Inquisitiveness
 * Leadership ability
 * Neatness
 * Need for achievement

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THESAURUS DEVELOPMENT & CONTROL

Personal Qualities (cont'd)

** Objectivity
** Open-mindedness
 * Optimism/Positive attitude
** Organization
 * Patience
 * Resourceful
** Sensitive/Thoughtful
   Sense of humor
 * Sense of ethics
 * Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

*** Willingness to take/accept responsibility
 ** Willingness to take initiative
 ** Willingness to respond to authority, apply and follow policy
  * Realization that there is no single "right" way to achieve the goals of
        the section/organization
 ** Desire to learn/try
  * Willingness to fail
 ** Willingness to ask questions
  * Desire to work to best of ability
  * Responsiveness to time constraints
 ** Accuracy
*** Attention to detail
    Willingness to do clerical tasks
*** Desire to follow-through
  * Service orientation
  * Organizational identity
  * Willingness to promote parent organization and its services
  * View of parent organization as part of a larger information environment
  * Ability to see broad picture
  * Ability to sacrifice short-term gains for long-term goals
 ** Political sense
  * Curiosity
  * Variety of interests
  * Desire to grow personally
  * Desire to grow professionally
  * Desire to remain current in specific and general subject field
  * Positive attitude toward job

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

THESAURUS DEVELOPMENT & CONTROL

<u>Dispositional Attitudes</u>

   <u>Attitudes Toward Institutions</u>

* Respect for profession
* Respect for the thesaurus development and control section
* Respect for the parent organization

   <u>Attitudes Toward Other People</u>

       <u>Toward Users</u>

* Respect users
* Like people in general
* Like to help people
* Like to meet people
* Like to make others feel comfortable
* Sensitive to others' needs

       <u>Toward Others in the Workplace</u>

* Respect co-workers
** Like to work with others/as a team
** Willingness to draw upon and share knowledge and experience with
       others
*** Supportive of co-workers
* Enjoy managing/supervising others

   <u>Personal Qualities</u>

* Alertness
* Confidence
* Dependability
* Flexibility/Versatility
* Imagination
* Inquisitiveness
* Leadership ability
* Objectivity
* Open-mindedness
* Organization
* Sensitive/Thoughtful
* Sense of humor
* Sense of ethics

THESAURUS DEVELOPMENT & CONTROL

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

* Willingness to take/accept responsibility
* Willingness to take initiative
* Willingness to respond to authority, apply and follow policy
* Realization that there is no single "right" way to achieve the goals of the section/organization
** Desire to learn/try
* Willingness to fail
* Willingness to ask questions
* Desire to work to best of ability
* Responsiveness to time constraints
* Accuracy
* Attention to detail
* Desire to follow-through
** Service orientation
* Organizational identity
* Willingness to promote parent organization and its services
** View of parent organization as part of a larger information environment
* Ability to see broad picture
* Ability to sacrifice short-term gains for long-term goals
* Political sense
* Curiosity
* Variety of interests
* Desire to grow professionally
** Desire to remain current in specific and general subject field
* Positive attitude toward job

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INFORMATION CENTER/CLEARINGHOUSE PROFESSIONAL COMPETENCIES

INDEXING/ABSTRACTING

ACTIVITIES

INDEXING/ABSTRACTING   ENTRY LEVEL

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1. Receive material to be indexed

2. Log in each piece as indexing begins

3. Review preliminary data (standard journal title abbreviation or other title information, volume, issue, pagination, article/chapter title, author(s), author affiliation, other bibliographic information, abstract) entered on the indexing form/record for accuracy

4. Make corrections to preliminary data, if required

5. Translate titles, if required, and enter on the indexing form/record

6. Read/scan the item to be indexed and identify the main theme and sub-themes

7. Enter check tag data on the indexing form/record, if applicable

8. Select the appropriate headings/heading-subheading combinations from the approved thesaurus

9. Enter the headings/heading-subheading combinations on the indexing form/record

10. Mark the subject terms under which the item should be cited in the printed index, if applicable. Additional unmarked subject terms, representing sub-themes in the item, will retrieve the cited item online only

11. Prepare abstracts or annotations, as required

12. Add comments/questions for the reviser on the indexing form/record, if necessary

13. Flag pieces which may require additional processing for inclusion in other indexes/databases and/or which should be routed to reference/information analysis staff for their review

Other

14. Perform proofreading of printed index page proofs as required

15. Complete necessary forms to suggest changes/additions to the approved thesaurus; forward forms to the revisor

16. Make recommendations to the section manager for improvement in the operations of the section

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INDEXING/ABSTRACTING   ENTRY LEVEL

Other (cont'd)

17. Maintain a statistical record of work performed

18. Write memos, as required

19. Attend and participate in staff meetings

20. Provide an overview of the operations of the section to visitors, as requested

21. Assist section manager in writing/updating the job description for entry level indexers

22. Assist section manager in developing performance standards for entry level indexers

23. Keep abreast of developments in the information field that affect indexing and abstracting

24. Attend professional meetings and prepare reports for dissemination to staff

25. Develop professional contacts both within and outside the section and the parent organization

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INDEXING/ABSTRACTING   MID LEVEL

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26. Index and abstract the more difficult materials and the selectively indexed/abstracted materials

Quality and Production Control

27. Receive materials to be indexed from the acquisitions section

28. Review materials for presence of proper locator labels; may be bar code/OCR labels to allow for tracking of materials in process

29. Review indexing forms/records for accuracy of bibliographic data input by acquisitions staff

30. Forward materials for descriptive indexing to in-house/contract staff:

    editorial staff mark off article/chapter title, author(s), author affiliation, and abstract
    keyboarding staff input data

INDEXING/ABSTRACTING   MID LEVEL

Quality and Production Control (cont'd)

31. Keep a record (manual/automated) of the location of materials in process

32. Review/spot check accuracy of editorial and keyboarding staff/ contractor

33. Forward materials to be distributed for indexing to the appropriate senior indexer. Notify him/her of any problems which may affect the volume of material to be indexed .

34. Train and supervise technicians who proof the completed indexing forms/records before they are released for publication processing

35. Run established search profiles and forward/release indexing data to the designated organizational unit for publication/product processing according to established schedules

36. Coordinate the proofreading of page proofs by section staff

37. Draft statements of work for request-for-proposals for contract data entry

38. Evaluate contractors' proposals

39. Act as project officer for contract services for data entry

Other

40. Review periodically the contents of the online dictionary, if applicable. Delete terms, as required

41. Work with a senior indexer (reviser) on a one-to-one basis to learn revision procedures and to develop the necessary skills

42. Participate in in-house committees which require specific subject and/or language expertise

43. Perform special studies, as assigned

44. Work to develop "esprit de corps" among staff supervised

45. Assist section manager in writing job descriptions for self and for staff supervised

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INDEXING/ABSTRACTING   MID LEVEL

Other (cont'd)

46. Assist section manager in developing performance standards for self and for staff supervised

47. Assist section manager in the review and performance evaluation of staff supervised

48. Assist section manager in the selection of new technicians

49. Prepare manuals of procedures for in-house technicians and for data entry contractors

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INDEXING/ABSTRACTING   SENIOR LEVEL

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50. Function as a technical expert/reviser in the section

51. Distribute work to indexers according to priority and language and/or subject expertise

52. Revise/review the work of all in-house/contract indexers

53. Respond to questions posed by revisees

54. Supervise the forwarding of all processed materials to the proper organizational unit for storage or disposal

55. Document performance of revisees

56. Prepare and conduct formal training/update classes for all in-house/ contract indexers

Other

57. Keep abreast of bibliographic standards for indexing and abstracting; incorporate these standards into section procedures

58. Work with the section manager to determine/revise the processing priority assigned to each title indexed

59. Prepare introductory material to be included in each issue of the printed index and in cumulations

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Other (cont'd)

60. Together with the indexing quality and production control supervisor, work with data processing staff (if appropriate) and publications management staff to establish procedures and resolve problems related to the publication/release of the indexes/databases on a regular basis

61. Work with senior staff of the thesaurus development and control section and data processing staff (if applicable) to develop procedures for regular maintenance of subject headings in the indexing database which have been changed in or deleted from the thesaurus database

62. Develop and maintain appropriate search profiles to retrieve subsets of the master indexing database for processing for distribution as separate publications/databases

63. Recommend new products which may be developed from the master indexing database

64. Work with senior staff of the acquisitions section to establish procedures and resolve problems related to the timely receipt of materials for indexing, input of bibliographic data on the indexing form/record by acquisitions staff, and the regular production of lists of titles indexed for inclusion in the printed index

65. Work with senior level staff from the acquisitions and reference/ information analysis sections to formulate draft selection policies for all types of materials to be acquired and processed (fully or selectively) by the center/clearinghouse; recommend revisions as required

66. Together with senior level staff from acquisitions, reference/ information analysis, and thesaurus control sections, identify organizations/institutions which produce information in the subject field(s) which the information center/clearinghouse supports

67. Review indexing staff suggestions for changes/additions to the approved thesaurus; confer with section manager and other senior level indexers, as appropriate

68. Act as liaison between the indexing section and the thesaurus control section on all questions related to use/modification of the approved thesaurus

69. Prepare/update manuals of indexing and abstracting policies and procedures for in-house/contract indexers

.

Other (cont'd)

70. Maintain an up-to-date collection of reference works to support the respective subject reference needs of the indexers

71. Work with the section manager to establish and/or revise standards of performance for all levels of indexers

72. Flowchart and document of a section procedures

73. Assist section manager in on-going systems analysis of the section

74. Assess performance of existing equipment and/or systems (manual or automated) used in the section and investigate capabilities of other equipment/systems

75. Recommend acquisition of new/additional equipment/systems

76. Train staff in operation and in-house maintenance of equipment/systems

77. Supervise in-house operation and maintenance of equipment/systems

78. Assist in the selection of new professional staff

79. Write articles for professional publications when appropriate

80. Analyze statistics for all operations in the section and prepare draft statistical reports

81. Assist the section manager in preparing the annual budget for section operations

82. Function as section manager in his/her absence

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

KNOWLEDGE

INDEXING/ABSTRACTING   ENTRY LEVEL

Basic knowledge (Assumed)

*** Knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

* knowledge of the primary subject field of users served (e.g., educa-
    tion, medicine, chemistry, law, etc.)
* knowledge in greater depth in specific subjects, (e.g., science, math,
    and environmental education; handicapped and gifted children;
    reading and communication skills, etc.)
** knowledge of foreign languages

Information Science Knowledge (Generic)

** knowledge of definition, structure, and formats of information
** knowledge of alternative approaches to the organization of information
* knowledge of alternative approaches to retrieval of information
* knowledge of alternative approaches to information management
** knowledge of available and emerging information technologies and their
    applications
** knowledge of completed and ongoing research in the field and its
    applicability to practice
** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

* knowledge of the expanding information community, its participants and
    their interrelationships (social, economic, technical, etc.)
* knowledge of the variety of work settings and their organizational
    structures
* knowledge of the functions performed within the various work settings
    and the services and products offered
* knowledge of the users of the services and products, their character-
    istics and information habits

Knowledge of what work is done

* knowledge of the indexing and abstracting functions, the range of
    services and products offered (both actual and potential)
  knowledge of the activities that are required to offer the services and
    produce the products
  knowledge of the various resources that are necessary to support the
    activities
*** knowledge of indexing tools
*** knowledge of indexing and abstracting methods and techniques
*** knowledge of performance expected and how it can be measured
*** knowledge of job responsibilities and working conditions (e.g., range
    of duties, probable compensation, benefits, etc.)

KNOWLEDGE

INDEXING/ABSTRACTING   ENTRY LEVEL

Knowledge of how to do work

** knowledge of how to perform the various activities (e.g., review
      descriptive indexing for accuracy, perform subject indexing, enter
      data on the indexing form/record, etc.)
*** knowledge of how to use the indexing tools
*** knowledge of how to apply the indexing and abstracting methods and
      techniques
  * knowledge of proofreading techniques and procedures
  * knowledge of personnel procedures

Knowledge of the organization and specific work unit

  * knowledge of the mission, goals and objectives of the organization
  * knowledge of the structure of the organization and the role of the
      section within the organization
 ** knowledge of the various projects and key personnel within the organi-
      zation
  * knowledge of the policies and procedures relevant to the section
      operations
  * knowledge of the various resources available within the organization
      (e.g., personnel, equipment, etc.)
  * knowledge of the users' information needs and requirements

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INDEXING/ABSTRACTING   MID LEVEL

 ** greater depths of knowledge specified above
 ** knowledge of the operations of other sections in the organization and
      how they relate to indexing/abstracting
    knowledge of the contracting process, both in general and within the
      organization
 ** knowledge of evaluation methods and techniques to evaluate systems,
    services and products
  * knowledge of quality and production control techniques and procedures

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INDEXING/ABSTRACTING   SENIOR LEVEL

*** greater depths of knowledge specified above
  * knowledge of statistical description, analysis, interpretation and
      presentation
  * knowledge of available vendor-supplied systems, services and products
      to support indexing/abstracting
  * knowledge of the costs associated with resources (materials, personnel,
      space, etc.)
  * knowledge of cost analysis and interpretation methods
  * knowledge of methods of resource allocation
  * knowledge of standards, measures and methods for evaluating personnel
  * knowledge of alternative management structures and their implications
      for the operation of the section
  * state-of-the-art knowledge of research and practice in indexing and
      abstracting techniques

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COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

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INDEXING/ABSTRACTING   ENTRY LEVEL

Basic knowledge

** knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

*** knowledge of the primary subject field of users served (e.g., medicine,
         chemistry, law, etc.)
*** knowledge in greater depth in specific subjects, (e.g., neuroanatomy,
         neurophysiology, neurosurgery, etc.)
*** knowledge of foreign languages

Information Science Knowledge (Generic)

* knowledge of definition, structure, and formats of information
* knowledge of alternative approaches to the organization of information
** knowledge of alternative approaches to retrieval of information
* knowledge of alternative approaches to information management
* knowledge of available and emerging information technologies and their
         applications
* knowledge of completed and ongoing research in the field and its
         applicability to practice
* knowledge of career opportunities
** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

** knowledge of the expanding information community, its participants and
         their interrelationships (social, economic, technical, etc.)
** knowledge of the variety of work settings and their organizational
         structures
** knowledge of the functions performed within the vario work settings
         and the services and products offered
*** knowledge of the users of the services and products, their character-
         istics and information habits

KNOWLEDGE

Knowledge of what work is done

** knowledge of the indexing and abstracting functions, the range of services and products offered (both actual and potential)
* knowledge of the activities that are required to offer the services and produce the products
** knowledge of the various resources that are necessary to support the activities
* knowledge of indexing tools
* knowledge of indexing and abstracting methods and techniques
* knowledge of performance expected and how it can be measured
* knowledge of job responsibilities and working conditions (e.g., range of duties, probable compensation, benefits, etc.)

Knowledge of how to do work

* knowledge of how to perform the various activities
* knowledge of how to use the indexing tools
* knowledge of how to apply the indexing and abstracting methods and techniques
* knowledge of proofreading techniques and procedures
* knowledge of personnel procedures

Knowledge of the organization and specific work unit

* knowledge of the mission, goals and objectives of the organization
* knowledge of the structure of the organization and the role of the section within the organization
* knowledge of the various projects and key personnel within the organization
* knowledge of the policies and procedures relevant to the section operations
* knowledge of the various resources available within the organization (e.g., personnel, equipment, etc.)
*** knowledge of the users' information needs and requirements

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INDEXING/ABSTRACTING   MID LEVEL

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* greater depths of knowledge specified above
* knowledge of the operations of other sections in the organization and how they relate to indexing/abstracting
** knowledge of the contracting process, both in general and within the organization
** knowledge of evaluation methods and techniques to evaluate systems, services and products
** knowledge of quality and production control techniques and procedures

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INDEXING/ABSTRACTING   SENIOR LEVEL

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* greater depths of knowledge specified above
* knowledge of public relations techniques
* knowledge of statistical description, analysis, interpretation and presentation
* knowledge of available vendor-supplied systems, services and products to support indexing/abstracting
* knowledge of the costs associated with resources (materials, personnel, space, etc.)
** knowledge of cost analysis and interpretation methods
* knowledge of methods of resource allocation
* knowledge of standards, measures and methods for evaluating personnel
* knowledge of alternative management structures and their implications for the operation of the section
** state-of-the-art knowledge of research and practice in indexing and abstracting techniques

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COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

INDEXING/ABSTRACTING   ENTRY LEVEL

Basic Skills

*** literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

    Ability to:

  * perform each activity
 ** apply indexing and abstracting rules consistently
  * perceive the information needs of the data user
 ** establish rapport with colleagues
*** communicate well by written, verbal and non-verbal means
  * collect, analyze and interpret data
  * make decisions and recommendations based on available information
  * work independently and in groups
  * perform sedentary work
    develop criteria for evaluation
  * make effective, timely, and well-informed decisions
  * isolate and define problems and develop the necessary criteria and
        action for their solution
 ** manage time effectively

INDEXING/ABSTRACTING   MID LEVEL

Skills Related to Each Specific Activity

*** Skills listed above are developed to a greater extent

    Ability to:

    conduct an interview
  * conduct meetings with individuals and groups
    supervise staff
 ** arbitrate and negotiate

INDEXING/ABSTRACTING   SENIOR LEVEL

*** Skills listed above are developed to a greater extent

Ability to:

** anticipate long-range needs of the section
** design systems and procedures to improve section operations
* apply methods of measurement and evaluation
** budget and make projections
*** optimize the use of organizational and section resources

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COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

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SKILLS

Basic Skills

* literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

Ability to:
* perform each activity
** apply indexing and abstracting rules consistently
*** perceive the information needs of the data user
** establish rapport with colleagues
* communicate well by written, verbal and non-verbal means
* collect, analyze and interpret data
* make decisions and recommendations based on available information
* work independently and in groups
* perform sedentary work
* develop criteria for evaluation
* make effective, timely, and well-informed decisions
** manage time effectively

INDEXING/ABSTRACTING   MID LEVEL

Skills Related to Each Specific Activity

* Skills listed above are developed to a greater extent

Ability to:
* conduct an interview
* conduct meetings with individuals and groups
* supervise staff
* arbitrate and negotiate

INDEXING/ABSTRACTING   SENIOR LEVEL

---

* Skills listed above are developed to a greater extent

Ability to:
** anticipate long-range needs of the section
* design systems and procedures to improve section operations
* apply methods of measurement and evaluation
* budget and make projections
** optimize the use of organizational and section resources

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

INDEXING/ABSTRACTING

Dispositional Attitudes

Attitudes Toward Institutions

* Respect for profession
** Respect for the section
** Respect for the parent organization

Attitudes Toward Other People

Toward Users

* Respect users
** Like people in general
** Like to help people
* Like to meet people
* Like to make others feel comfortable
Sensitive to others' needs

Toward Others in the Workplace

** Respect co-workers
* Like to work with others/as a team
* Like to work on own
* Willingness to draw upon and share knowledge and experience with others
* Supportive of co-workers

Personal Qualities

** Alertness
* Assertiveness
* Compassion/Kindness
* Confidence
* Cheerfulness
*** Dependability
* Determination/Tenacity
** Diplomacy
* Emotional stability
* Fairness
* Flexibility/Versatility
* Imagination
* Inquisitiveness
* Leadership ability
* Neatness
* Need for achievement

INDEXING/ABSTRACTING

Personal Qualities (cont'd)

** Objectivity
** Open-mindedness
 * Optimism/Positive attitude
** Organization
 * Patience
 * Resourceful
 * Sensitive/Thoughtful
 * Sense of humor
** Sense of ethics
 * Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

** Willingness to take/accept responsibility
 * Willingness to take initiative
 * Willingness to respond to authority, apply and follow policy
 * Realization that there is no single "right" way to achieve the goals of
     the section/organization
*** Desire to learn/try
     Willingness to fail
** Willingness to ask questions
 * Desire to work to best of ability
** Responsiveness to time constraints
** Accuracy
     Willingness to get hands dirty
** Attention to detail
 * Willingness to do clerical tasks
** Desire to follow-through
 * Service orientation
 * Organizational identity
** Willingness to promote parent organization and its services
 * View of parent organization as part of a larger information environment
 * Ability to see broad picture
 * Ability to sacrifice short-term gains for long-term goals
** Political sense
     Curiosity
     Variety of interests
 * Desire to grow personally
 * Desire to grow professionally
 * Desire to remain current in specific and general subject field
 * Positive attitude toward job

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

INDEXING/ABSTRACTING

<u>Dispositional Attitudes</u>

   <u>Attitudes Toward Institutions</u>

 * Respect for the parent organization

   <u>Attitudes Toward Other People</u>

     <u>Toward Users</u>

   * Sensitive to others' needs

    <u>Toward Others in the Workplace</u>

  ** Willingness to draw upon and share knowledge and experience with
       others
   * Supportive of co-workers
●   * Enjoy managing/supervising others

<u>Personal Qualities</u>

  * Alertness
  * Dependability
  * Flexibility/Versatility
  * Imagination
  * Inquisitiveness
  * Leadership ability
  * Neatness
  * Open-mindedness
  * Resourceful
  * Sensitive/Thoughtful
  * Sense of humor
  * Sense of ethics

INDEXING/ABSTRACTING

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

* Willingness to take/accept responsibility
** Willingness to respond to authority, apply and follow policy
* Realization that there is no single "right" way to achieve the goals of
    the section/organization
** Desire to learn/try
* Willingness to fail
* Desire to work to best of ability
* Responsiveness to time constraints
* Desire to follow-through
* Service orientation
* Organizational identity
* Willingness to promote parent organization and its services
* View of parent organization as part of a larger information environment
** Ability to see broad picture
* Ability to sacrifice short-term gains for long-term goals
** Desire to grow professionally
** Desire to remain current in specific and general subject field
* Positive attitude toward job

INFORMATION CENTER/CLEARINGHOUSE PROFESSIONAL COMPETENCIES

REFERENCE/INFORMATION ANALYSIS

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REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Custom Searches

1. Log in and review search request forms submitted by requesters

2. Contact requesters if clarification of information requirements is required

3. Supervise the return of search request forms/letters to requesters if the forms/letters lack essential information; use form letters to indicate why the requests have not been accepted for processing

4. Develop the strategy for btaining, evaluating, and packaging the information and data to meet requesters' needs

5. Perform online searches, using proper thesaurus terms and advanced search techniques to retrieve the requested information

6. Review retrieval output for relevancy

7. If additional searching is required, determine appropriate source(s) (vertical files, printed publications, consultation with subject experts, etc.)

8. Refer requests to higher-level reference staff, as appropriate

9. Refer requesters to other information services/sources, as appropriate

10. If copies (hard or microfiche) of original documents are required, forward/transfer document numbers and requester identification to the appropriate contract distributor for separate mailing/delivery of the copies

11. Supervise preparation of search results for mailing/delivery to requesters

12. Supervise the transfer of billing documentation/data to the appropriate fiscal control staff

Subscription Searches

13. Run stored search profiles/programs at specified intervals

14. Supervise preparation of offline printouts for mailing delivery

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REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Information Analysis

15. Perform searches (online and manual) to support the information analysis activities of higher level section staff; obtain copies of the cited documents

16. Translate titles and abstracts, as required

17. Assist in proofreading information analysis products

18. Recommend development of information analysis products on specific topics

19. Recommend topics/news notes for inclusion in the center's/clearinghouse's newsletter(s)

Other

20. Perform bibliographic verification as required

21. Supervise handling of phone and written requests for information on the services provided by the information center/clearinghouse

22. Assist senior staff with procedures, documentation and communication to support the implementation of special online training classes and system demonstrations

23. Participate in training representatives of database distributors/ services, contractors and organizational staff in searching the online database(s) and using the controlled vocabulary developed by the information center/clearinghouse

24. Suggest ways in which the online system may be made more user-friendly

25. Participate as a team member in staffing exhibits and demonstrating the online system at professional meetings and conferences

26. Assist mid level staff in investigating requesters' problems related to search charges and to lack of satisfaction with search results

27 Participate in cross-education of staff by filling out and distributing staff alert forms describing new information discovered about the subject fields(s) of interest to the information center/clearinghouse, the online system, specific databases, specific types of equipment, telecommunications systems, etc.

Other (cont'd)

28. Recommend materials/data for inclusion in reference source files (vertical files, in-house indexes)

29. Complete necessary forms to suggest changes/additions to the approved thesaurus; forward forms to senior level section staff

30. Recommend new publications/products which could be developed from the databases produced by the center/clearinghouse

31. Use interdisciplinary reference sources/services to identify materials which are in-scope for the center/clearinghouse and which should be acquired

32. Forward to the selection/acquisitions staff recommendations for materials to be acquired and indexed

33. Recommend acquisition of materials for the reference collection

34. Perform special studies, as assigned

35. Conduct business by phone, whenever appropriate

36. Write memos and letters, as required

37. Maintain a record of work performed and prepare a monthly report of activities

38. Prepare manuals of procedures

39. Make recommendations to the section manager for improvement in operations of the section

40. Attend and participate in staff meetings

41. Provide an overview of the operations of the section to visitors, as requested

42. Supervise technicians and other paraprofessional staff

43. Work to develop "esprit de corps" among staff supervised

44. Assist section manager in writing job descriptions for self and for staff supervised

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REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Other (cont'd)

45. Assist section manager in developing performance standards for self and for staff supervised

46. Assist section manager in the review and performance evaluation of staff supervised

47. Assist in the selection of new technicians and paraprofessionals

48. Keep abreast of new and changing reference sources, services and tools

49. Keep abreast of new and developing technologies applicable to reference searching and information analysis

50. Keep abreast of developments in the subject field(s) supported by the information center/clearinghouse

51. Attend professional meetings and prepare reports for dissemination to staff

52. Develop professional contacts both within and outside the parent organization

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REFERENCE/INFORMATION ANALYSIS   MID LEVEL

Custom Searches

53. Perform more complex searches

54. Assist entry level staff with any questions related to search formulation or strategy, including use of the approved thesaurus terms

Subscription Searches

55. Develop and maintain stored search profiles for subscription searches

56. Obtain feedback from requesters on the relevancy of retrievals

57. Modify stored search profiles, as required

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REFERENCE/INFORMATION ANALYSIS   MID LEVEL

Search Service Administration

58. Work with fiscal control staff and data processing staff to develop systems and procedures for forwarding/transferring billing data to the fiscal control office

59. Work with data processing staff and representatives of document distributors to develop procedures/programs for forwarding/ transferring retrieved document numbers to the appropriate contractor for document distribution

60. Work with representatives of document distributors to resolve any problems related to document delivery

61. Prepare information brochures/fact sheets on the search programs and other services provided by the center/clearinghouse

62. Prepare application forms and all necessary form letters to support the search services

63. Supervise all activities related to enrollment of new subscribers in the current awareness subscription search service

64. Develop and supervise operation of a tracking system in order to maintain knowledge of the status of all information requests

65. Coordinate the investigation of requesters' problems related to search charges and to lack of satisfaction with search results

Information Analysis

66. Review published information on selected topics, analyze the information, consult with subject experts as required, and draft information analysis products for review by senior staff

67. Coordinate the proofreading of all information analysis products approved for publication

68. Prepare the center's/clearinghouse's regular newsletter(s) on specific topic(s) with input from section staff

Other

69. Organize and maintain reference source files (vertical files, in-house indexes)

REFERENCE/INFORMATION ANALYSIS   MID LEVEL

Other (cont'd)

70. Make preliminary selection of forms and/or develop draft record formats for all reference files and operations

71. Assess performance of existing equipment/systems/services used in reference and investigate capabilities of other equipment/system3/ services

72. Recommend acquisition of new/additional equipment/systems/services

73. Train staff in operation and in-house maintenance of equipment/ systems/services

74. Supervise in-house operation and maintenance of equipment/systems/ services

75. Gather information for maintenance contracts on equipment/systems

76. Draft statements of work for contract proposals for services, systems, equipment and/or maintenance

77. Evaluate contractors' proposals

78. Train and supervise entry level staff

79. Assist in the selection of new professional staff

80. Write articles for professional journals/newsletters when appropriate

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REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

Search Service Administration

81. Supervise the overall planning and operation of the custom and subscription search services

82. Assign search requests to the appropriate entry and mid level staff for processing

83. Assist mid level staff in formulating the search strategies for particularly difficult topics; confer with senior level indexing and thesaurus development staff as required

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REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

Search Service Administration (cont'd)

84. Spot check the search results obtained on custom and subscription
     searches; recommend additional search strategies as appropriate

85. Work with publications/product management staff and data processing
     staff to identify charging requirements for custom and subscription
     searches

System Training and Demonstration

86. Work with publications/product management staff in scheduling online
     training for contractors and representatives of database distributors/
     services

87. Plan and coordinate all training activities and demonstrations/
     exhibits related to the information center's/clearinghouses's online
     database(s)

88. Monitor and evaluate all training activities and system demon-
     strations/exhibits by direct observation and by review of attendees'
     written evaluations

89. Advise section staff of ways in which they may improve training
     sessions. training aids, and system demonstrations/exhibits

Information Analysis

90. Receive and review newly-indexed materials that have been flagged for
     forwarding to the reference/information analysis section (selected
     journals, state-of-the-art reviews in selected subjects and
     information prepared by selected experts/organizations)

91. Select topics for information analysis

92. Plan information analysis products, developing the objectives and
     general outline for each one

93. Work with publications/product management staff to establish
     production and distribution plans, procedures, and estimated budget
     for each publication/product

94. Work with selected staff to develop a detailed outline for each
     information analysis publication/product

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Information Analysis (cont'd)

95. Assign various section staff to prepare part(s) of each publication/ product

96. Function as editor of each information aralysis publication/product

Other

97. Function as a technical expert in all matters relating to reference search services and to preparation of information analysis publications/products

98. Work with publications/product management staff to plan a marketing program to make potential user groups awere of the search services and information analysis publications/products

99. Identify organizational mailing lists that publications/product management staff should obtain for marketing purposes

100. Obtain input from users regarding changes that they would recommend in the search services and in the information analysis publications/ products

101. Represent the center/clearinghouse at professional meetings and conferences in the subject field(s) of interest to the center/ clearinghouse

102. Together with senior level staff from the selection/acquisitions, indexing/abstracting and thesaurus control sections, identify organizations/institutions which produce information in the subject field(s) which the information center/clearinghouse supports

103. Work with senior level staff from the selection/acquisitions and indexing/abstracting sections to formulate draft selection policies for all types of materials to be acquired and processed (fully or selectively) by the center/clearinghouse; recommend revisions as requ'~ed

104. Work with senior level selection/acquisitions staff to evaluate the existing data collection(s) and to identify areas of weakness

105. Review suggestions by section staff for changes/additions to the approved thesaurus; forward recommended changes/additions to thesaurus development and control staff

REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

Other (cont'd)

106. Review and weed reference source files on a regular basis

107. Compile lists of reference books and standard works which comprise a basic collection in each major subject area of interest to the center/clearinghouse. New editions of these materials are to be acquired when published. Forward the lists to acquisitions for processing

108. Draft section procedures and policies; draft revisions as required

109. Flowchart and document section procedures

110. Assist section manager in on-going systems analysis of the section

111. Analyze statistics of section operations and prepare draft statistical reports

112. Train and supervise mid level staff

113. Assist section manager in preparing the annual budget for section operations

114. Function as section manager in his/her absence

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Basic knowledge

*** knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

* knowledge of the primary subject field of users served (e.g.,
    education, medicine, chemistry, law, etc.)
* knowledge in greater depth in specific subjects, (e.g., science, math,
    and environmental education; handicapped and gifted children;
    reading and communication skills, etc.)
** knowledge of foreign languages

Information Science Knowledge (Generic)

* knowledge of definition, structure, and formats of information
* knowledge of alternative approaches to the organization of information
* knowledge of alternative approaches to retrieval of information
* knowledge of alternative approaches to information management
** knowledge of available and emerging information technologies and their
    applications
* knowledge of completed and ongoing research in the field and its
    applicability to practice
* knowledge of career opportunities
** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

** knowledge of the expanding information community, its participants and
    their interrelationships (social, economic, technical, etc.)
* knowledge of the variety of work settings and their organizational
    structures
* knowledge of the functions performed within the various work settings
    and the services and products offered
* knowledge of the users of the services and products, their character-
    istics and information habits

Knowledge of what work is done

** knowledge of the reference and information analysis functions, the
    range of services and products offered (both actual and potential)
* knowledge of the activities that are required to offer the services and
    produce the products
* knowledge of the various resources that are necessary to support the
    activities
** knowledge of reference tools

REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Knowledge of what work is done (cont'd)

** knowledge of reference and information analysis methods and techniques
** knowledge of performance expected and how it can be measured
*** knowledge of job responsibilities and working conditions (e.g., range
      of duties, probable compensation, benefits, etc.)

Knowledge of how to do work

** knowledge of how to perform the various activities (e.g., review search
      request forms, develop search strategies, perform online and manual
      searches to support information analysis activities, etc.)
*** knowledge of how to use the reference tools
*** knowledge of how to apply the reference methods and techniques
  * knowledge of personnel procedures

Knowledge of the organization and specific work unit

  * knowledge of the mission, goals and objectives of the organization
  * knowledge of the structure of the organization and the role of the
      section within the organization
  * knowledge of the various projects and key personnel within the
      organization
  * knowledge of the policies and procedures relevant to the section
      operations
** knowledge of the various resources available within the organization
      (e.g., personnel, equipment, etc.)
** knowledge of the users' information needs and requirements

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REFERENCE/INFORMATION ANALYSIS   MID LEVEL

*** greater depths of knowledge specified above
 ** knowledge of how to apply the information analysis methods and
      techniques
 ** knowledge of the operations of other sections in the organization and
      how they relate to reference and information analysis
 ** knowledge of the contracting process, both in general and within the
      organization
  * knowledge of evaluation methods and techniques to evaluate systems,
      services and products
  * knowledge of quality and production control techniques and procedures

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REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

*** greater depths of knowledge specified above
 ** knowledge of public relations techniques
 ** knowledge of statistical description, analysis, interpretation and
       presentation
 ** knowledge of available vendor-supplied systems, services and products
       to support reference and information analysis
 ** knowledge of the costs associated with resources (materials, personnel,
       space, etc.)
  * knowledge of cost analysis and interpretation methods
 ** knowledge of methods of resource allocation
 ** knowledge of standards, measures and methods for evaluating personnel
  * knowledge of alternative management structures and their implications
       for the operation of the section
  * state-of-the-art knowledge of research and practice in reference and
       information analysis techniques

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

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REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Basic knowledge

* knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

*** knowledge of the primary subject field of users served (e.g.,
        education, medicine, chemistry, law, etc.)
 ** knowledge in greater depth in specific subjects, (e.g., science, math,
        and environmental education; handicapped and gifted children;
        reading and communication skills, etc.)
 ** knowledge of foreign languages

Information Science Knowledge (Generic)

* knowledge of definition, structure, and formats of information
* knowledge of alternative approaches to the organization of information
* knowledge of alternative approaches to retrieval of information
* knowledge of alternative approaches to information management
** knowledge of available and emerging information technologies and their
        applications
* knowledge of completed and ongoing research in the field and its
        applicability to practice
* knowledge of career opportunities
** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

* knowledge of the expanding information community, its participants and
        their interrelationships (social, economic, technical, etc.)
* knowledge of the variety of work settings and their organizational
        structures
* knowledge of the functions performed within the various work settings
        and the services and products offered
*** knowledge of the users of the services and products, their character-
        istics and information habits

Knowledge of what work is done

* knowledge of the reference and information analysis functions, the
        range of services and products offered (both actual and potential)
* knowledge of the activities that are required to offer the services and
        produce the products
* knowledge of the various resources that are necessary to support the
        activities
** knowledge of reference tools

REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Knowledge of what work is done (cont'd)

* knowledge of reference and information analysis methods and techniques
* knowledge of performance expected and how it can be measured
* knowledge of job responsibilities and working conditions (e.g., range of duties, probable compensation, benefits, etc.)

Knowledge of how to do work

* knowledge of how to perform the various activities
* knowledge of how to use the reference tools
* knowledge of how to apply the reference methods and techniques
* knowledge of personnel procedures

Knowledge of the organization and specific work unit

* knowledge of the mission, goals and objectives of the organization
* knowledge of the structure of the organization and the role of the section within the organization
* knowledge of the various resources available within the organization (e.g., personnel, equipment, etc.)
* knowledge of the users' information needs and requirements

REFERENCE/INFORMATION ANALYSIS   MID LEVEL

* greater depths of knowledge specified above
* knowledge of how to apply the information analysis methods and techniques
* knowledge of the operations of other sections in the organization and how they relate to reference and information analysis
** knowledge of the contracting process, both in general and within the organization
* knowledge of evaluation methods and techniques to evaluate systems, services and products
* knowledge of quality and production control techniques and procedures

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REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

* greater depths of knowledge specified above
* knowledge of public relations techniques
* knowledge of statistical description, analysis, interpretation and
     presentation
* knowledge of available vendor-supplied systems, services and products
     to support reference and information analysis
* knowledge of the costs associated with resources (materials, personnel,
     space, etc.)
* knowledge of cost analysis and interpretation methods
* knowledge of methods of resource allocation
* knowledge of standards, measures and methods for evaluating personnel
** knowledge of alternative management structures and their implications
     for the operation of the section
** state-of-the-art knowledge of research and practice in reference and
     information analysis techniques

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COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

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REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Basic Skills

*** literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

   Ability to:

 * perform each activity
 * teach adults
 * use computer and telecommunications equipment with ease
 * perceive the information needs of the data user
 * establish rapport with colleagues
 ** communicate well by written, verbal and non-verbal means
   collect, analyze and interpret data
 * make decisions and recommendations based on available information
 * work independently and in groups
 * develop criteria for evaluation
 * make effective, timely, and well-informed decisions
 ** isolate and define problems and develop the necessary criteria and
        action for their solution
 ** manage time effectively
   conduct an interview
 * supervise staff

REFERENCE/INFORMATION ANALYSIS   MID LEVEL

Skills Related to Each Specific Activity

 ** Skills listed above are developed to a greater extent

   Ability to:

 ** analyze, evaluate and synthesize information
 * communicate with data processing staff on a technical level
 * conduct meetings with individuals and groups
   arbitrate and negotiate

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REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

** Skills listed above are developed to a greater extent

   Ability to:

** anticipate long-range needs of the section and of the organization
*** design systems and procedures to improve operations of the section and
        of the organization
** apply methods of measurement and evaluation
** budget and make projections
** optimize the use of organizational and section resources

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REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

** Skills listed above are developed to a greater extent

Ability to:

** anticipate long-range needs of the section and of the organization
*** design systems and procedures to improve operations of the section and
       of the organization
** apply methods of measurement and evaluation
** budget and make projections
** optimize the use of organizational and section resources

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COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

REFERENCE/INFORMATION ANALYSIS   ENTRY LEVEL

Basic Skills

*** literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

   Ability to:

 * perform each activity
 ** teach adults
 ** use computer and telecommunications equipment with ease
 * perceive the information needs of the data user
 * establish rapport with colleagues
 * develop criteria for evaluation
 * manage time effectively
 * conduct an interview

REFERENCE/INFORMATION ANALYSIS   MID LEVEL

Skills Related to Each Specific Activity

 * Skills listed above are developed to a greater extent

   Ability to:

 ** analyze, evaluate and synthesize information
 ** communicate with data processing staff on a technical level
 * conduct meetings with individuals and groups
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REFERENCE/INFORMATION ANALYSIS   SENIOR LEVEL

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 * Skills listed above are developed to a greater extent

   Ability to:

 * anticipate long-range needs of the section and of the organization
 * design systems and procedures to improve operations of the section and
      of the organization
 * apply methods of measurement and evaluation
 * budget and make projections
 * optimize the use of organizational and section resources

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

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REFERENCE/INFORMATION ANALYSIS

Dispositional Attitudes

Attitudes Toward Institutions

* Respect for profession
** Respect for the section
* Respect for the parent organization

Attitudes Toward Other People

Toward Users

*´ Respect users
* Like people in general
** Like to help people
** Like to meet people
* Like to make others feel comfortable
** Sensitive to others' needs

Toward Others in the Workplace

* Respect co-workers
* Like to work with others/as a team
* Like to work on own
** Willingness to draw upon and share knowledge and experience with others
* Supportive of co-workers
** Enjoy managing/supervising others

Personal Qualities

** Alertness
* Assertiveness
* Compassion/Kindness
* Confidence
* Cheerfulness
*** Dependability
* Determination/Tenacity
* Diplomacy
* Emotional stability
* Fairness
** Flexibility/Versatility
* Imagination
* Inquisitiveness
** Leadership ability
* Neatness
** Need for achievement

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REFERENCE/INFORMATION ANALYSIS

Personal Qualities (cont'd)

* Objectivity
** Open-mindedness
* Optimism/Positive attitude
* Organization
* Patience
* Physical endurance
* Resourceful
* Sensitive/Thoughtful
** Sense of humor
** Sense of ethics
* Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

** Willingness to take/accept responsibility
* Willingness to take initiative
** Willingness to respond to authority, apply and follow policy
* Realization that there is no single "right" way to achieve the goals of
    the section/organization
** Desire to learn/try
* Willingness to fail
** Willingness to ask questions
* Desire to work to best of ability
** Responsiveness to time constraints
* Accuracy
* Willingness to get hands dirty
* Attention to detail
* Willingness to do clerical tasks
** Desire to follow-through
** Service orientation
* Organizational identity
* Willingness to promote parent organization and its services
* View of parent organization as part of a larger information environment
* Ability to see broad picture
* Ability to sacrifice short-term gains for long-term goals
** Political sense
* Curiosity
* Variety of interests
* Desire to grow personally
* Desire to grow professionally
** Desire to remain current in specific and general subject field
** Positive attitude toward job

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

REFERENCE/INFORMATION ANALYSIS

Dispositional Attitudes

Attitudes Toward Institutions

* Respect for the parent organization

Attitudes Toward Other People

Toward Users

* Respect users
* Like people in general
* Like to help people
* Like to meet people
* Like to make others feel comfortable
* Sensitive to others' needs

Toward Others in the Workplace

* Like to work with others/as a team
** Willingness to draw upon and share knowledge and experience with others
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* Alertness
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* Cheerfulness
* Dependability
* Determination/Tenacity
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* Emotional stability
* Flexibility/Versatility
* Imagination
* Inquisitiveness
* Leadership ability
* Neatness
* Open-mindedness
* Optimism/Positive attitude
* Organization
* Patience
* Physical endurance
* Resourceful
* Sensitive/Thoughtful
* Sense of humor
* Sense of ethics

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REFERENCE/INFORMATION ANALYSIS

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

* Willingness to take/accept responsibility
* Willingness to take initiative
* Willingness to respond to authority, apply and follow policy
* Realization that there is no single "right" way to achieve the goals of
     the section/organization
** Desire to learn/try
* Willingness to fail
* Willingness to ask questions
* Desire to work to best of ability
* Responsiveness to time constraints
* Accuracy
* Willingness to get hands dirty
* Attention to detail
* Desire to follow-through
* Service orientation
* Organizational identity
* Willingness to promote parent organization and its services
* View of parent organization as part of a larger information environment
* Ability to see broad picture
* Ability to sacrifice short-term gains for long-term goals
* Political sense
* Curiosity
* Variety of interests
* Desire to grow personally
* Desire to grow professionally
** Desire to remain current in specific and general subject field
* Positive attitude toward job

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INFORMATION CENTER/CLEARINGHOUSE PROFESSIONAL COMPETENCIES

PUBLICATIONS AND PRODUCT MANAGEMENT

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PUBLICATIONS AND PRODUCT MANAGEMENT   **SENIOR LEVEL**

Planning

1. Work with senior staff of various sections to identify publications (in hardcopy and/or microform) and special data products (computer tapes for distribution to database distributors, special reports and listings, reprints, data supplied to special subject interest groups for publication of bibliographies, etc.) which may be developed from the master indexing, thesaurus, and acquisitions databases or which may be prepared by organization staff

2. Contract for/conduct market surveys to identify the potential need, demand for, and response to the various planned publications/products

3. Recommend modifications to planned publications/products based on analyses of market survey results

4. Work with the section manager, staff of the respective sections, and data processing staff to prepare the production plans and requirements for each new publication/product. Provide special assistance by helping them visualize the publications/products and minimizing production costs in planning

5. Following approval/modification of new publication/product plans by senior management, work with the appropriate senior staff to develop procedures and establish schedules for the production of each publication/product

6. Estimate the cost which must be charged for each publication/product in order to cover costs and make a profit, if applicable

7. Work with representatives of database distributors and other organizations to arrange preliminary details related to the use of and reimbursement for the supplied data

8. Draft documentation required to support the production and distribution of each approved publication/product

9. Work with appropriate organizational staff to plan and identify in-house procedures and contract requirements to support distribution of publications/products on demand or on a subscription basis.

10. Work with appropriate organizational staff to negotiate and monitor contracts and other agreements in support of production and distribution of publications/products

ACTIVITIES

PUBLICATIONS AND PRODUCT MANAGEMENT   SENIOR LEVEL

Planning (cont'd)

11. Work with appropriate organizational staff to develop plans and
    procedures for distribution of copies (hardcopy or microform) of
    materials indexed by the center/clearinghouse

12. Work with legal counsel to develop documentation which may be completed
    by a copyright holder to grant permission to the center/clearinghouse
    and/or its distributing agent to reproduce and sell copies of the
    original material

13. Work with apppropriate organizational staff to negotiate and monitor
    contracts and other agreements in support of microfilming original
    materials, converting the film to fiche, and supplying hard/fiche
    copies of the materials on demand or on a subscription basis; all
    microforms should meet federal and national standards.

Database Coordination

14. Keep abreast of industry-wide standards for online databases

15. Work with senior data processing staff and staff of the respective
    sections to ensure that established standards are maintained in online
    files developed by the organization

16. Work with senior staff in the respective sections and data processing
    staff to develop methods for testing the technical integrity of each
    database/software package prior to release of tapes for publication
    processing, for distribution to database distributors, or for sale

17. Work with appropriate staff in the respective sections to ensure that
    the content data in each database is ready for release on schedule and
    fulfills quality and quantity requirements

18. Work with data processing staff, representatives of database
    distributors and photocomposition/videocomposition contractors to
    ensure that the data is released in formats compatible with the
    receivers' systems

19. Coordinate in-house preparation of documentation and training programs
    for representatives of database distributors; provide them with an
    overview of the content and potential uses of the data contained in
    each database

20. Coordinate staff review of database documentation created by database
    distributors for their clients

PUBLICATIONS AND PRODUCT MANAGEMENT   SENIOR LEVEL

Database Coordination (cont'd)

21. Coordinate the sending of computer tapes to the database distributors on schedule

22. Supervise the maintenance of documentation files for each database released to database distributors

23. Maintain a statistical record of the use of each database by database distributors' clients

24. Maintain a financial record of the royalty/usage charges received from database distributors

Publications Coordination

25. Work with in-house staff and contractors to ensure that all deadlines are met in the production schedule for each publication

26. Coordinate operations related to the processing of illustrations for publications:

> make/obtain half-tone photos and/or line cuts
> crop photos as required and mark their locations on galleys
> write captions
> choose type
> paste up boards
> ensure return of negatives from publisher and file
> return artwork obtained on loan

27. Provide guidance, as needed, to senior staff of the respective sections in development of objective, user-oriented introductory materials for publication

28. Send galleys of introductory materials for typesetting

29. Coordinate the proofreading of the introductory materials by senior staff in the respective sections

30. Obtain computer tapes of the content data for each publication and send to the appropriate source for computerized photocomposition/videocomposition

31. Receive the positive or negative camera-ready copy

32. Work with senior staff of the respective sections to coordinate the proofing of the camera-ready content data

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PUBLICATIONS AND PRODUCT MANAGEMENT   SENIOR LEVEL

Publications Coordination (cont'd)

33. Design or contract for the design of the covers for each publication

34. Establish a color rotation cycle for the covers of successive year's issues/cumulations

35. Obtain/assign publication numbers for each publication, as required (e.g., volume and issue numbers, in-house document numbers, publisher's series numbers)

36. Obtain an ISSN for each title published as a serial

37. Obtain Cataloging-in-Publication (CIP) data for each publication/ series

38. Apply for copyright for each publication, if appropriate

39. Send the complete package of camera-ready copy to the printer with specifications for the size of the publication, the cover color(s), the type of binding, the type of paper, the number of copies (for in-house use and shipment to the distributing agent), etc.

40. For data to be published by special subject interest groups, send the camera-ready content data to the respective organizations for publication processing

41. For microform publications, send computer-output-microfilm (COM) and introductory copy to the appropriate contractor for the creation of the masters and production of copies. Specify the number of copies for in-house use and for shipment to the distributing agent

42. For special or occasional publications, provide guidance, as needed, to senior staff of the respective sections regarding writing the introductory material, so that the publication will not be outdated too quickly by use of time-linked wording

43. For approved reprint publications, send negatives, if available, to the reprint publisher; ensure that all negatives are returned

44. Keep track of costs related to production of each publication; note cost trends

45. Notify the respective sections of the costs associated with production of each of the publications

46. Supervise the maintenance of files related to production of each publication

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PUBLICATIONS AND PRODUCT MANAGEMENT   SENIOR LEVEL

Marketing

47. Prepare advertising brochures for each publication/product; coordinate review by appropriate in-house staff prior to publication

48. Request/purchase mailing lists from appropriate sources to reach the target audience for each publication/product

49. Coordinate mailing of samples of new publications to the editors of journals and reference guides in the appropriate subject fields

50. Work with a graphics designer to prepare copy for paid advertisements

51. Purchase advertising space in appropriate journals

52. Plan and staff exhibits of publications/products at professional meetings and conferences

53. Coordinate the preparation of a list of publications/products produced; publish the list as a separate or include the list (full or partial) in each title published

54. Contact known users of each publication/product to get feedback on ways the publication/product may be improved

Other

55. Assist users, as requested, in resolving problems which they may encounter in obtaining/using the publications/products from the designated distributing agent(s)

56. Plan and coordinate a marketing program to make potential user groups aware of the services provided by the information center/clearinghouse

57. Contact users of the services of the information center/clearinghouse to get feedback on ways that the service may be improved

58. Attend professional meetings in the information field and in publications and data products management; prepare reports for dissemination to staff

59. Keep abreast of developments in the information field that affect publications and product management and information centers/ clearinghouses

60. Develop contacts with other professionals in publications and data products management

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PUBLICATIONS AND PRODUCT MANAGEMENT   SENIOR LEVEL

Other (cont'd)

61. Perform special studies, as assigned

62. Conduct business by phone, when appropriate

63. Write memos and letters, as required

64. Maintain a record of work performed

65. Make recommendations to the section manager for improvement in operation of the section

66. Attend and participate in staff meetings

67. Provide as overview of the operations of the section to visitors, as requested

68. Train and supervise support staff, as required

69. Work to develop "esprit de corps" among co-workers and staff supervised

70. Assist section manager in writing job descriptions for self and for staff supervised

71. Assist section manager in developing performance standards for self and for staff supervised

72. Assess performance of existing equipment/systems used in the section and investigate capabilities of other equipment/systems

73. Recommend acquisition of new/additional equipment/systems

74. Train section staff in operation and maintenance of equipment/systems

75. Draft statements of work for contract proposals for services, systems, equipment and/or maintenance

76. Evaluate contractor's proposals

77. Write articles for professional journals/newsletters

78. Draft statements of section procedures and policies; draft revisions as required

79. Flowchart and document section procedures

PUBLICATIONS AND PRODUCT MANAGEMENT   SENIOR LEVEL

Other (cont'd)

80. Prepare manuals of procedures

81. Assist section manager in on-going systems analysis of the section

82. Analyze statistics for all operations in the section and prepare draft statistical reports

83. Assist section manager in preparing the annual budget for section operations

84. Function as section manager in his/her absence

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

KNOWLEDGE

PUBLICATION/PRODUCT MANAGEMENT   SENIOR LEVEL

Basic knowledge

*** knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

** knowledge of the primary subject field of users served (e.g.,
      education, medicine, chemistry, law, etc.)
 * knowledge in greater depth in specific subjects, (e.g., science, math,
      and environmental education; handicapped and gifted children;
      reading and communication skills, etc.)
 * knowledge of foreign languages

Information Science Knowledge (Generic)

 * knowledge of definition, structure, and formats of information
 * knowledge of alternative approaches to the organization of information
 * knowledge of alternative approaches to retrieval of information
 * knowledge of alternative approaches to information management
** knowledge of available and emerging information technologies and their
      applications
 * knowledge of completed and ongoing research in the field and its
      applicability to practice
 * knowledge of career opportunities
** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

 * knowledge of the expanding information community, its participants and
      their interrelationships (social, economic, technical, etc.)
   knowledge of the variety of work settings and their organizational
      structures
 * knowledge of the functions performed within the various work settings
      and the services and products offered
 * knowledge of the users of the services and products, their character-
      istics and information habits

Knowledge of what work is done

*** knowledge of the publications and product management functions, the
      range of services and products offered (both actual and potential)
*** knowledge of the activities that are required to offer the services and
      produce the products
*** knowledge of the various resources that are necessary to support the
      activities
*** knowledge of methods and techniques for publications and product
      management

PUBLICATION/PRODUCT MANAGEMENT   SENIOR LEVEL

Knowledge of what work is done (cont'd)

** knowledge of performance expected and how it can be measured
** knowledge of job responsibilities and working conditions (e.g., range
   of duties, probable compensation, benefits, etc.)

Knowledge of how to do work

*** knowledge of how to perform the various activities (e.g., conduct
    market surveys, plan new publications/products, coordinate
    production of publications/products, etc.)
** knowledge of how to apply the methods and techniques of publications
   and product management
** knowledge of proofreading techniques and procedures
 * knowledge of personnel procedures
 * knowledge of the contracting process, both in general and within the
   organization
 * knowledge of evaluation methods and techniques to evaluate systems,
   services and products
** knowledge of quality and production control techniques and procedures
 * knowledge of public relations techniques
   knowledge of statistical description, analysis, interpretation and
   presentation
 * knowledge of available systems, services and products to support
   publications and product management
** knowledge of the costs associated with resources (materials, personnel,
   space, etc.)
** knowledge of cost analysis and interpretation methods
 * knowledge of methods of resource allocation
 * knowledge of standards, measures and methods for evaluating personnel
 * knowledge of alternative management structures and their implications
   for the operation of the section
 * state-of-the-art knowledge of research and practice in publications and
   product management techniques

Knowledge of the organization and specific work unit

** knowledge of the mission, goals and objectives of the organization
** knowledge of the structure of the organization and the role of the
   section within the organization
** knowledge of the various projects and key personnel within the
   organization
*** knowledge of the policies and procedures relevant to section operations
*** knowledge of the various resources available within the organization
    (e.g., personnel, equipment, etc.)
** knowledge of the operations of other sections in the organization and
   how they relate to publications and product management

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

PUBLICATION/PRODUCT MANAGEMENT   SENIOR LEVEL

Basic knowledge

   * knowledge related to literacy, numeracy, communications, etc.

Subject knowledge

   ** knowledge of the primary subject field of users served (e.g.,
         education, medicine, chemistry, law, etc.)
    * knowledge in greater depth in specific subjects, (e.g., science, math,
         and environmental education; handicapped and gifted children;
         reading and communication skills, etc.)
    * knowledge of foreign languages

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   ** knowledge of alternative approaches to information management
   ** knowledge of available and emerging information technologies and their
         applications
    * knowledge of completed and ongoing research in the field and its
         applicability to practice
    * knowledge of career opportunities
   ** knowledge of how to learn on an ongoing basis

Knowledge about information work environments

   * knowledge of the expanding information community, its participants and
         their interrelationships (social, economic, technical, etc.)
     knowledge of the variety of work settings and their organizational
         structures
   * knowledge of the functions performed within the various work settings
         and the services and products offered
   ** knowledge of the users of the services and products, their character-
         istics and information habits

Knowledge of what work is done

   ** knowledge of the publications and product management functions, the
         range of services and products offered (both actual and potential)
   ** knowledge of the activities that are required to offer the services and
         produce the products
   ** knowledge of the various resources that are necessary to support the
         activities
   ** knowledge of methods and techniques for publications and product
         management
    * knowledge of performance expected and how it can be measured

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PUBLICATION/PRODUCT MANAGEMENT   SENIOR LEVEL

Knowledge of how to do work

** knowledge of how to perform the various activities (e.g., conduct
      market surveys, plan new publications/products, coordinate
      production of publications/products, etc.)
** knowledge of how to apply the methods and techniques of publications
      and product management
 * knowledge of proofreading techniques and procedures
 * knowledge of personnel procedures
 * knowledge of evaluation methods and techniques to evaluate systems,
      services and products
** knowledge of quality and production control techniques and procedures
** knowledge of public relations techniques
 * knowledge of statistical description, analysis, interpretation and
      presentation
 * knowledge of available systems, services and products to support
      publications and product management
** knowledge of the costs associated with resources (materials, personnel,
      space, etc.)
** knowledge of cost analysis and interpretation methods
** knowledge of methods of resource allocation
 * knowledge of standards, measures and methods for evaluating personnel
 * knowledge of alternative management structures and their implications
      for the operation of the section
** state-of-the-art knowledge of research and practice in publications and
      product management techniques

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** knowledge of the mission, goals and objectives of the organization
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      section within the organization
** knowledge of the various projects and key personnel within the
      organization
 * knowledge of the policies and procedures relevant to section operations
 * knowledge of the various resources available within the organization
      (e.g., personnel, equipment, etc.)
 * knowledge of the operations of other sections in the organization and
      how they relate to publications and product management

COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

PUBLICATION/PRODUCT MANAGEMENT   SENIOR LEVEL

Basic Skills

*** literacy, numeracy, cognitive, analytical, communications, etc.

Skills Related to Specific Activities

    Ability to:

  * perform each activity
  * establish rapport with colleagues
*** communicate well by written, verbal and non-verbal means
 ** collect, analyze and interpret data
*** make decisions and recommendations based on available information
 ** work independently and in groups
  * perform sedentary work
 ** develop criteria for evaluation
 ** make effective, timely, and well-informed decisions
 ** isolate and define problems and develop the necessary criteria and
      action for their solution
 ** manage time effectively
  * conduct an interview
 ** conduct meetings with individuals and groups
 ** supervise staff
 ** arbitrate and negotiate
 ** anticipate long-range needs of the section and of information users
  * design systems and procedures to improve section operations/products
  * apply methods of measurement and evaluation
 ** budget and make projections
 ** optimize the use of organizational and section resources

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COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

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PUBLICATION/PRODUCT MANAGEMENT   SENIOR LEVEL

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Ability to:

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* budget and make projections
* optimize the use of organizational and section resources

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COMPETENCIES VALIDATED AS
ESSENTIAL VERSUS DESIRABLE

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PUBLICATION/PRODUCT MANAGEMENT

<u>Dispositional Attitudes</u>

<u>Attitudes Toward Institutions</u>

** Respect for profession
*** Respect for the publications and product management section
** Respect for the parent organization

<u>Attitudes Toward Other People</u>

<u>Toward Users</u>

** Respect users
* Like people in general
* Like to help people
** Like to meet people
** Like to make others feel comfortable
* Sensitive to others' needs

<u>Toward Others in the Workplace</u>

* Respect co-workers
** Like to work with others/as a team
* Like to work on own
** Willingness to draw upon and share knowledge and experience with
        others
* Supportive of co-workers
* Enjoy managing/supervising others

<u>Personal Qualities</u>

** Alertness
* Assertiveness
** Compassion/Kindness
* Confidence
** Cheerfulness
** Dependability
* Determination/Tenacity
** Diplomacy
* Emotional stability
** Fairness
. ** Flexibility/Versatility
* Imagination
* Inquisitiveness
* Leadership ability
  Neatness
  Need for achievement
* Objectivity

PUBLICATION/PRODUCT MANAGEMENT

Personal Qualities (cont'd)

** Open-mindedness
* Optimism/Positive attitude
** Organization
** Patience
** Physical endurance
* Resourceful
* Sensitive/Thoughtful
** Sense of humor
* Sense of ethics
* Tolerance

Attitudes Related to Job/Work/Organization

Individual should demonstrate:

*** Willingness to take/accept responsibility
*** Willingness to take initiative
*** Willingness to respond to authority, apply and follow policy
** Realization that there is no single "right" way to achieve the goals of
the section/organization
*** Desire to learn/try
* Willingness to fail
*** Willingness to ask questions
** Desire to work to best of ability
*** Responsiveness to time constraints
*** Accuracy
* Willingness to get hands dirty
*** Attention to detail
*** Desire to follow-through
* Service orientation
* Organizational identity
** Willingness to promote parent organization and its services
** View of parent organization as part of a larger information environment
*** Ability to see broad picture
** Ability to sacrifice short-term gains for long-term goals
*** Political sense
* Curiosity
Variety of interests
* Desire to grow personally
* Desire to grow professionally
** Desire to remain current in specific and general subject field
*** Positive attitude toward job

COMPETENCIES VALIDATED AS BECOMING
MORE VERSUS LESS IMPORTANT
IN THE FUTURE

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PUBLICATION/PRODUCT MANAGEMENT

Dispositional Attitudes

Attitudes Toward Institutions

* Respect for the publications and product management section
* Respect for the parent organization

Attitudes Toward Other People

Toward Users

* Respect users
* Like people in general
* Like to help people
* Like to meet people
* Sensitive to others' needs

Toward Others in the Workplace

* Respect co-workers
* Like to work with others/as a team
* Like to work on own
** Willingness to draw upon and share knowledge and experience with others
* Supportive of co-workers
* Enjoy managing/supervising others

Personal Qualities

* Alertness
* Assertiveness
* Confidence
* Cheerfulness
* Dependability
* Determination/Tenacity
* Diplomacy
* Emotional stability
* Fairness
* Flexibility/Versatility
* Imagination
* Inquisitiveness
* Leadership ability
* Objectivity
* Open-mindedness
* Optimism/Positive attitude
* Organization
* Resourceful
* Sensitive/Thoughtful
* Sense of humor

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PUBLICATION/PRODUCT MANAGEMENT

Attitudes Related to Job/Work Organization

Individual should demonstrate:

* Willingness to take/accept responsibility
* Willingness to take initiative
* Willingness to respond to authority, apply and follow policy
* Realization that there is no single "right" way to achieve the goals of the section/organization
** Desire to learn/try
** Willingness to fail
* Willingness to ask questions
* Desire to work to best of ability
* Responsiveness to time constraints
* Willingness to get hands dirty
* Attention to detail
* Desire to follow-through
* Service orientation
* Organizational identity
* Willingness to promote parent organization and its services
* View of parent organization as part of a larger information environment
** Ability to see broad picture
* Ability to sacrifice short-term gains for long-term goals
* Political sense
* Curiosity
* Variety of interests
* Desire to grow personally
** Desire to grow professionally
** Desire to remain current in specific and general subject field
* Positive attitude toward job

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