

DEVELOPMENT AND VALIDATION OF A BASIC LIBRARY LOCATIONAL  
SKILLS MODEL FOR ELEMENTARY SCHOOL LIBRARY, READING, AND  
SOCIAL STUDIES EDUCATION

by

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## ABSTRACT

The purpose of the study was to develop and validate a model of basic library locational skills for print sources.

The major processes of the study involved (1) the identification of an information base from which to draw the model, (2) the validation of the information base, (3) the development of a tentative model, (4) a pilot validation of the model, and (5) the final validation of the model.

The information base was identified from a wide variety of sources and fell into the five major categories of articles, books/instructional materials, curriculum guides, tests, and theses and dissertations.

The validation of the information base required judgments about the quality of the search for library sources by five school librarians with specific qualifications. The referent quality was defined in terms of the appropriateness of sources and comprehensiveness of the search. The conclusion was reached that the quality of the search was satisfactory.

A tentative skills model was produced through a process of identifying all library learnings (skills and other behaviours) in the library literature, categorizing them and isolating all those learnings hypothesized to be basic library locational skills. The model included the two major skills clusters of "Locating Materials in a Library" (LMIL) and "Locating Content/Data in Materials : Books - Standard Fiction/Non-Fiction (LCIM).

A pilot validation was then conducted. Five qualified judges were asked to react to the locale for instruction and the level of skills and subskills included. The locale item was used to separate locational skills likely to be used in the library from locational skills used in other locales and was defined in terms of being either library-based (LB) or not necessarily library-based (NNLB). The levels item was used to separate out basic locational skills from higher level locational skills and was defined in terms of the concepts basic (B) and non-basic (NB). Judges were asked to make appropriate additions to the list of skills.

The data were analyzed to obtain a revised skills model and to provide guidelines for procedures in the projected Canada-wide validation.

As a result of the pilot validation the LMIL cluster was retained the the LCIM cluster eliminated from the model. The decision was made for the final validation to give judges an opportunity to react to the entire model by designating the eliminated skills/subskills as supplementary sets of items. It was also decided that the concept of Level One- and Level Two- Basic skills/subskills should be introduced. That is, a high degree of agreement (75-100%) should be a criterion for Level One- Basic and a lesser degree of agreement (51-74%) a criterion for Level Two- Basic skills and subskills.

The revised model was prepared, cross-Canada judges identified and selected, and a final questionnaire package developed. The group of judges consisted of school librarians in department of education supervisory positions, university teaching positions and school district supervisory positions. In all, eighty Canadian school librarians with the same qualifications as those in the two previous validations were asked to make independent judgments about the locale and level of items included in the skills model.



Sixty-one librarians completed response forms and 92 percent of the data was useable. Using the criteria established, the data were analyzed to determine the final form of the basic skills model. A comparison was also made between the findings of the pilot and Canada-wide validations of the number of skills clusters, component skills and subskills agreed upon as being basic.

Conclusions were drawn, the major conclusion being that a valid model of basic library locational skills for print sources had been obtained. Implications were stated and suggestions made for further studies.

## TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES.....	v
LIST OF FIGURES.....	vii
 <u>Chapters</u>	
1 THE PROBLEM.....	1
STATEMENT OF THE PROBLEM.....	5
SIGNIFICANCE OF THE STUDY.....	5
DESIGN OF THE STUDY.....	6
LIMITATIONS OF THE STUDY.....	7
DEFINITIONS OF TERMS.....	8
ORGANIZATION OF THE PAPER.....	9
2 REVIEW OF THE LITERATURE.....	10
INDEPENDENT LEARNERS : A BROAD GOAL OF EDUCATION.....	10
School Library Education.....	11
Reading Education.....	13
Social Studies Education.....	15
RELEVANCE OF LIBRARY RESEARCH AND REPORTING AS AN AVENUE TO DEVELOPING INDEPENDENT LEARNERS.....	17
School Library Education.....	17
Reading Education.....	19
Social Studies Education.....	22
GOAL SETTING IN A PROGRAMME OF LIBRARY RESEARCH AND REPORTING.....	25
Clarity of Objectives a Necessity.....	25
Clarity Lacking in Existing Literature on the Library Research and Reporting Process.....	26
Providing Clarity with a Hypothetical Three-- Dimensional Model of the Target Process.....	26
CONTENT FOR A THREE-DIMENSIONAL MODEL OF LIBRARY RESEARCH AND REPORTING.....	27
Dimension One : Subprocesses .....	27
Dimension Three : Levels of Difficulty.....	31
Dimension Two : Skills and Subskills.....	33

## TABLE OF CONTENTS – continued

<u>Chapters</u>	<u>Page</u>
3 VALIDATION OF THE INFORMATION BASE OF SOURCES IN ELEMENTARY SCHOOL LIBRARY EDUCATION....	43
NEED FOR VALIDATION.....	43
PLAN FOR VALIDATION.....	43
VALIDATION PROCEDURES.....	44
ANALYSIS OF DATA : QUESTIONNAIRE I.....	51
4 DEVELOPMENT AND PILOT VALIDATION OF THE BASIC LIBRARY LOCATIONAL SKILLS MODEL.....	55
DEVELOPMENT OF THE MODEL.....	55
DEVELOPMENT OF THE QUESTIONNAIRE INSTRUMENT..	70
PILOT VALIDATION PROCEDURES.....	72
RESULTS OF THE PILOT VALIDATION.....	75
5 VALIDATION OF THE REVISED MODEL OF BASIC LIBRARY LOCATIONAL SKILLS.....	100
VALIDATION PROCEDURES.....	100
ANALYSIS OF DATA : FINAL VALIDATION, QUESTIONNAIRE III.....	116
6 SUMMARY AND CONCLUSIONS.....	148
SUMMARY OF FINDINGS.....	148
CONCLUSIONS.....	153
IMPLICATIONS.....	154
RECOMMENDATIONS FOR FURTHER STUDIES.....	156
BIBLIOGRAPHY.....	157
APPENDICES.....	167
A LIST OF JUDGES FOR THE THREE VALIDATIONS.....	168
B QUESTIONNAIRE I : VALIDATION OF THE INFORMATION BASE....	178
C QUESTIONNAIRE II : THE PILOT VALIDATION OF THE SKILLS MODEL.....	218
D QUESTIONNAIRE III : THE FINAL VALIDATION OF THE SKILLS MODEL.....	245
E FOLLOW-UP LETTER : THE FINAL VALIDATION.....	280

## LIST OF TABLES

<u>Number</u>		<u>Page</u>
4.1	Frequency and Percent : <u>Basic</u> Level of Skills Cluster #1, Locating Materials in a Library (LMIL).....	77
4.2	Frequency and Percent : <u>Basic</u> Level Subskills (LMIL), Arrangement of Materials in the Library : By Sections.....	82
4.3	Frequency and Percent : <u>Basic</u> Level Subskills (LMIL), Arrangement of Materials in the Library : Within Sections.....	85
4.4	Frequency and Percent : <u>Basic</u> Level Subskills (LMIL), Card Catalogue.....	89
4.5	Frequency and Percent : <u>Basic</u> Level Subskills (LMIL), Vertical File.....	92
4.6	Frequency and Percent : <u>Basic</u> Level Skills (LMIL), Classification by Subject/D.D.C. ....	92
5.1	Number and Percent of Questionnaire Returns : Responses by Groups <sup>a</sup> .....	119
5.2	Judges' Characteristics : Percentages by Groups.....	122
5.3	LMIL : <u>Basic</u> Level Skills – Percentages by Groups.....	128
5.4	LMIL : Locale for Instruction – Percentages by Groups.....	129
5.5	LMIL Subskills : Arrangement of the Library – Percentages by Groups.....	130
5.6	LMIL Subskills : Arrangement of Materials in the Library – Percentages by Groups.....	132
5.7	LMIL Subskills : Card Catalogue – Percentages by Groups....	135

## LIST OF TABLES – continued

<u>Number</u>		<u>Page</u>
5.8	LMIL Subskills : Vertical File and Dewey Decimal Classification – Percentages by Groups.....	137
5.9	LMIL Subskills : Supplementary Checklist – Percentages by Groups.....	139
5.10	LCIM : <u>Basic</u> Level Skills – Percentages by Groups.....	141
5.11	LCIM : Locale for Instruction – Percentages by Groups.....	141

## LIST OF FIGURES

<u>Number</u>		<u>Page</u>
1.1	Hypothetical Three-Dimensional Model of the Research and Reporting Process.....	3
1.2	Hypothetical Three-Dimensional Model of the Library Research and Reporting Process.....	4
2.1	Hypothetical Three-Dimensional Model of Research and Reporting : A Process-Centred Model.....	28
2.2	Scope and Sequence Chart for Grades 4-6 by Polette (1973).....	35
2.3	A Framework for Teaching the Investigative and Research Skills by Cleary (1968) : Charts 3 and 4.....	39
4.1	Collection of Individual Library Learnings on Cards.....	57
4.2	Analysis and Categorization of Library Learnings into Tentative Categories.....	58
4.3	Analysis and Categorization of Library Learnings into Two Major Categories and Three Subcategories.....	58
4.4	Analysis and Categorization of Library Learnings : By Level.....	61
4.5	A Section of the Summary Charts of Library Skills and Subskills.....	63
4.6	Tentative Skills Model of <u>Basic</u> Library Locational Skills.....	67
4.7	Revised Model of <u>Basic</u> Library Locational Skills and Subskills Obtained in the Pilot Validation : Agreement Shown by Three out of Five Judges (60 Percent).....	97
4.8	Revised Model of <u>Basic</u> Library Locational Skills and Subskills Obtained in the Pilot Validation : Agreement Shown by Four out of Five Judges (80 Percent).....	98

LIST OF FIGURES – continued

<u>Number</u>		<u>Page</u>
5.1	Model of <u>Basic</u> Library Locational Skills and Subskills Obtained in the Final Validation, Levels One and Two : Agreement shown by 51 to 100 Percent of the Total Group...	144
5.2	Model of <u>Basic</u> Library Locational Skills and Subskills Obtained in the Final Validation, Levels One and Two : Agreement Shown by 75 to 100 Percent of the Total Group..	146
6.1	Model of <u>Basic</u> Library Locational Skills and Subskills Obtained in the Pilot Validation : Agreement Shown by 60 Percent and 80 Percent of the Five Judges.....	150
6.2	Model of <u>Basic</u> Library Locational Skills and Subskills Obtained in the Final Validation, Levels One* and Two - Basic Items : Agreement Shown by 51 to 100 Percent of the Total Group.....	152

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## Chapter 1

### THE PROBLEM

A long-standing educational goal of curriculum theorists in various areas of education has been the development of independent learners, that is, learners who have acquired the skills and attitudes needed for self-directed inquiry. Such a goal is considered to be of value to both the learner and to society. The attainment of this goal is, in fact, often regarded as one of the most important contributions that the school can make to students both as individuals and as future citizens.

Apparently educators are in clear agreement about the worth of the goal and its appropriateness to school-based education. What does not seem to be so clear in educational writing, including both the theoretical literature and curriculum guides, is how independent learners are to be produced in the school system. Indeed, a number of possible approaches could be suggested.

An avenue to independent learning frequently suggested is the teaching of the research and reporting process. Library, reading and social studies educators have all suggested that the goal of producing independent learners can be at least partially attained through integrating instruction in research with the content of the various curriculum areas. Teachers of these subject areas have been urged to teach their students the processes of library research: seeking information and organizing their findings into oral and written reports. Students with such research skills, it is argued, will rely little on teachers and single texts as sources of

information and more on such other sources as libraries when they need information for problem-solving either in a school setting or out of it.

Agreement that instruction in library research and reporting is an appropriate avenue to teaching habits of independent learning does not ensure the easy provision of a programme. Curriculum theorists such as Tyler and Bloom consider that for any projected programme, clarity is essential both to statements of goals and to models of target learnings. They stress always the importance of such clarity if instruction is to be efficient, outcomes measurable, and consistency maintained between general goals and specific programmes of instruction.

A search of the school library education literature shows that the clarity essential to providing an instructional programme in the library research and reporting abilities is now lacking. In fact, a first scanning of sources on the topic leaves the reader with a definite impression of lack of direction.

A main problem, in fact, has been a tendency in many older books on school library education to avoid a clearly "process-centred" approach. That is, they meld together many purposes and procedures in library instruction without identifying the research and reporting process specifically or attempting to isolate its subprocesses, skills/subskills, or levels. Any reading or social studies teacher attempting until recently to find specific guidance about library research instruction in library education sources would have had difficulty in finding sources that isolated the process itself and gave clear guidelines for teaching it.

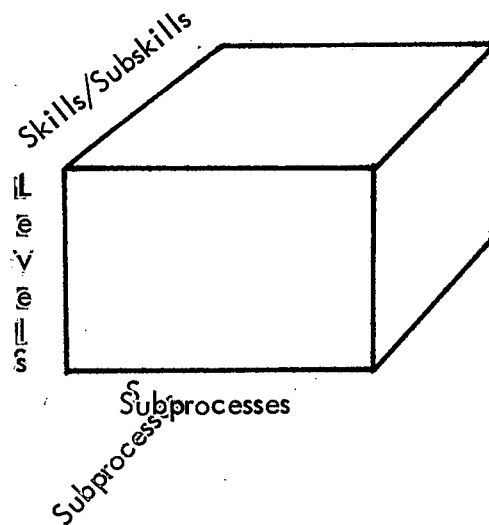
Fortunately, more recent sources seem to have moved to a more process-centred approach and they provide a better focussed attention on the specifics of

library research programmes. Even so, they seem confused unless one creates some kind of organizer within which to place the pertinent sources.

It is suggested that a useful organizer is provided by a hypothetical three-dimensional model for the target process research. In such a model Dimension One would specify the main categories of activities or subprocesses; Dimension Two would specify skills and subskills within each subprocess; and Dimension Three would specify levels within each subprocess. Essentially, then, a visual representation of the construct would have this shape:

Figure 1.1

Hypothetical Three-Dimensional Model of the Research and Reporting Process

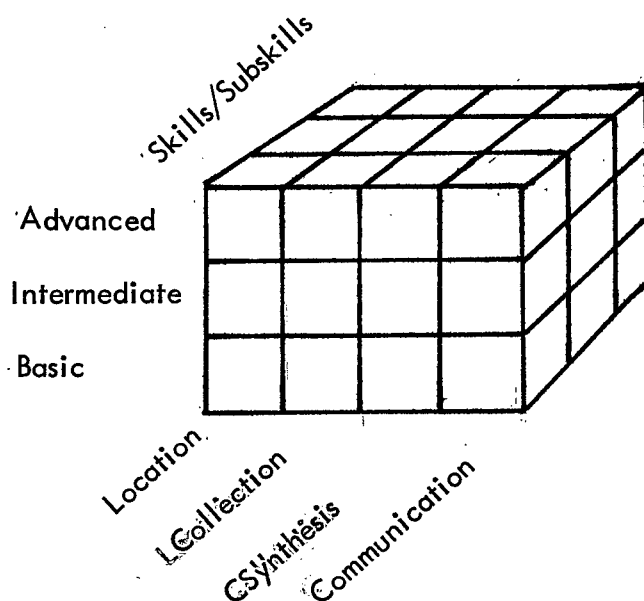


If one examines the literature from the perspective provided by this three-dimensional model one finds that the sources of the confusion noted begin to emerge. It becomes clear that Dimension One is reasonably well agreed upon and can be conceptualized as having at least three basic subprocesses: locating,

collecting, synthesizing and possibly a fourth, communicating information. Dimension Three is generally discussed in terms of a basic, intermediate and advanced level. if the two dimensions are accepted the visual conceptualization then becomes:

Figure 1.2

Hypothetical Three-Dimensional Model of the Library Research and Reporting Process



It is in Dimension Two that the problems seem to be most marked. One does find categorized under the various subprocess rubrics certain basic skills that logic and a knowledgeable researcher would suggest are appropriately placed. However, one also finds beyond these basic skills a puzzling inconsistency from source to source. Authors seem to be influenced by personal philosophy, subject specialization, or possibly the feeling that it is better to be comprehensive than to be selective in providing listings of skills under subprocesses. As a result, one finds interleaved with lists of research skills items that seem to relate as much to general book reading as to doing research;

or, alternatively, items are listed as skills that seem to relate more to attitudes or appreciations than to ability to perform a specific task. There is, in fact, no evidence in any source of attempts to validate the models of research implicit in the skills listed under each subprocess rubric.

The validation of models of the library research process is needed if curricula for library, reading, and social studies education are to have the clarity already noted as desirable. If a valid basic model, or series of models, of the research process as it pertains to library use could be developed, it would be possible for each of the other disciplines to adapt those basic models.

It is suggested that a complete model of the library research and reporting process would require a specification of Dimension Two (the skills and subskills) for each of the subprocesses of Dimension One at each of the levels in Dimension Three. The first step in developing such a complete model would be the development and validation of a model of the first subprocess called locating, at the first or basic level. level.

#### STATEMENT OF THE PROBLEM

The purpose of the study was the development and validation of a taxonomic model of basic library locational skills for print sources.

#### SIGNIFICANCE OF THE STUDY

The study is seen as having significance from the point of view of both its product and its processes.

The product, a taxonomic model of basic library locational skills, should be an important contribution to the literature on library research and reporting skills as they apply to elementary school social studies, reading and library instruction. The model will provide for the first time a validated source for curriculum development of library research skills through many subject areas.

The model is explicit about both the content and organization of the skills included and has been subjected to content validation by qualified judges. It should, therefore, provide an appropriate basis for developing both instructional materials and measures of basic library locational skills.

A third potential contribution of the model lies in its adaptability to integrating basic library locational skills with such subject areas as social studies, science and mathematics.

The description of the process involved in both developing and validating an explicit taxonomic skills model for a specific curriculum area should be a useful contribution to educational literature on model building. Its procedural framework should be suitable for replication or adaptation in producing the additional models needed to provide a complete series of models for the research and reporting process.

## DESIGN OF THE STUDY

The study was done in two major stages, the first related to the information base used and the second to the work on the model.

Stage One required (1) identification of an appropriate information base for developing the skills model, and (2) the validation by school library educators of that information base.

Stage Two involved three steps: (1) critical analysis of the school library information base to produce a tentative taxonomic model of the basic library locational skills, (2) a pilot validation by a panel of British Columbia school library educators to refine both the model and the validation procedures, and (3) validation of the refined model by various groups of school library educators across Canada.

### LIMITATIONS OF THE STUDY

It was considered that there were a number of limitations to the study. These were:

1. The model was limited to the basic library locational skills, a specific sub-set of skills within the broader area of the library research and reporting process.
2. The model was focussed on basic library locational skills for print sources and not on such audio-visual sources as film, film strips, picture collections and recordings. Inherent commonalities among those locational skills needed for finding either print or non-print sources are not explored in the study.
3. Judges for the three validations of the study were selected from Canadian school librarians only. International validation was not sought.
4. In the Canada-wide validation of the skills model not every Canadian school librarian was polled to discover whether or not they met the required characteristics of judges. Rather, selection of qualified judges was based largely on information provided by (1) provincial school library supervisors across Canada, (2) a number of school district and university librarians, and



(3) such sources as school library association directories. Other librarians may have met the criteria required for judges although they were not identified either by the sources located or individuals consulted during the validation period.

## DEFINITION OF TERMS

For purposes of the study it was necessary to define a number of terms. They were defined as follows:

Library Locational Skills. The abilities required to use various locational aids or tools of a library to gain efficient access to the holdings of that library, e.g., ability to use a card catalogue to find a particular book in the library.

Book Locational Skills. The abilities required to use various locational aids or tools to gain efficient access to the content of any book, e.g., ability to use the index of a social studies textbook to find whether or not certain topics are included in that book.

Basic. as applied to library or book locational skills in this study, this term means the first or beginning level on a skills continuum.

Library/Media Centre Programme. These terms and the concept of library or media centre are considered to be interchangeable in the study.

"A library or media center program may be defined as a group of related activities consisting of a combination of personnel, space, materials, equipment, supplies and services which operate together to support the educational program... . The concept of the library has expanded to include many new kinds of media and the title "library" is in the process of changing to media center." (California, State Department of Education, 1973, pp. 23 and 37).

Library locational skills could, therefore, be equated with media center locational skills.

Library Research and Reporting Process. As conceptualized for this study this process encompasses the abilities required to produce a report from library sources and has the three dimensions of subprocesses, skills and subskills, and levels of difficulty.

## ORGANIZATION OF THE PAPER

The first chapter contains the introduction, statement of the problem, statements about its significance, a brief description of the study, the definition of terms, and an outline of the organization of the study. Chapter 2 presents the review of the literature that provided the conceptual base for the study. Chapter 3 describes the validation of the information base of sources by a panel of school librarians. In Chapter 4 the development of a tentative skills model from the validated literature base is outlined and the pilot validation of that model described. Chapter 5 presents the validation procedures and the results obtained from the cross-Canada validation of the refined skills model. Chapter 6 contains the summary of the study, and the conclusions drawn, suggests implications for application of the findings, and makes recommendations for related research.

## Chapter 2

### REVIEW OF THE LITERATURE

The review of the literature is presented under headings that reflect the researcher's conceptualization of the problem. These headings are: (1) independent learners, a broad goal of education, (2) relevance of library research and reporting as an avenue to developing independent learners, (3) goal setting in a programme of library research and reporting, and (4) content in the library literature for a hypothetical three-dimensional model of research and reporting.

Views about the first two topics have been drawn largely from sources in school library education, reading education and social studies education, the third from curriculum literature, and the fourth from library literature.

#### INDEPENDENT LEARNERS : A BROAD GOAL OF EDUCATION

One finds in the literatures of school library, reading and social studies education many statements supporting the long-standing educational aim of developing independent learners. These statements suggest that school should take responsibility for helping produce individuals who have the desire and competency to pursue learning in school years and in later life.

The value of the goal is discussed in both the theoretical literature and in such practical applications of it as curriculum guides at both elementary and secondary level. Within such sources one finds support expressed in terms of either broad curriculum goals or in terms of the perceived contribution and responsibility of each area.

## School Library Education

Writers in the library area clearly acknowledge the importance of developing independent learners as a broad goal of education. They recognize it as both a long-established goal and one that is particularly appropriate for today's schooling.

The most recent set of standards by the Canadian School Library Association (1967) referred to "an accepted principle that the aims of a school library will reinforce the aims of general education" (p. 2). The authors added that if a general educational aim was, for example, developing an individual to his fullest potential, the library programme would "recognize each pupil's needs in the areas of reading for personal interest and information, and the development of necessary skills essential to independent use of all the materials of learning" (p. 2). In this same context Burham and Barker (1968) made implicit reference to long-standing educational goals when they wrote, "There is no novelty in the desire of today's educator to create an educational system that will cherish and foster the child's normal drive to learn" (p. 1).

Gates (1968) in discussing curriculum changes of the 1960's said that "the curriculum is viewed more broadly than ever before..." and "learning is no longer only for children and youth; it is a lifelong process and the school must prepare life-time learners". "A student", she continued, "should not learn just a set of facts, any of which may soon be outdated; he should develop an effective mode of inquiry which will serve him through life" (p. 237).

Cleary (1972) and Polette (1973) expressed similar views about the impetus provided by continual change and knowledge growth. Cleary said:

Since the extent of information increases and events occur with such startling rapidity, the student catches during his formal education only glimpses of the body of knowledge and ideas acquired by mankind. He must therefore develop the will and skills to continue his quest for information and to so utilize it that he remains knowledgeable throughout his life (p. 173).

In summarizing a chapter on philosophies that determine educational programmes, Polette expressed concern that even in the seventies with knowledge growth ever expanding "many teachers will insist that learning how to learn is only incidental to the real learning process." "It is performance", she felt, "rather than learning that is still emphasized in many schools today". She concluded that "if we do indeed live in an ever-changing society, then learning how to learn should be a primary goal of education" (p. 21).

Over the years a common viewpoint has been expressed about the potential contribution of school library instruction to developing independent learners. Fargo, in 1947, wrote that library instruction "adds greatly to the possibilities for independent study in school and out and encourages lifelong use of library resources as a means of continuing education" (p. 83.)

Elementary school library curricula from Seattle (1966), Idaho (1969) and Pittsburgh (1974), all reflected support for the goal as part of library instruction. The stated purpose of the Seattle guide was "to assist elementary teacher-librarians as they help boys and girls acquire library skills both for more effective study now and throughout life." Authors of the Idaho curriculum suggested that, among its other values, the school library is "a place where students learn the study skills and habits necessary for continuing self-education" (p. 12). Prefacing a list of general objectives in the Pittsburgh guide was a statement that "one of the major responsibilities of the librarian...

is to support the curriculum in all of its aspects while helping children become independent in the use of the library" (p. iii).

Apparently, then, agreement is evident among school library educators about the worth of fostering independent learners through school-based instruction and the pertinence of the library programme to helping reach that goal.

### Reading Education

The development of independent learners is endorsed as a highly desirable instructional goal by reading educators and regarded as a major contribution of reading programmes at all levels. The personal rewards of such learning are commonly cited, including its value in helping students deal with the diversity and massiveness of knowledge.

In a 1970 text Dechant wrote that "one of the prime tasks of the elementary school is that of teaching the pupil how to learn" (p. 447). Heilman (1972) said that "the purpose of the school is to develop and expand concepts along with the tools that will permit the child to assume responsibility for his own growth" (p. vii).

In discussing teacher responsibilities for fostering the self-directed learning, Lindberg (1963) explored the self-perpetuating potential of the goal. She remarked:

As a child searches and makes discoveries he becomes aware of his developing power. It is exciting and wonderful to him. With this awareness comes the desire to push himself still further, a self-propelling excitement which keeps him perpetually studying...(p. 46).

The growth of knowledge, the fact that "there is simply too much to know for it all to be taught" impelled Shores and Snoddy (1971) to suggest as one alternative, "ample emphasis...to the development of those skills that will enable the student to

continues to learn independently" (p. 648). Shores, in fact, has been so concerned with the value of independent learning that he conducted a series of studies directed at the skills he considered critical in its development (Rodgers, 1966; Snoddy, 1967; Stinson, 1970; and Nold, 1971), and produced three research reports about teaching and testing of these skills (Shores, 1967a, 1967b, and 1970).

Many writers have focussed on the independent learner as a specific goal of reading instruction. Among these are Gates (1956), Miel (1961), and Catterson (1965).

In outlining guidance on reading in the content areas, Gates said that "the purpose of the program should be to teach youngsters superior techniques of learning so that they could learn at the time and continue to learn..." (p. 95). He added that "no amount of instruction by the teacher or practice by the pupil is adequate unless it increases the pupil's insight and his interest and skill in trying to learn by himself" (p. 98).

Miel and Catterson both referred to the desired goal in the context of study skills guidance. Miel felt it might behelpful "to think of ourselves engaged in teaching study skills in reading for the purpose of developing students", that is, "individuals who have acquired both the disposition and skills for obtaining knowledge on their own" (p. 8). In summarizing a collection of articles on study skills Catterson concluded:

The authors of these papers have made it obvious that they think of study skills not as something to teach but as a way to teach - a way which advances not only the student's knowledge of subject matter but his ability to learn other subject matter independently and at will" (p. 158).

Such statements make it evident that reading educators accept the goal as a vital part of every child's education and agree that their area of interest should help lay the requisite foundations. The reading view, is reflected, in essence, by a statement in a 1975 Kentucky curriculum guide that said, "Learning to learn is the essential goal

for pupils and reading is a complex tool that both hastens and broadens independent learning" (p. 2).

### Social Studies Education

Statements made by many social studies educators convey strong conviction about the need and value of developing independent learners. Discussions about the goal commonly include reference to the implications of the future for current programme planning.

Thomas and Brubaker (1971) and Joyce (1972) indicate concern about the uncertain nature of the future and its significance for today's curriculum. In their text,

Decisions in Teaching Elementary Social Studies, Thomas and Brubaker stated:

...we believe that children and youth who are skilled inquirers and investigators are in a much sounder position to deal with the puzzles of the future than those who possess only concepts or, even more limiting, know only a series of facts whose applicability to problems of the future may be highly questionable (p. 50).

In a similar vein Joyce said that the "most important education is self-education for the future", that students should become "lifelong learners" (p. 342). He added that although we are not sure what knowledge students will need in the future they can be taught "how to find information and build ideas" (p. 342).

Concern about how best to prepare students for the future is strong in discussions of the perceived contribution of social studies education to producing independent learners. Students, it is felt, are best prepared through training in inquiry skills or in "learning how to learn". With such skills, it is believed, they will be better equipped to adjust to future uncertainties, constant change, and continual knowledge growth.



Price (1969) has suggested, in fact, that the methodology of social studies should focus more on the inquiry process than the coverage of information. Support for increased attention to process, he explained, is based on various factors. He listed:

The rapid obsolescence of factual knowledge; the arbitrary and often capricious divisions of knowledge; and recognition, that because schooling cannot anticipate the problems and issues which face students 25 years from now as adults, we must provide the inquiry skills which will aid students to become self-directive (p. 46).

Sources in which similar views are expressed included a 1970 Pittsburgh social studies guide and texts by Michaelis (1972) and Preston and Herman (1974). In each volume reference was made to acceleration of knowledge or continual flux in knowledge and their impact on goal selection. Michaelis, for example, in outlining the contributions of social studies to the goals of education said that "the accelerating explosion of knowledge characteristic of our time has given a new importance to view lifelong learning as both a personal and a social responsibility." Social studies, he added, "with other areas of curriculum, contribute directly to making the ideal of life-long learning a reality..." (p. 7).

It seems to be clear, then, that development of the independent learner is regarded as an important goal for education in general and as a specific contribution of social studies education. The belief is held, as Jarolimek stated, that "the best education is one that will encourage the child to continue learning" (1971, p. 45).

Summary: Examination of statements within the three literatures leads one to conclude that school library, reading and social studies educators regard the development of independent learners as a major responsibility of the school system and a goal to which each area can make a vital contribution.

## RELEVANCE OF LIBRARY RESEARCH AND REPORTING AS AN AVENUE TO DEVELOPING INDEPENDENT LEARNERS

As one approach to producing self-directed learners, school library, social studies and reading educators suggest that instruction should be given in library research and reporting activities. Discussion is usually focussed on the perceived importance of the research task, in itself, and on instruction in that task as a specific responsibility of each area.

### School Library Education

The relevance of instruction in research skills to helping produce independent learners is strongly emphasized in school library literature. Library research skills are regarded as important learnings in themselves and the library is viewed as a logical setting for acquiring the requisite skills.

The potential benefits of library research training are noted in a 1969 Oklahoma library guide. It stated that students who become competent in research skills will discover that "they can satisfy curiosity, do independent reading and enjoy books...without continued guidance of teachers and librarians. Acquisition of such learning in early years, it was suggested, helps youngsters "feel secure in their approach to school and public libraries and later in college and university libraries" (p. 1).

In recent years references are commonly made to the impetus provided by rapidly accumulating knowledge to the need for promoting research skills. On this point McGuire (1967) speculated that acquiring "even a small part of such burgeoning knowledge in a lifetime becomes well-nigh impossible." She identified, therefore, as a key objective the need "to imbue children with intellectual curiosity, a real enthusiasm for learning

and to provide them with the ability to seek and acquire knowledge independently" (p. 68). "The outmoded term for such knowledge-seeking", she explained, "was 'doing reference work', but that more currently we are prone to label it research even in the early stages of education." (p. 68).

A Chicago library skills chart (1965) and curriculum guide (1968) described the impact of knowledge growth as follows:

In a world characterized by rapid technological progress, by an ever-expanding body of knowledge, and by its continuous change, there is need for instruction in the use of the library and its resources in order to assist each elementary pupil to develop essential study and research skills; to prepare each pupil for self-direction in learning as he moves into high school and knowledge; and to emphasize the pupil's need for a lifetime of intellectual growth toward responsible citizenship and self-fulfillment (1965, Chart).

Policy handbooks of the American and Canadian School Library Associations provide representative statements about the essential role and responsibility of the library in reaching the goal. The 1960 and 1969 editions of A.L.A. Standards for School Library Programs stated that:

The library is a laboratory for research and study where students learn to work alone and in groups under the guidance of librarians and teachers. Thus it contributes to the growth and development of youth in independent thinking, in abilities to study effectively and in desirable attitudes towards other media of communication, and toward all learning and research (1960, p. 15).

General guidelines provided in the C.S.L.A. Standards for School Library Service in Canadian Schools (1967) included the developing of "pupils' skill and resourcefulness in the use of libraries" and encouraging "the habit of personal investigation" (p. 2). They also stated within the same section that "throughout life, whether in the university, the public library, the business library, or the technical school, men and women

need to locate, master and use information. It is one function of the school to teach these skills" (p. 6).

Many more references could be cited from the library literature to support the view that library educators believe in the significance of library research instruction for encouraging inquiry attitudes. The point is clear, however, with only a few. Librarians in general regard development of independent learners as a highly significant goal of education.

### Reading Education

Within the literature of reading education, one usually finds library research instruction and its implications for developing independent learners presented as part of guidance on the application or "uses" of reading. The frame of reference is made clear in Russell's statement (1961) that "children learn to read so that they can translate purpose into action. Reading is a tool whereby all sorts of printed materials are made available in solving problems in curriculum fields and in out-of-school activities." (p. 358). Within this functional type of guidance, reading educators point out the value to students of learning skills involved in the research process and they recognize the intrinsic role of library services and resources.

Four doctoral studies directed by Shores between 1965 and 1971 focussed on instructional programmes of research study skills (Rodgers, 1966; Snoddy, 1967; Stinson, 1970; and Nold, 1971). The importance of the target skills discussed in each of these studies is clearly reflected in Snoddy's dissertation, Teaching Research Study

### Skills in Grade Six.

Snoddy stressed the need for acquisition of research skills whether programme emphasis was on "factual learnings involving substantive knowledge" or "methods of investigation of the scholars in the discipline." He continued:

Regardless of which of these two kinds of learnings receives the greater emphasis in future curricular programs, the foundational skills necessary for the pupil to independently make use of existing as well as emerging knowledge will remain important. If the knowledge of factual information is emphasized, then the ability to gather such information will be a valuable skill for the pupil. If, on the other hand, the method of investigation of workers in a discipline is seen as an important elementary school learning, the ability to investigate printed sources efficiently is basic to the methods of investigation in many of the disciplines. Those skills that are basic to the gathering, integrating and applying of information from the expanding amount of knowledge that is available in printed sources should be identified and programs should be developed for teaching these skills (p. 2).

Guidance on library research skills has been provided in such elementary school reading texts as those by De Boer and Dallman (1970) and Spache (1973). De Boer and Dallman devoted two chapters to locating and using information including the ability to locate material in the library for various purposes. As part of their rationale for inclusion of the chapters they said, "In our day of abundant newspapers, magazines, encyclopedias, dictionaries, almanacs and other kinds of printed matter, skill in finding information is becoming ever more important. The increasing complexity of modern life, too, has brought this new need into focus" (p. 259).

Spache outlined some essential library skills for primary and intermediate grade levels and discussed the role of classroom teachers and certain commercial materials available for teaching library research and reporting. Among library skills listed for intermediate grade children is their participation in doing "simple projects in finding resource materials related to a given topic" and projects that involve making bibliographies, producing outlines for a research report, summarizing information on a specified

topic, and preparation of short reports using quotations from various sources (p. 416).

He urged teachers, whether working alone or in conjunction with librarians, to promote "independent exploration of a variety of sources of information" (p. 418).

Writers such as Kinder (1967) and Dechant (1970) noted the potential academic rewards of student acquisition of the research process. Kinder felt that student awareness of the importance of "reference-study skills" must be developed. "The long view", he said, "must be clear to the student that learning to handle the tools of reference can aid him immeasurably in a multitude of situations in school, college and throughout his lifetime. "Here are the building blocks of scholarship and academic success" (p. 82).

Ability to locate information in libraries and books and use that information was stressed by Dechant. "The good pupil", he wrote, "is one who has 'learned to find the facts' " (p. 426). He explained that particularly at the intermediate level "the pupil must be able to locate materials in preparation for his assignments. There is a high degree of relationship between a pupil's ability to locate and use reference material and the grades that he gets in school."

In discussing the specific objectives of reading instruction the topic of library research and independent learning is generally categorized under the rubric "study skills". The reason for this categorization becomes clear in Wagner's definition of study skills as "those which help a student to learn effectively on an independent basis" (1965, p. 377). In a more recent publication Judson specifically mentioned that "library research is closely related to study" (1972, p. 275).

The relationship between study skills, research and the independent learner is clearly shown in a recent statement by Karlin. He said:

It should be apparent that one of the major principles involved (in study skills instruction) is helping children learn through their own efforts. The teacher is intimately involved in the learning process but the role the teacher plays is that of a catalyst who suggests and prods rather than tells and does. It is the children who think and react so that they might develop insights into the processes that govern their performance... . More dependence on searching and less on receiving is characteristic of this learning climate (1975, p. 287).

In sources where the topic is discussed apart from study skills much the same viewpoint is expressed about the role of reading instruction. As one example, Thomas and Robinson (1972) covered the pertinent skills in a chapter on "Reading Skills for Problem Solving and Topic Development". They urged the teacher to take responsibility for providing such instruction to help prepare students "for tasks demanded in almost every subject and on every level and to develop "skills essential for solving life problems after their courses are over." They asked whether the school could risk leaving "these vital skills of reading - these basic tools of learning...to the student's fumbling efforts to develop them for himself?" (p. 170).

The stance of reading educators toward instruction in library research and reporting is obviously a positive one. Acquisition of these skills, it is felt, will help students become increasingly self-directed in their academic work and inclined to pursue learning in later years.

### Social Studies Education

Writers in the social studies, like those in library and reading education, consider that instruction in the research process has direct bearing on helping develop perpetual students. Library research techniques are regarded as fundamental tools for all kinds of learning and as one approach to problem-solving in the social studies.

The value of research in general has been indicated by Morse and McCune (1971) and Hanna, Potter and Reynolds (1973). Under the heading "The Skill of Acquiring Information", Morse and McCune discussed library information search procedures and noted that "by teaching a child adequate research skills we provide him with the skill to pursue a lifelong search for information regardless of his future station or position in life" (p. 17). Through participation in research tasks, Hanna, Potter and Reynolds felt, youngsters "satisfy their insatiable desire for facts : to know how and why and who and what." Research activities, they explained, provide "innumerable opportunities "for children to become acquainted with libraries and to practice work-study skills "needed for accurate and thorough reference work..." (p. 186). In a subsequent chapter the authors again emphasized the importance of instruction in research skills beginning in early grades. They said:

The ability to find information when it is needed and wanted is more important than memorizing unrelated facts that soon fade into insignificance because they do not meet the needs of the person compelled to memorize them. Research skills can and should be developed by children early in the elementary grades. Such skills will be useful to them throughout life (p. 233).

A 1962 Illinois guide noted the potential contribution of social studies programmes to helping develop research competence. Social studies, it stated, affords "admirable opportunities for pupils to develop reference skills" and that "pupils so educated have a feeling of responsibility to use resource material as well as the facility in gathering the needed information from the sources consulted" (p. 144).

Instruction in research and other inquiry processes is regarded as necessary if students are to cope with the ever-expanding content of social studies. In the Illinois Guide it was noted that:



As our social world becomes more complex, and knowledge included in the social science multiplies, it becomes apparent that no person can learn in school all of the material he needs for out-of-school living, either as a twelve-year-old or a thirty-year-old. Indeed the person must know how to obtain the information he requires...(1962, p. 144).

Crowder (1973) took a similar stance, alluding to the "tremendous growth of knowledge" and the impossibility of students absorbing even a small part of existing print information." Students, he said, could "only be taught where and how to locate information when it is needed" (p. 329).

It seems to be clear that social studies educators place a high priority on the acquisition of library research and reporting skills and emphasize the importance of learning those skills in a meaningful context. As viewed by Estvan (1968) in a discussion of inquiry skills, youngsters "are not merely to be taught about the work of the scholar. They should think - or more broadly speaking, act like social scientists." Through this means, he continued, "the skills needed for continued independent learning may be acquired" (p. 333).

Summary: Educators in the three areas, then, clearly advocate instruction in library research and reporting as a worthwhile approach to developing students and future citizens who are self-initiating and skilful inquirers. Each area has suggested that within its respective programmes, ample opportunities should be provided for an integrated approach to library research and curriculum-based problems.

## GOAL SETTING IN A PROGRAMME OF LIBRARY RESEARCH AND REPORTING

The discussion of goal setting for a programme of library research and reporting is set in the context of clarity of objectives.

### Clarity of Objectives a Necessity

Acceptance of a broad goal and a general approach to helping students reach that goal provides essential direction and a definite focus for educational planning. It does not, however, guarantee that provision of specific instructional programmes will be an easy task. A vital characteristic of any programme, it is suggested by such curriculum theorists as Tyler and Bloom, is clarity of objectives. They indicate that unless programme objectives are clearly specified potential users will be impeded in their attempts to move efficiently towards the desired goal and to evaluate its successful attainment.

Bloom, Hastings and Madaus (1971) commented on the need for clarity in translating broad goals into more specific educational objectives. They said:

Goals must of course be translated into school programs and activities. In turn, the explicit behaviors that a program will help the student develop are its immediate objectives and should be related to the statement of long-range purpose that initiated it. It is these immediate aims that must be made precise enough to guide instruction and evaluation (p. 21).

Vaguely stated objectives have been noted by Tyler (1964) as a problem for curriculum makers. He wrote:

...when objectives are identified and defined only casually, if at all, the students are likely to get the wrong image of what the teacher is trying to teach and what the student is expected to be able to do. He is misguided rather than helpfully steered in his learning efforts (p. 77).

Bloom, Hastings and Madaus (1971) dealt with teacher responsibility for making clear statements of objectives and the potential benefits of such clarity. They explained:

The short-range objectives must be stated in an unambiguous way so that they are clear not only to the teacher himself but also to his colleagues with whom he may wish to share his observations. . . . If a teacher is successful in clarifying his objectives in his own mind and expressing them clearly to his colleagues, then it becomes possible to plan instruction and evaluation procedures more intelligently (p. 23).

Clarity, then, is regarded as an important criterion for any curriculum model.

Curriculum theorists urge that consistency between statements of general and more specific goals be evident and, as well, that statements of student learning outcomes be precise and consistent within themselves.

#### Clarity Lacking in Existing Literature on the Library Research and Reporting Process

While agreement was indeed expressed in the three literatures about the worth of the broad goal and appropriateness of instruction in the research process, the criterion of clarity seems not to be met by existing guidelines. A careful search for guidance within sources leads one to conclude that available treatments are neither sufficiently internally consistent nor explicit enough to facilitate effective programme planning. An attempt to identify the specific obstacles to clarity seems to require a kind of organizer on which to base one's reactions.

#### Providing Clarity with a Hypothetical Three-Dimensional Model of the Target Process

A logical organizer, it is suggested, can be supplied by a hypothetical three-dimensional model of the focal process. In such a process-centered model Dimension One

would identify the major categories of tasks or "subprocesses". Dimension Two would specify the "skills" and "subskills" for each process, and Dimension Three would designate the "levels" of difficulty. Illustrated graphically, the model would appear as shown in Figure 2.1.

The specific content of all dimensions would depend to a large extent on the conceptualization of the projected product.

### CONTENT FOR A THREE-DIMENSIONAL MODEL OF LIBRARY RESEARCH AND REPORTING

Support can be found for the notion of a three-dimensional model of library research and reporting in the recent library literature with Dimensions One and Three reasonably clearly set out and Dimension Two identified as a major source of confusion.

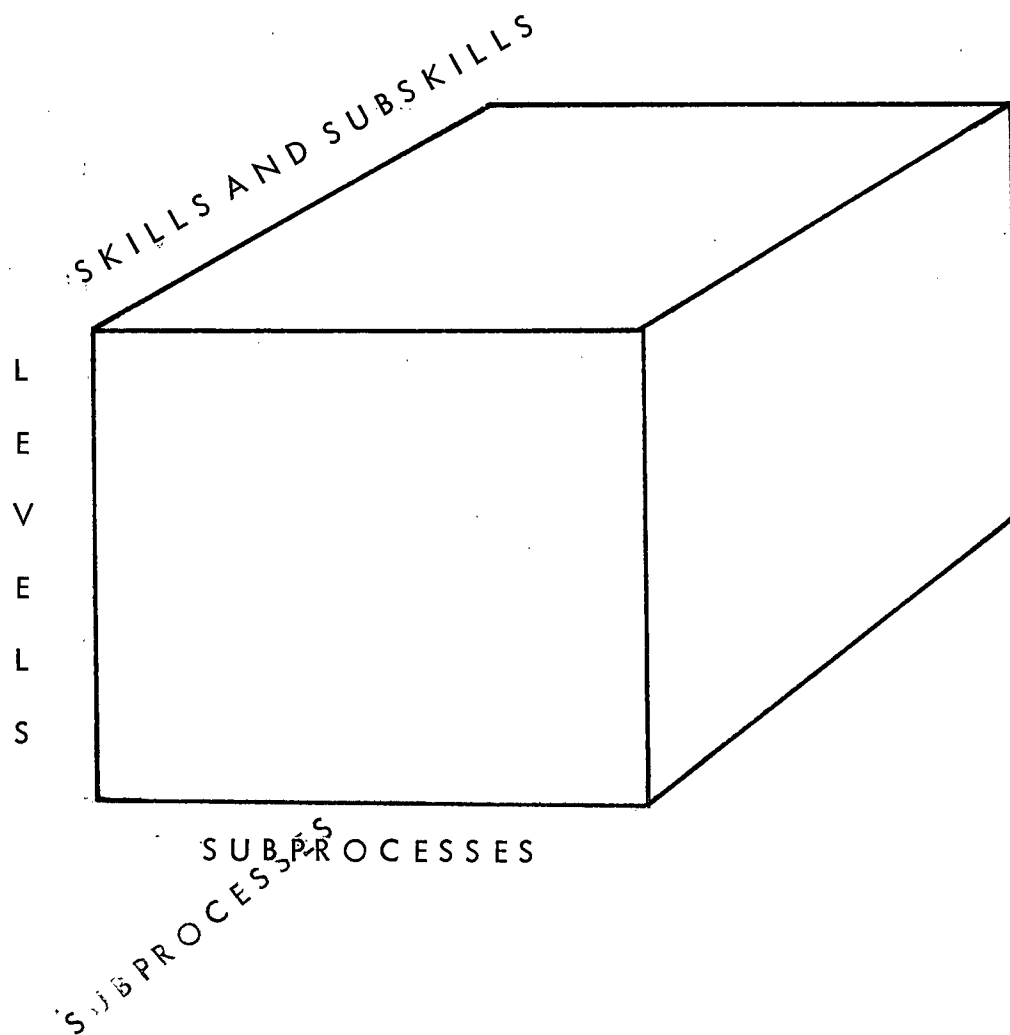
#### Dimension One : Subprocesses

School librarians seem to identify as many as six or as few as two subprocesses in their treatment of the topic.

Cleary (1968, 1972) noted six skills in her framework for teaching the investigative and research skills, those of locating and gathering information, organizing, evaluating and interpreting information and reaching conclusions (1968, p. 209). An examination of the detailed skills chart included shows that the 'reaching conclusions' category also encompasses use of the information including the reporting task.

Figure 2.1

Hypothetical Three-Dimensional Model of Research  
and Reporting : A Process-Centred Model



In her text, *Developing Independent Methods of Inquiry* (1973), Polette referred to the research skills variously as "methods of inquiry" (p. 64), "research process" (p. 65), "work/study skills", "skills for independent inquiry", and the "research and reference skills" (p. 103). Her scope and sequence chart included the location skills, skills of acquisition, skills of organization and recording, and skills of oral presentation (p. 103).

Obviously Cleary has designated certain critical thinking skills as specific rather than implicit tasks, but aside from that difference, the Polette and Cleary conceptualization of subprocesses is quite similar.

An elementary school library skills chart produced by Montgomery County Public Schools (1973) was divided into six categories, three of which were designated as "research skills". These were:

selection of sources (discrimination in selection  
of materials)

utilization of sources (ability to use materials  
once selected)

comprehension and study skills (main ideas, sequence  
outlining, notetaking, etc.)

The Montgomery chart also included a "production" category outside the cluster of "research skills" in which reporting is included as one activity.

A handbook called The Encyclopedia, ... (n.d.) also provided a chapter on developing research skills in which three steps were also identified. The "first important step was to learn how to find information" while "step number two was to learn how to use information" (p. 38). A third step - reporting - was clearly indicated on the page

following by the phrase "and then she wrote her report" (p. 39).

Another source reflecting three sets of subprocesses is the Gatner and Cordasco guide on research and report writing. Following a general introduction on the research task the authors presented chapters on the uses of the library for finding materials, the collection and organization of materials, and the techniques of composition (p. vii, 1961).

Rossoff (1964), in a text designed to provide guidance on the "mechanics of individual library research" for high school students, divided the task essentially into "finding information" and "preparing the report". Within the "finding" category were included six chapters describing different types of information-seeking.

Beck and Pace (1966) and a Los Angeles secondary handbook on research skills and library resources (1966) both employed only the two categories of "locating" and "using" in connection with research. Beck and Pace, for example, mentioned that preparation of reports in the library involves abilities in locating information through the card catalogue or the Dewey Decimal Classification and in using various reference books (Book 3, p. 25).

School library educators, then, seem to think that the research and reporting activity requires at least two subprocesses, that is, "locating" and "obtaining" of information from the library. If the reporting activity is separated out as a "compiling" or "composing" task using the information located and obtained, the minimum number of processes would rise to three.

Of the various "subprocesses" mentioned it was observed that "locating" is most commonly placed first. Glogau, Krause and Wexler (1972) make specific reference to its placement as "goal one of the media center program" and regarded the second goal, "utilization", as being "somewhat more complicated" (p. 37).

Summary: Components of Dimension One. One is led to conclude that writers in school library education acknowledge at least three major categories of activities within the research and reporting process, with the locating skills always placed first. The behaviours designated are clearly intended to serve the same purposes as subprocesses of the hypothetical model. That is, they are intended to serve as logical rubrics for clustering closely related sets of skills and subskills.

### Dimension Three : Levels of Difficulty

One finds that school librarians writing about the topic over the past decade mention at least two levels of library research instruction, and imply the need for additional levels.

The stance of the Chicago Board of Education about levels has clear implications for instruction in library research. In one of their numerous library publications, a wall chart entitled "Overview of Developmental Concepts for Instruction in the Use of the Library and its Resources" included the following statement:

Listed on the chart are library concepts which have been carefully analyzed and organized within broad categories, at two-year levels, into a developmental sequence designed to introduce basic learnings, to systematically broaden and deepen comprehension of these learnings, ... Each school will adjust its teaching in accord with the needs of its pupils. Therefore, the grade placement of the various concepts may need to be adapted to coincide with existing levels of achievement (1965).

Specific reference is made within the chart to helping elementary students attain necessary study and research skills partly to prepare students for self-initiated learning as they proceed to high school and college.



Apparently, authors of the Chicago library materials recognize at least a basic level and more advanced levels of library instruction for the elementary school level.

Glogau, Krause and Wexler (1972) and Polette (1973) referred to levels of library research within the elementary school programme. Glogau, Krause and Wexler divided the research task for elementary grades into primary and elementary levels. For children in second and third year primary grades, they suggested, instruction can be given in "simple research skills" while for those in intermediate grades, the previously taught research skills are to be "refined, intensified and taught in greater depth" (p. 55).

A beginning level of elementary school research and indication of higher levels are noted by Polette. She said that "simple research and reference skills can be acquired by primary students and should be introduced...in the kindergarten program and developed throughout the elementary school years" (p. 93).

One can assume, then, that these educators conceptualize at least a basic and one higher level of elementary school library training.

Other sources have incorporated both the elementary and high school instruction in their conceptualization of elementary levels. In a Los Angeles High School guide entitled Research Skills and Library Resources, Part Three (1966), the authors explained that "Part Three was an advanced book in the development of library skills and research techniques designed for individual and group study after the basic skills, presented in Part Two, have been mastered" (p. iv). That is, they suggested at least two levels, basic and more advanced training.

An Idaho school library guide (1969), Saddler (1970), and Cleary (1972) all identified a series of levels ranging from elementary through high school. Beyond the primary grades the Idaho guide noted the existence of "two other more or less natural divisions in the program of library instruction: the transition from elementary school to junior high school, and the transition from there to senior high school" (p. 28).

Saddler felt that "the job of teaching the techniques of information gathering cannot be done in an hour lecture...". Instead, she continued, time must be allowed for it "at all levels of education, elementary school through higher education with an ever increasing degree of library sophistication" (p. 86).

The locational skills as part of the research task were listed by Cleary (1972) under primary, intermediate and high school levels. She explained that "in the elementary level only the groundwork can be laid for developing these skills" and "these foundations need to be solid if mastery of the more complex locational skills is to be realized."

Such statements suggest these librarians view library instruction as consisting of at least a basic and two higher levels of difficulty. One may conclude that at least a basic and advanced level is recommended and possibly a basic, intermediate and advanced level of difficulty.

### Dimension Two : Skills and Subskills

It is in the writing about skills and subskills within subprocesses that the obstacles to clarity emerge even in the best recent literature on the topic (Polette, 1973; and Cleary, 1968, 1972). As has already been noted (Dimension One), these authors have provided potentially very useful analyses of library research skills for elementary school, organized around the concept of a process-centred approach. That is, they identify

subprocesses of the library research task. There are, however, problems in each author's statement about skills and subskills of each subprocess, problems that make the listings less useful than they appear at first glance when one seeks to use them to fill in the matrixes of Dimension Two.

Essentially, the quality of clarity is lacking, the treatment given skills and subskills is not consistent enough, not specific enough and not selective enough to be used as a basis for planning programmes.

Polette on Dimension Two. Polette focussed on the subprocesses research in a chapter entitled "Developing Skills for Independent Study", in which she presented separate scope and sequence charts of skills for the primary grade levels, K-3 (pp. 94-96) and the intermediate grade levels, 4-6 (pp. 103-105). She gave some attention to subprocesses in the primary list by the inclusion of the categories "Locating Fiction" and "Locating Nonfiction", and in the intermediate list, she organized skills entirely around the subprocesses of location, acquisition, organization and recording, and oral presentation.

Polette's scope and sequence chart for grades four to six is shown in Figure 2.2. If one examines critically the skills listed under each subprocess one finds that there is inconsistency in what is included within each list. In the first place, the "skills" are not all skills but items labelled as "understandings" or, alternately, "understandings and abilities to...". If a desired outcome of locational skills is developing the student's ability to find information efficiently and independently, all behaviours listed should reflect that objective. The curriculum developer, faced with the task of translating the skills into specific objectives, would have to separate the knowledge objectives from the actual locating behaviours before any kind of programme could be planned.

Figure 2.2

Scope and Sequence Chart for Grades 4-6  
by Polette (1973)

Locational Skills

Understanding and use of alphabetical order by first, second, third and fourth letter

Understanding and use of the call number for fiction

Ability to locate nonbook materials by call number

Understanding of the Dewey Number as a symbol of location and subject identification

Ability to locate library materials by the Dewey Number

Understanding of and ability to use an index

Understanding of the information contained on a catalog card

Ability to differentiate between title, author and subject cards

Understanding and use of the card catalog as an index to all materials contained in the media center

Understanding of the nature, purpose and use of basic reference tools, including:

- General Encyclopedia
- Science Encyclopedia
- History Encyclopedia
- Standard Dictionary
- Geographical Dictionary
- Biographical Dictionary
- Thesaurus
- Atlas
- Almanac
- Readers' Guide

Skills of Acquisition

Understanding of the purpose for reading or the purpose of the research activity

Ability to grasp main ideas

Ability to locate details related to the main idea

Skimming skills

Understanding of major topics and sub-topics in an article

Ability to follow sequence of ideas or events

Ability to determine cause and effect

Ability to differentiate fact from opinion

Ability to differentiate the significant from the less significant

Ability to differentiate the real from the fanciful

Ability to develop and/or follow directions

Ability to summarize research material

Skills of Organization and Recording

Understanding of a bibliography and the ability to prepare a bibliography

Ability to take notes relevant to information required

Spelling skills

Ability to place facts in sequence

Ability to outline

Use of interesting words

Knowledge of grammar and sentence construction

Ability to write a well-organized report

Ability to evaluate the finished product

Skills of oral presentation

Organized and sequential

Clear speech

Able to present main points and details in order

Able to answer questions on the subject

Able to defend a stated position with relevant information

Another problem related to consistency is evident when one examines the treatment of obviously related skills. The author makes three separate statements under "locational skills" about card catalogue, yet lumps together the nature, purpose and use of ten reference tools. One would be led to assume that one category of skill had more "facets" than the other or that one was more significant than the other. Actually, any reasonably knowledgeable user of libraries would agree that a multitude of locating and using behaviours are inherent in each of the categories of "library reference tools" and "reference works", and that attempting to cover them in a single simple statement is misleading. The test maker or curriculum developer using this list of skills as a source would attempt to develop many more items on the card catalogue than on ten basic reference tools. It seems unlikely that the author would consider that appropriate. She seems to have sacrificed consistency to brevity.

The issues raised about consistency are considered to have direct bearing on the criterion of specificity. Again, under the rubric "locational skills", skills listed for grades four to six include "understanding of and ability to use an index", "ability to locate nonbook materials", and "ability to locate library materials by the Dewey number". What kind of index? Which nonbook materials? Which Dewey numbers? Developmental psychology suggests that grade six children would be unlikely to acquire all possible learnings within the areas indicated, but no restrictions are indicated by the author. The list is deceptively simple and will not stand up to the need for specificity.

A third problem with Polette's lists is their lack of selectivity. Under the sub-process "organization and recording" she lists "spelling skills" and "use of interesting

words". These are surely general skills of composition rather than skills related specifically to the process of library research. To place them in a list that purports to be focussed on one subprocess of an overall process is potentially very misleading. The writer of objectives is left with the task of selecting out his own set of skills and the purpose of the author's listing is lost.

In sum, the Polette listings of skills make a useful beginning if one wishes to specify Dimension Two of a library research and reporting model but do not adequately meet a criterion of clarity when one examines details.

Cleary on Dimension Two. As has already been noted (Dimension One above) Cleary produced a list of subprocesses in her book Blueprints for Better Learning (1968) and reproduced it as part of her 1972 publication Blueprints for Better Reading. The list was entitled "A Framework for Teaching the Investigative and Research Skills" and provided a graphic presentation of her chapter on the same topic (Chapter 7, "The Investigative and Research Skills", pp. 87-118).

Cleary explained that her first eight charts outlined the skills needed for locating and gathering information and the last three charts outlined the skills needed for organizing, evaluating and interpreting information and reaching conclusions. This description conveys the rather comprehensive coverage of the topic. Twenty-six pages, in fact, were devoted to eleven skills charts.

Like Polette's model Cleary's framework reflects a process-centred approach and includes many of the requisite behaviours for the research and reporting task. It offers, then, a promising base for planning a programme on the target skills and indeed offers some advantages over Polette's model since it is considerably more comprehensive than Polette's and offers, in addition, some refinements that Polette's does not.

As the three criteria for clarity (consistency, specificity, selectivity) are applied to the Cleary model, however, one finds problems similar to those noted in Polette's conceptualization although the significance of each is weighted somewhat differently.

The decisions Cleary made about her skills categories had ramifications for consistency within the various charts. Charts 3 and 4 have been reproduced as a basis for discussion of perceived inconsistencies. As shown over, the chart content is arranged by Cleary under the headings "Desirable Learnings for Pupils" and "Action Recommendations for Teachers". Of concern here are the "Desirable Learnings...", that is, the specification of what is to be learned by students. Chart 3 shows that Cleary, like Polette, has not maintained consistency between the objective, "locating", and the type of behaviour specified. The first item on Chart 3 involves a knowledge base (understanding of the opportunities for acquiring knowledge...) while the third item on Chart 4 involves reading and use of magazines. Each item, then, on these charts must be examined and the actual locating behaviours selected before instruction on locational skills can be planned. The lack of consistency, therefore, imposes on potential users an extra decision-making step as they attempt to shift from the objectives stage to the practical planning stage.

A second example of lack of consistency is found in the treatment of clearly related skills. As shown in Chart 3 certain locational tools are highlighted (card catalogue, Dewey Decimal Classification) while others are subordinated to the knowledge base (arrangement of the library, arrangement of the library collection). The same dysjuncture is found on Chart 4 in terms of ephemeral materials. That is, magazines and newspapers are singled out as subcategories while such materials as pamphlets and

Figure 2.3

A Framework for Teaching the Investigative and Research Skills  
by Cleary (1968) : Charts 3 and 4

Chart 3

Locating Books and Other Learning Materials  
in the Library

Desirable Learnings for Pupils	Action Recommendations for Teachers
1. Understanding of the opportunities for acquiring knowledge through the skillful use of books and libraries.	1 a. Explain the various opportunities that libraries offer for exploring, for finding out, for pursuing individual interests, for obtaining materials for a variety of purposes both in and out of school.  b. Take classes to the school library for practice in locating learning materials. Call attention to special displays, exhibits and lists, the location of files, filmstrips, records, and the shelf headings that designate the location of books.  c. Take the class to the library and arrange for the librarian to give instruction in the general arrangement of books in the library: the subject arrangement of non-fiction works, the arrangement of fiction alphabetically by author, the arrangement of biography, reference books and other special collections. Acquaint older pupils with some of the modifications used in public libraries, such as the Reader Interest Arrangement.
2. Acquaintance with and facility in using the Dewey Classification System for locating books on library shelves.	2 a. Give instruction about the Dewey Classification system, with emphasis on its origin and history; the ten general subject or class divisions; the smaller divisions and sub-divisions; the arrangement of numbers for these groupings; the call number of books; the arrangement of books by call number on the shelves.  b. Provide practice in locating and shelving books by classification number.
3. Skill in using the card catalog to locate books and other learning materials in the library.	3 a. Teach the arrangement and use of the card catalog as a tool for locating materials in the library. Instruction will emphasize the alphabetical arrangement of the cards in the catalog;

the author, title and subject cards in the catalog; the placement of the classification number of the book on each card, thereby making it possible to locate the book on the shelf; the advantages of listing books under the subject as well as by author and title; the use of "see" and "see also" references.

- b. Explain and show how non-book materials--films, filmstrips, records, realia--are cataloged in most libraries, emphasizing the use of colored cards, and the entries by title and subject.
- c. Provide practice for pupils in locating books and other learning materials on shelves and in files by using the card catalog.

4. Skill in the use of indexes and lists for locating poetry, plays, biography, short stories, essays, songs, fiction and other materials in collections.

- 4 a. Discuss the importance of indexes in locating informal materials: the index in a non-fiction book; the card catalog; the periodical indexes and the indexes to poetry, plays, short stories, essays, biographies, vocations and informational materials in periodicals and newspapers.

- b. Discuss arrangement and use of indexes and bibliographies: Readers' Guide to Periodical Literature, Granger's Index to Poetry, Van Nostrand's Subject Index to High School Fiction, Cook and Monroe's Short Story Index, Haebich's Vocations in Biography and Fiction, Monroe and Cook's Costume Index, the Rue Indexes, the Biography Index, and others as need for their use arises.

5. Facility in locating films, film strips, records, flat pictures and other audio-visual materials--those available in the school and those available through other agencies.

- 5 a. Demonstrate the use of authoritative guides and indexes to audio-visual materials, emphasizing frequency of publication, scope, arrangement, and cumulation.
- b. Give practice in the use of these guides as pupils locate materials for units of study and for research papers.

- c. Provide practice in locating audio-visual materials that are housed in the school library. Explain how they are organized, cataloged and circulated.
- d. Comment on the availability of picture collections and symbolic materials in public libraries and museums.



Figure 2.3 (continued)

Chart 4

Locating and Using Current Materials

Desirable Learnings for Pupils	Action Recommendations for Teachers
1. Understanding of the value of current ephemeral materials as sources of information and knowledge.	<p>1 a. Provide many opportunities for the class to examine newspapers, clippings, magazines, flat pictures, brochures and other free or inexpensive materials in the library and classroom. Stress their importance as sources of information on current happenings and achievements.</p> <p>b. Give instruction in the location and arrangement of picture, pamphlet and vocational files in the library.</p> <p>c. Make available lists, bibliographies and sources of free and inexpensive materials for pupils gathering information on units or topics, and give instruction in how to order such materials.</p>
2. Acquaintance with and facility in reading and using magazines as sources of information.	<p>2 a. Introduce and allow pupils to examine and evaluate a large number of available and appropriate magazines. Emphasize their type or scope, such as whether pictorial, scientific, current events or literary; their quality, format and authoritativeness.</p> <p>b. Develop methods of instruction that encourage the use of periodicals; allow time for pupils to read and discuss special features of the periodicals.</p>
3. Skill in using magazine and newspaper indexes.	<p>3 a. Give instruction in the <u>Readers' Guide to Periodical Literature</u>, emphasizing frequency of publication; cumulation features; magazines indexed; arrangement--articles listed by author, title and sometimes subject; information under each entry, including author, title of the article, name of magazine in which the article appears, volume number, date and page.</p> <p>b. Demonstrate and provide practice in</p>

using the Readers' Guide and other periodical and newspaper indexes to locate needed information on current subjects.

4. Facility in using and evaluating newspapers as sources of information

4 a. Involve pupils in the reading of newspapers and the skillful discussing of current events.

b. Initiate projects designed to develop critical judgment regarding editorial policy, coverage of news, special features, possible bias in reporting, propaganda techniques.

5. Facility in using T. V. programs and documentary films as sources of information and knowledge.

5 a. Encourage pupils to listen to and evaluate news broadcasters and analysts. Discuss programs that bring information to bear on problems and happenings of the day as well as achievements in many fields of endeavor.

b. Make lists and publicize outstanding programs, documentary films and film strips that are vivid sources of knowledge and opinion.

and pictures are not. Although Cleary is giving examples only, the relationships among skills and the weighting of items should be made clear to the potential users.

The question of specificity also arises in treatment of the skills. An example of the problem is shown on Chart 3. While Cleary has listed several pertinent skills of the card catalogue and Dewey Decimal Classification she does not refer to the total range of subskills nor provide a categorization that would facilitate addition of subskills and inclusion of levels. She has, it seems, assumed the reader to be knowledgeable about either the entire research task or the sources of information about the task.

The criterion of selectivity also emerges as a troublesome factor within the charts. Reference to such related tasks as reading might certainly be justified on the basis of their essential contribution to acquisition and mastery of the research and reporting process. Their inclusion within a chart of locating skills (see Chart 4, Item 2), however, seems likely to distract attention from the target skills, to foster a diffuse rather than precise type of guidance, and to inhibit efficient and effective programme planning procedures.

In sum, then, Polette and Cleary have provided potentially useful frameworks of research and reporting. Their models are process-centred and incorporate many directly relevant skills. They are, in their present state, the most useful and clearest general conceptualizations of the library research task found by the researcher in elementary school library literature.

The Polette and Cleary models do, however, need improvement to meet a proposed criteria of clarity (consistency, specificity and selectivity) at the level of skills and subskills. If the content of their subprocess lists of skills and subskills could

be refined and validated they would be of enormous value to programme planners and a boon to the less knowledgeable teacher faced with the task of providing instruction in library research and reporting.

## Chapter 3

### VALIDATION OF THE INFORMATION BASE OF SOURCES IN ELEMENTARY SCHOOL LIBRARY EDUCATION

The chapter focusses on the validation of the school library information base and includes the following topics: (1) the need for validation, (2) the plan for validation, (3) the validation procedures, and (4) the analysis of data.

#### NEED FOR VALIDATION

In the course of developing the conceptual framework for the study a large variety of sources covering the areas of library, reading and social studies education were consulted. This survey convinced the researcher that the rationale was sound and the statement of the problem accurate. It was considered, however, that validation of the elementary school library sources located in the search was crucial if the skills model produced from the projected analysis of the literature was to be regarded as having content validity. Evidence was needed, it was felt, to ensure content validity or "representativeness" (Kerlinger, 1973, p. 458) of the projected model and any instructional material or measure that might subsequently be derived from it. It was decided, therefore, that a formal validation of the information base should be undertaken as an integral part of the study.

#### PLAN FOR VALIDATION

The plan for validation was based in part on such guidelines in measurement literature as those provided by Kerlinger. He said:

Content validation consists essentially in judgment. Alone or with others, one judges the representativeness of the items. ...The universe of content must be clearly defined; that is, judges must be furnished with specific directions for making judgments, as well as specification of what they are judging. Then, some method for pooling independent judgments can be used. (1973, p. 458).

Based on such guidelines, with appropriate consultation and advice, three major decisions were made in a plan for validation. First, it was decided, a number of school librarians should be asked to make judgments about the located information base. Secondly, it was agreed that a questionnaire should be developed as the instrument for gathering their judgments, using the concept "quality of the search" as its key concept. The third decision was that judges should be asked to respond to the questionnaire independently and then to discuss their responses individually in a personal interview with the researcher.

The referent, quality, was considered to encompass two characteristics: defined in terms of appropriateness and comprehensiveness. Appropriateness was defined as the suitability of sources while comprehensiveness was defined as the adequacy of coverage of sources considering the available literature and the stated problem.

#### VALIDATION PROCEDURES

There were four main steps in the validation procedures: (1) construction and assembly of the questionnaire package, (2) selection of judges, (3) distribution of questionnaire packages, and (4) collection of judgments.

## Step One : Construction and Assembly of the Questionnaire Package

The questionnaire package required construction of four constituent parts:

(a) a list of sources, (b) questionnaire section, (c) background information section, and (d) covering letter (see Appendix B, pp. 178).

List of Sources: The list was, in fact, a bibliography produced in a slightly abridged form. Contents of the list were categorized (1) by type of material, and (2) by type of source, as outlined below:

1. Type of material
  - a. Articles
  - b. Books/Instructional Materials
  - c. Curriculum Guides
  - d. Tests
  - e. Theses and Dissertations
2. Type of source
  - a. Locational source
  - b. Sources located

"Locational Sources" were largely the reference tools used to find items under each of the five categories and "Sources Located" were the items found under each of these categories. (see Appendix B, p. 198).

A total of forty-five locational sources was listed under all categories ranging from five sources under "Articles" to fourteen for "Books/Instructional Materials". A number of such reference tools as Education Index and Library Literature had been useful for locating two or more categories of materials, resulting in a total of about twenty-five discrete locational sources.

"Sources Located" included materials in which contents were focussed either entirely or partly on elementary school level library skills. One hundred and twenty-nine items were listed for all categories with materials distributed by categories as follows:

Articles	38
Books/Instructional Materials	43
Curriculum Guides	28
Tests	10
Theses/Dissertations	10

Of these materials, the great majority were drawn from school library literature. A few other items considered potentially appropriate were drawn from elementary school reading and social studies education.

The nineteen-page List of Sources was completed with the addition of a contents page on which was indicated the page number for each of the five categories according to both "Locational Sources" and "Sources Located". The list was labelled as "Enclosure #3" of the questionnaire package.

The Questionnaire Section. The questionnaire section consisted of two main parts: (1) response forms, and (2) directions for responding (see Appendix B, p. 190). To correspond with the organization of the bibliography, response forms were arranged in five single-page sections beginning with "Articles" and ending with "Theses/Dissertations". For each category of material, items on "Locational Sources" were put in the upper half of a page and in the bottom half were placed items on "Sources Located".

For Sources Located a three-point Likert-type scale was used. Selection of Likert-type scaling for questionnaire items was based largely on statements by such writers as Kerlinger (1973) and also on logical analysis of the needs of the problem. First, Kerlinger noted that "as in all attitude scales the purpose of the summated rating scale" - such as a Likert-type scale - "is to place an individual somewhere on an agreement continuum of the attitude in question" (p. 496). However, he added, in support of Likert-type scales, that of the three major kinds of attitude scales (summated rating, equal-appearing interval and cumulative scales) the summated rating scale seemed to be the most useful

in behavioral research. He explained that it was less difficult to construct, while yielding about the same results for reliability as the more "laboriously constructed equal-appearing interval scale" (p. 499). Cumulative scales, Kerlinger felt, were simply not so useful nor so widely applicable as either of the other two scales. It was decided, therefore, that construction of a Likert-type scale would be both practical and appropriate considering the data to be gathered.

Items constructed around the type of measure selected required individuals to judge whether or not sources located for the study were appropriate and comprehensive. The three-point scale developed for appropriateness and comprehensiveness, respectively, was: NA, U, A (Not Appropriate, Undecided, Appropriate) and NC, U, C (Not Comprehensive, Undecided, and Comprehensive). Space was also provided for judges to list any additional titles of sources they wished to include, ~~or that they felt should have been located.~~

In terms of objective items, then, response forms consisted of a combination of dichotomous fixed-alternative items for "Locational Sources", and Likert-type scale items for "Sources Located". Including both item types, there was a total of fifteen objective items. Provision was also made for subjective comment by judges about items and about any aspect of the questionnaire package.

Directions for Responding. A brief set of directions was prepared that provided both general and specific guidance for the judges.

In general, judges were asked to express their reactions about the quality of the search in terms of the appropriateness and comprehensiveness of the sources listed.

Specific instructions were also given for responding to objective items and subjective items arranged under the five categories of materials and the subcategories



of "Locational Sources" and "Sources Located". It was explained that, for locational sources, either a 'yes' or 'no' answer was to be checked and, for sources located one number, either 1, 2 or 3, was to be circled beside each of the referents appropriateness and comprehensiveness. For example, if a judge should consider the sources located to be appropriate, he was asked to circle the answer that best expressed his judgment, that is, the number 3. Directions also included mention of possible responses for each category under "Additional Titles" and some guidance about critical comments judges might wish to make about sources under a "Remarks" section.

A contents page was added and the questionnaire section designated as "Enclosure #2" of the package.

Background Information Section. The purpose of this section was to provide potential respondents with frames of reference for the study, their judgments, the list of sources, and the questionnaire section. Five topics were included: (1) statement of the problem, (2) nature and purpose of the search, (3) nature and purpose of judgments, (4) description of the "List of Sources", and (5) description of Questionnaire I. This section was kept deliberately brief, eight double-spaced pages in all, with three topics limited to a page or half a page in length.

Much of the information prepared for judges in this section has been covered previously in the report. Therefore, only two points of information not previously outlined are presented here.

First, under the "List of Sources" it was explained that while the original intention had been to list books and instructional materials separately, the two types had been combined when it was found that a clear distinction could not always be

made between these materials. Secondly, in the same section, it was stated that "located" sources meant those that had been received, ordered, or that were accessible within the various local resources centres.

With this information added, all the material on background of the study, with the addition of a contents page was labelled as "Enclosure #1" of the package (see Appendix B, p. 181).

Covering Letter. A covering letter provided judges with an overview of both the task and the contents of the questionnaire package, as well as an expression of gratitude to participants for their time and cooperation.

It was explained to judges that after about two weeks interview appointments would be made with each person and the interview based on the response pattern of the questionnaire. Information about where to contact the researcher about any aspect of the validation was also included (see Appendix B, p. 179).

Assembly of the Questionnaire Package. The four parts of each package, when completed, were placed in a two-pocket portfolio - the letter and background section in one pocket, and the questionnaire section and list of sources in the other.

### Selection of Judges

A decision was made that five British Columbia school librarians with certain characteristics should be asked to participate as judges for the validation. Required qualifications for judges were: (1) training that included either a school library major or a degree in librarianship (B.L.S., M.L.S., or comparable training), (2) experience as an elementary school librarian or presently working with elementary teacher-librarians, and

(3) experience in school library positions for five or more years. A desirable fourth characteristic was experience in elementary school teaching.

Selection criteria were founded on logical assumptions. It was assumed that a librarian whose training and experience fell within this range of characteristics should be well qualified to both understand the curriculum-based problem of the study and make the required judgments about sources in terms of that problem.

A final decision about selection was concerned with the kinds of positions held by potential judges. To help ensure that various points of view were obtained it was concluded that three types of positions should be represented: (1) school district supervision - one judge, (2) elementary school library - two judges, and (3) faculty of education - two judges.

With these characteristics in mind, a search was made for five qualified local school librarians holding the designated types of positions. Two members of the School Libraries Department in the U.B.C. Faculty of Education were very helpful in providing suggestions about potential judges, and also expressed a willingness to participate themselves. One of these faculty members, being a school librarian on leave to work at the university, qualified for the panel as either a school librarian or faculty of education member. In the end, the planned distribution of fully qualified judges was achieved.

#### Distribution of Questionnaire Packages

The pocket portfolio containing questionnaire materials was put in a kraft envelope and delivered to judges either at their homes or places of employment. When individual judges had completed their responses independently, they contacted the

researcher to arrange an interview at a mutually agreeable appointment time.

### Collection of Responses

Responses were discussed with each judge in a semi-structured interview conducted by the researcher. Following the item format of the questionnaire, responses were elicited page by page, and noted for each of the questions (fifteen objective responses in all). Within this structured framework, discussion about responses was encouraged, especially about suggestions for additional titles and remarks about any sources or aspects of the study. As a useful check against possible additional suggestions by judges, a card file of the entire pool of sources located in library, reading and social studies literature was available during each interview.

The time for responding to each category varied according to the particular concerns and conceptions of individual judges. Overall, however, interviews took an average of two-and-a-half hours.

All materials were returned by judges, including their working copies of the response forms. Their written responses, with those recorded during the interview by the researcher, provided the total data base for the validation.

## ANALYSIS OF DATA : QUESTIONNAIRE I

Procedures used in analyzing responses are briefly outlined, followed by a report of results obtained in the validation.

### Method of Analysis

A hand analysis was used, since the amount of objective data was small and the subjective response fairly extensive. A summary sheet of objective reactions was

prepared corresponding in format to categories of the response sections. This part of the analysis simply involved recording the total number of "yes" and "no" responses for the comprehensiveness category and the check-marks on the Likert scale for the appropriateness category. Subjective data were then sorted, assembled and attached to the summary of objective data.

### Results of the Validation

The data are presented first by locational sources and then by sources located.

Locational Sources. Judges expressed agreement that the essential locational sources had been used for all five categories of materials, i.e., for articles, books/instructional materials, curriculum guides, tests, and theses and dissertations.

No additions were suggested as locational sources for articles, curriculum guides, tests and theses and dissertations. Under "Books/Instructional Materials" it was suggested by two judges that some multi-media indexes should have been consulted for instructional materials. The researcher explained that a number of these indexes had been consulted without locating any items of significantly different content for library instruction. However, it was agreed that some of these catalogues might have been included as locational sources. Under this category, also, one judge brought to the interviewer's attention the existence of the ninth edition by a new editor of a book locational source (#11, Gaver, 1973).

The researcher requested possible additional sources for obtaining curriculum guides but only two were mentioned, both education libraries, one at a local university, and one at another Canadian university.

Under the "Remarks" section, one judge asked if the selected sources had been limited to Canada and the United States, while another asked why no theses and dissertations after 1969 were listed. The answer to the first was affirmative, and the second was that no appropriate studies after that date had been located.

Sources Located. For each of the five categories presented, judges expressed agreement that, in relation to information provided about the study, the sources were appropriate and that the search had been comprehensive.

No additional titles were suggested under the categories of "Tests", "Theses and Dissertations". For the categories of "Articles" and "Books/Instructional Materials" a number of additional suggestions were made that individual judges thought might or might not be useful – three articles, fourteen books/instructional materials, and two curriculum guides. Some of these sources had already been located by the researcher and not found to be directly relevant to the model. Others were in the researcher's card file but had not been selected for the list of sources. This latter group and any other potentially useful sources were noted for checking or re-checking during model construction, about twelve items in all.

Judges also made a few comments about some of the sources located for articles and books/instructional materials. Two judges expressed surprise that there were so few recent articles on library skills. However, both judges indicated that on checking various periodical indexes they had found the list to be an accurate reflection of the literature. Two other judges, when questioned about this point, said that considering the curriculum trends of the mid-sixties and seventies they had not been at all surprised to note fewer articles on teaching skills listed for more recent years.

It was suggested by one judge that in the list of materials the precise locational source for each article could have been noted, for example, whether Education Index or Library Literature had been the reference used for a particular article. The researcher agreed that this was useful information and that, although it had been noted in her card file, it had been omitted from the list of sources in the interests of brevity.

In regard to books/instructional materials, it was felt by one judge that the original organization of six categories should have been maintained, that is, books and instructional materials should have been separated. The researcher agreed that the two types should be separated as needed for succeeding parts of the study.

### Summary

When the data collection was complete it was evident that all judges (100%) agreed that the quality of the search was satisfactory. That is, the selected pool of sources had been considered by the panel to meet the criteria of both appropriateness and comprehensiveness. Beyond this pool of materials some additional or optional materials had been suggested for checking before or during model construction. All these materials, in total, were considered by the judges to provide an appropriate and comprehensive information base for developing the proposed model.

## Chapter 4

### DEVELOPMENT AND PILOT VALIDATION OF THE BASIC LIBRARY LOCATIONAL SKILLS MODEL

This chapter includes the following topics: (1) the steps followed in the developing of the tentative model, (2) the development of the questionnaire instrument, (3) the pilot validation procedures, and (4) the results of the pilot validation.

#### DEVELOPMENT OF THE MODEL

Seven major steps were taken in developing the skills model. A file of individual "library learnings" or "behaviours" was first developed. Items in this file were then analyzed and placed into two tentative categories and three subcategories. The next step involved isolation of the concept "level" of library learnings. A selection was then made of categories and subcategories for the tentative model. As a fifth step the concept of "location" skills was isolated. This was followed by the selection of basic locational skills and addition of subskills. Lastly, the selected content of the model was assembled in readiness for the pilot validation. A detailed description of these seven steps follows.

In outlining the first four steps the term "library learnings" or "behaviours" is used as a reflection of the rather general nature of available library guidance from which "library skills" were selected.

#### Step One : Collection of Library Learnings

A review of the literature for the purpose of sifting out information about the library locational skills (as the core material for the projected model) could, it was



realized, take a simple or more complex approach. In the simple approach the researcher would consult the index of any source for the term "library locational skills", find the appropriate pages, and note the skills and subskills listed. This process appeared, at least on the surface, to be the most direct route to follow. It did, however, present a problem. The researcher, in reviewing the literature for the development of the rationale for the research, had found that the term "library locational skills" did not, in fact, appear in the index of most sources even when it was mentioned in the body of the text; that where it did appear, not all occurrences of the term were accounted for; and that certain locational skills and subskills that the researcher as a trained librarian knew should be included were not always mentioned.

It was concluded, therefore, that a much more time-consuming but thorough process would have to be used if a valid model were to be developed. This process involved the collection of all suggestions within the relevant sources that appeared to relate to what could be called a library learning.

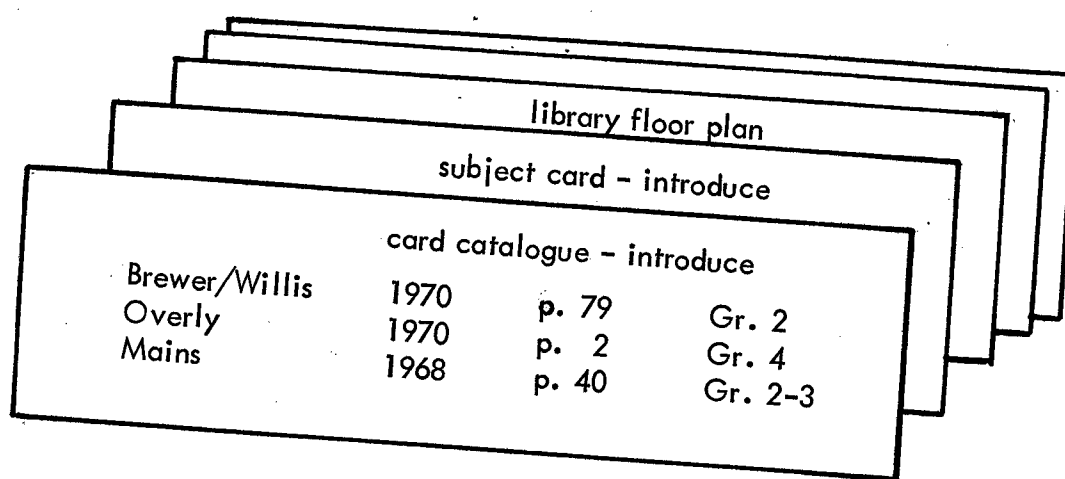
A procedure was therefore adapted in which each learning from each source was noted on a 3" by 7" card. On the card, as shown in Figure 4.1, were also noted: (a) the source in which the behaviours appeared, and (b) any suggested grade levels for instruction.

No learning was ever noted twice, and the procedure was continued until learnings began to reappear and some major categories had begun to emerge. To reach this point about twenty-five sources were analyzed, all of which had been selected subjectively from the validated information base. It was considered that this process, although somewhat laborious, would ensure the content validity of the model and serve

as well as a core of information for any further research. In a subjective evaluation the researcher concluded that the process selected had been appropriate.

Figure 4.1

Collection of Individual Library Learnings on Cards



Step Two : Analysis and Categorization of Library Learnings into Two Major Categories and Three Subcategories

In a hand-sorting process, the slips were arranged in a file box, as shown in Figure 4.2, according to such tentative categories of learnings as "Card Catalogue", "Circulation Procedures" and "Book Interests". Some of the categories already existed in the literature. Others were created by the researcher as a means of organizing what would otherwise have been an unmanageably large number of discrete items. Always, as categories were used or created, the tentative goal was kept in mind of creating even larger and more general rubrics that might prove useful in later research on subsequent models of subprocesses. As a result, the gradual process of categorization and re-categorization produced a system (shown in Figure 4.3) in which two broad categories and three

Figure 4.2

Analysis and Categorization of Library Learnings into Tentative Categories

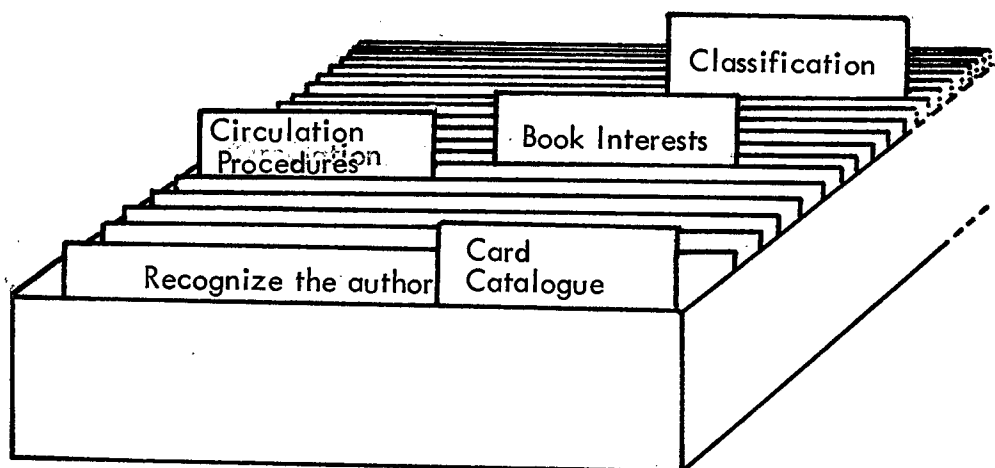
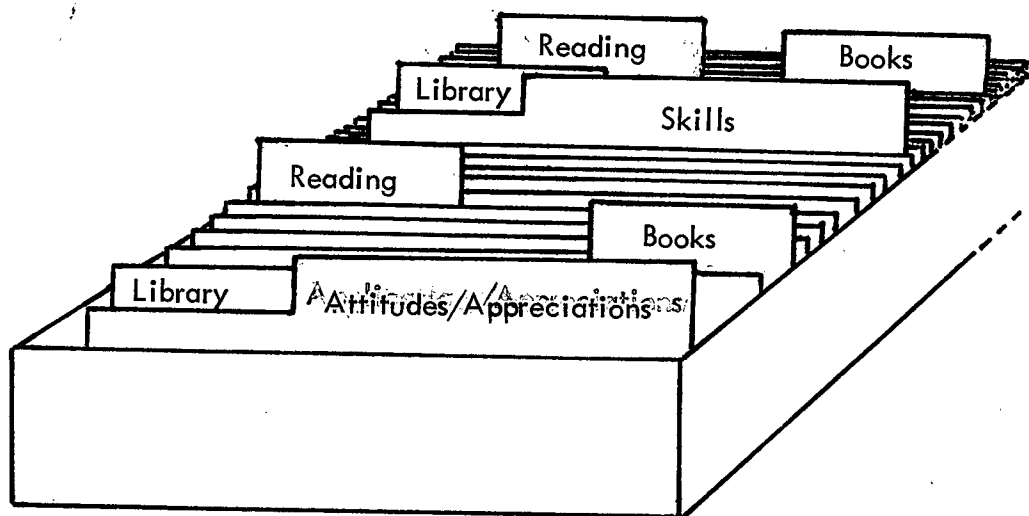


Figure 4.3

Analysis and Categorization of Library Learning into Two Major Categories and Three Subcategories



subcategories emerged. The two broad categories were: (a) Attitudes/Appreciations and (b) Skills. The subcategories for each larger category were Library, Books and Reading.

It was considered, then, that the library learnings gathered could be conceptualized as (1) Attitudes/Appreciations about the library, books and reading, and (2) Skills involved in using the library, books, and reading. The process of deriving these rubrics should, perhaps, be noted since it may prove useful to subsequent model making.

As it happened the three subcategories were developed first in response to the problem noted in the initial review of the literature, namely, that library education appeared to "borrow" skills from other subject areas without clearly indicating the origins of such borrowing. As the researcher sought to separate the learnings it seemed appropriate to try to place together items that related mainly to library use, mainly to book use (really, use of book parts), or mainly to reading as a means of getting meaning from connected prose. Obviously, there would be differences of opinion about the placement of certain learnings and there is no attempt here to suggest that the categorization is, in fact, "correct". It served a purpose at this stage of research in making the file manageable and it later had significance for the tentative model.

It was while the categories Library, Books and Reading were being used that it seemed evident to the researcher that the organization would profit from the creation of two large categories, Attitudes/Appreciations and Skills, retaining the three rubrics already noted as subcategories. These two large classifications emerged as the researcher attempted to use the Library, Books and Reading categories for all library learnings and

found it difficult to place such learnings as knowledge of book production with skill in using a book index or good library citizenship with ability to use a card catalogue. It seemed evident that a dichotomy existed in the kind of thinking involved and the Attitudes/Appreciations and Skills labels seemed to express the dichotomy neatly. They proved their usefulness as the sorting process continued.

### Step Three : Isolation of the Concept "Level" of Library Learnings

Steps One and Two had produced a collection of all library learnings. What had not been developed was a clear idea of which skills could be considered to be basic, which intermediate, and which advanced level skills. This information was partially available on the collected slips but required organization into a format that would clarify the various relationships and later make possible the identification of the basic library locational skills.

It was decided that level of difficulty could be clarified through construction of charts for each skill category. These charts, it was considered, would serve to organize in a logical concise way information already gathered, and that to be gathered from remaining sources. As the additional information was recorded the existing categories would, it was expected, undergo refinement and possible extension. Of primary concern was the verification and possible elaboration of information about locational skills.

After a few trials the following procedures were selected: First, on 8" by 11" paper a chart format was devised, as shown in Figure 4.4, that would accommodate (1) each library learning and sub-learning, (2) sources cited for that learning, the type of source, page and year of publication, and (3) a range of either suggested grade levels

Figure 4.4

## Analysis and Categorization of Library Learnings : By Level

Skill/Subskills :		CARD CATALOGUE		(General : Introduction up)									
Type	Author	Page	Year	Levels	1		2		3		4		8
				Grades	K	1	2	3	4	5	6	7	
thesis	Overly	2	'71						Int <sup>a</sup>				
bk.	Brewer/Willis	79	'70				Int <sup>a</sup>						
c.g.	Pittsburgh	39-40	'74						Int <sup>a</sup>				
bk.	Glogau et al	55	'72				Int <sup>a</sup>						
thesis	Mains	40	'68					Int <sup>a</sup> 3-4					
c.g.	Chicago	78	'68					Int <sup>a</sup> 3-4					
Chart	Winnipeg	1	n.d						Int <sup>a</sup>				
thesis	Dugas	14	'67						Int <sup>a</sup>				
Elementary - No Grade Level Stated													
bk.	Douglas	119	'49										
i.m.	Zimmerman	---	'60										
art.	Tillin	38	'44										

<sup>a</sup> Int. introduction of skill

for instruction from kindergarten to grade eight, or broader levels such as combined grades or simply levels One, Two and up as appropriate. Space was left at the bottom of each page to record any sources in which no specific elementary levels were suggested.

Once this format had been devised, the information already noted on cards was transferred to the appropriate charts. Following the transfer, data collection from remaining sources was undertaken and continued. For such major skill categories as the "card catalogue" and the "Dewey Decimal System" a considerable number of sources were found that suggested grade levels or a range of grade levels, while for some subskills only a few citations were found about level.

In the end about fifty-eight skills and subskills charts were completed and placed in a three-ring binder according to major categories and subcategories, with tabbed dividers providing quick access to major categories.

From the notebook information on skills and subskills, summary charts were next constructed on 8" by 11" graph paper. The two categories of Attitudes/Appreciations and Skills were used with the three subcategories - Library, Books and Reading. The range of most frequently cited grade levels was shown and the main grade level for introduction of a particular skill indicated. The charts were kept concise, with items confined mainly to first level subskills such as "outside labels" under such skills clusters as the "card catalogue". A segment of one chart is shown in Figure 4.5.





With the completion of the notebook and summary chart information it was concluded that enough data had been gathered to identify tentatively the basic level of library skills.

Figure 4.5

## A Section of the Summary Charts of Library Skills and Subskills

		Grades								
		K	1	2	3	4	5	6	7	8
ARRANGEMENT OF LIBRARY										
Library floor plan										
ARRANGEMENT OF BOOKS IN THE LIBRARY										
By Sections										
easy bks, picture bks,										
main divisions - fic/n.f.										
Within Sections										
fiction										
non-fiction										
biography										
shelf labels										
CARD CATALOGUE										
Outside labels										
Guide cards (inside)										
3 Main types of cards										
Basic filing rules										
CLASSIFICATION/D.D.C.										
D.D.C. - general										
introduction										
ten general divisions										

	incidental instruction
	introduction of skill
	review and/or extension of skill
	main grade level for introduction



#### Step Four : Selecting Categories and Subcategories for the Tentative Model

With all library learnings collected, categorized and identified by suggested levels, the process was begun of selecting content for the tentative model. This became a process of applying inclusion/exclusion criteria first to the major categories and secondly to the subcategories.

Excluding the Attitudes/Appreciations Category. Since the problem of the study was focussed on Skills it was concluded that the Attitudes/Appreciations category should be excluded from the model. No further attention, then, was devoted to this set of learnings.

Applying Inclusion/Exclusion Criteria to Subcategories of the Skills Category. The next logical decision to be taken was determination of which of the three subcategories under Skills contained material that should be included in the model. It was concluded that Reading skills should be excluded since these were considered by the researcher as fitting more appropriately under reading instruction than library instruction. Among these skills were such word skills as "letter name knowledge" and "alphabetizing" and such specialized comprehension skills as "reading maps, globes, tables and diagrams". As it happened, some discussion developed in the pilot validation about the alphabetizing skills but it was excluded in the final validation.

It was next decided that the category designated as "Library Skills" should be considered for inclusion in the model, and its subskills tested against the criteria of the previously hypothesized subprocesses of research and reporting.

The remaining decision was whether or not to include the "Book" skills so commonly listed as part of library instruction. Some local librarians consulted said

that they did not consider instruction in book skills to be a basic responsibility of the librarian except for instruction about use of specialized reference books. Instead, they felt that the librarian should supplement skills introduced by the classroom teacher. They added, however, that the inclusion of book skills in library skills listings was based on school librarians' concern about both their importance and possible neglect of these skills in classroom instruction. After these discussions, and consultation with the library adviser for the study it was decided to include basic book locational skills in the model and ask for librarians' reaction to them. This procedure, it was decided, would allow a wider range of librarians to react to the question of inclusion/exclusion of book skills within library instruction and throw light on a basic issue.

In sum, out of the three subcategories under "Skills" it was concluded that Reading skills should be excluded, and both Library and Book skills considered for inclusion.

#### Step Five : Isolation of the Concept "Location" Skills

~~Book~~  
Book All Skills - Library and Skills - Books were tested against the criteria of the previously hypothesized subprocesses of research and reporting, that is, "locating", "collecting" and "synthesizing". It was then that the researcher realized most clearly that most of the learnings that had emerged as Skills - Library, seemed to fit logically under the "locating" rubric as processes of either locating materials in a library or of locating information in books, especially specialized reference books. This insight made a significant impact on the researcher's thinking since it crystallized again an idea that had been in the background of the study: that is, the school library literature may be weakened by its tendency to claim nearly all skills that relate to books and

literacy. If "library" skills are essentially "locational" skills this should be made clear to teachers of library use whether they are trained librarians or classroom teachers.

As has already been indicated above, it had been concluded that all Skills - Book essentially involving locating information in books should be considered for inclusion.

#### Step Six : Selection of Basic Locational Skills and Adding Appropriately to the Content

Using the charts developed in Step Three, skills and subskills were drawn from the lower end of the continuum of Skills - Library and Skills - Book. It was noted that there was a tendency to suggest introduction of Book skills in Grades one to three, while the introduction of Library skills was most often left to Grades three to six.

When the process of selection from the charts was complete it seemed evident that some subskills should be added to ensure balance and coherence. The combined training of the researcher and her library adviser were applied to this problem with the idea that the judges would act as referees in the projected validation. With the addition of some subskills it was concluded that the content had been largely determined and that items were ready for assembly into a unified model.

#### Step Seven : Assembly of the Content into a Coherent Skills Model

The completed model is shown in Figure 4.6 for reference throughout this description.

In the process of skills identification the researcher had constantly sought classifications within subcategories for organizing all selected items into a coherent

Figure 4.6

Tentative Skills Model of Basic Library Locational SkillsCluster #1 : Locating Materials in a Library (LMIL) : Skills and Subskills

## ARRANGEMENT OF THE LIBRARY

simple library floor plan

## ARRANGEMENT OF MATERIALS

## IN A LIBRARY

By Sections

picture books

easy books

non-fiction books

reference materials

magazines/periodicals

Within Sections : Books

fiction, alphabetical by author

non-fiction, by subject - D.D.C.,

then alphabetical by author

biography by B

or 92

then alphabetical by biographee

call number

(parts of call number)

(letter identifiers)

PB - form

E - content

R - purpose

author's surname - initial

(number identifiers)

author's surname - number

shelf labels

for section identification

for subject identification

Within Sections : Magazines

alphabetical by title

(ignoring articles a, an, the)

## CARD CATALOGUE

outside labels

guide cards (inside trays)

author card

author - top line

surname first

title of book

date of publication

call number - recognition

subject identifiers - D.D.C.

letter identifiers

number identifiers : author's

surname : number

title card

title on first line

subject card

subject on first line

heading capitalized

cross-reference cards

"see"

"see also"

filing rules

alphabetical order

word -by-word arrangement

'Mac/Mc' as if spelled 'Mac'

numbers as if spelled out

books by an author before books

about an author

'an', 'a', 'the' in titles disregarded

(at beginning of title

## VERTICAL FILE

drawer labels

envelope/folder labels

alphabetical by subject headings

## CLASSIFICATION BY SUBJECT/D.D.C.

the ten general divisions of the

D.D.C.

some subdivisions

to first decimal

(classification by)

fairy tales

biography

Cluster #2 : Locating Content/Data in Materials (LCIM) :Books : Standard Fiction/Non-fiction : Skills and Subskills

## FORMAT

cover

spine

(collation)

title page

text/body matter

graphic material

## BIBLIOGRAPHIC DATA

appendix

author (name)

bibliography

charts (listing)

copyright date/or date

of publication

edition

foreword/preface

glossary

illustrations

index

cross-reference

introduction

key, guides

maps

series

tables

titles

table of contents

volume number

format. Such logical classifications as "arrangement of the library", the "card catalogue" and the "Dewey Decimal Classification" were already in the literature. These classifications, though essential, were not sufficient in themselves to ensure clear organization of the content, particularly if the model was to be considered useful to classroom teachers and an appropriate base for curriculum development. It was decided, therefore, that some additional categories should be developed using guidance from the focal literatures and the combined judgments of the researcher and her library adviser.

The added categories ranged from a broad to increasingly specific focus. First, as shown in Figure 4.6, the two major divisions of the model were identified as Skills Clusters #1 and #2. The concept of "skills clusters" was considered likely to be more meaningful and familiar to potential judges than the term "subprocesses" introduced in the study as part of the hypothetical model.

Labels for the two clusters were selected for both their relevance to the skills on hand and their potential application in developing locational skills models for all kinds of media. Cluster #1 was identified as "Locating Materials in a Library" (LMIL) and Cluster #2 as "Locating Content/Data in Materials" (LCIM). Future production of models, it was speculated, might lead one to substitute "media" for "materials" depending on its implications for a comprehensive model of research and reporting.

The label for Cluster #2 was derived from the fairly common reference in the literature to locating information in books. This, in fact, was found to be the main thrust of locational skills, guidance in reading education. The phrase was selected to make explicit the difference between locating in books and locating in the library. It was subsequently expanded by substitution of "content/data" and "materials" for "information/books". While a single term in place of "content/data" was considered

desirable, such a term could not be found to cover all possible forms of rhetoric.

The decision was made next to label the specific type of materials in Cluster #2 of the model as "Books : Standard Fiction/Non-fiction". In the researcher's opinion, locating content in such books was a logical first or basic locational skill for the Books category.

Thirdly, the label "arrangement of materials in the library" was elicited from the literature as a potentially useful category and two subcategories - "by sections" and "within sections" were attached to facilitate a logical clustering of subskills. Clarity of the "within sections" category would be further enhanced, it was decided, by inclusion of "books" and "magazines" as additional subcategories.

The final major decision made about category labels was to seek an alternate term for the rather global "book parts". A search of relevant glossaries and other reference books led to the selection of "format" and "bibliographic data" as being somewhat more discrete terms for clustering constituent book skills. "Format" was intended to encompass the idea of the physical parts of the book while "bibliographic data" was intended to cover the information generally found about library books on the main entry catalogue card. If these terms did not provide a more definitive concept or if, in fact, they were not appropriate, it was assumed that judges would provide that information during the validation.

Development and assembly of the skills model was, therefore, the outcome of numerous objective and subjective decisions based on both explicit and implicit guidance in educational literature. The conclusion was drawn at this point in the procedure that an essential framework for organizing the content had been achieved and that this form of the model was ready for validation by judges.

## DEVELOPMENT OF THE QUESTIONNAIRE INSTRUMENT

With the content of the tentative model selected and arranged in a logical format, the next step was to develop a suitable measurement instrument. This step involved establishment of criteria for eliciting judgments and production of the questionnaire section for gathering the judgments.

Criteria needed for collecting judgments were actually inherent in the goal of the validation, that is, identification of a set of basic library locational skills. From this starting point emerged the key concepts of basic and non-basic level of skills and a library-based or not necessarily library-based locale for instruction as bases for responses. Items built around these criteria would, it was felt, draw out the desired judgments and provide a valid skills model.

### Objective Responses

The two major skills clusters of "Locating Materials in a Library" and "Locating Content/Data in Materials" were designated as Section A of the response forms while their respective subskills were designated as Section B. Skills and subskills content was drawn directly from tentative model shown in Figure 4.6, p. 67 , and items constructed around the key concepts of level of difficulty and locale for instruction.

Judges were given two directions for responding to objective items. First, they were asked to react to the level of each component skill, that is, whether or not they considered these skills to be a basic (B) or non-basic (NB) level according to definitions provided as part of the questionnaire.(see Appendix C, p. 228).

Secondly, for each skills cluster they were to judge whether the locale was library-based (LB) or not necessarily library-based (NNLB), also according to given definitions. This second response controlled whether or not each respondent would proceed to either of the subskills sections. If the response NNLB was given, judges were not to proceed further. However, if they had checked LB they were asked to react to the related subskills section. These directions were focussed on identifying not just basic locational skills but the basic library locational skills.

If respondents had checked library-based (LB) their task within the relevant subskills section was to indicate by checking whether they considered each subskill as being at a basic (B) or non-basic (NB) level of difficulty.

Between sections, sets of directions for branching were interleaved in which were explained options available to judges dependent on their reactions to locale items. These directions permitted judges to by-pass subskills sections deemed to be not necessarily library-based. (see Appendix C, pp. 232, 239, 240).

### Subjective Responses

Within the sets of directions provision was also made for gathering subjective judgments. Individuals were asked, if they wished, to add items, either skills or subskills, they felt should be included. For judges' reference in making such suggestions, supplementary subskills were listed under those skills for which fairly large numbers of subskills had been found in the literature, specifically, for the "card catalogue" and "format/bibliographic data" (book parts).

Space was also left on the last page of the questionnaire for respondents to make any remarks about the content or organization of the package.



## Definitions

Further guidelines were given librarians by including definitions for:

(1) Locating Materials in a Library, (2) Locating Content/Data in Materials, (3) Basic and Non-Basic Levels, and (4) Library-Based/Not Necessarily Library-Based Skills (see Appendix C, p. 226). It was assumed that judges would, as part of the validation process, react critically to the appropriateness and explicitness of the definitions provided.

## Physical Format

To facilitate access to sections, items on LMIL skills/subskills were printed on pink paper and those on LCIM skills/subskills printed on yellow paper.

When all parts of the questionnaire section had been prepared they were assembled into a nineteen-page booklet with a cover page identifying this part as Enclosure #2. Of the nineteen pages, eight pages contained items for judges' responses while the rest consisted of definitions and directions (see Appendix C, p. 218).

## PILOT VALIDATION PROCEDURES

Within the following section six topics are presented: (1) purpose of the pilot validation, (2) method of validation, (3) criteria for judgments, (4) the questionnaire package, (5) selection of judges, and (6) collection of judgments.

### Purpose of the Pilot Validation

The pilot validation had three major purposes. The first was to establish the content validity or representativeness of the skills model. Judgments by trained school

librarians, it was felt, would help determine whether or not the skills as outlined adequately sampled the potential domain of basic library locational skills available in school library literature.

A second purpose was refinement by participating librarians of the skills model, especially aspects of it about which subjective decisions had been made such as the decisions as to which subskills were basic and whether or not the book locational skills should be included.

It was decided, thirdly, that librarians participating in the pilot validation could be helpful through their reactions to the design of the questionnaire package, particularly the questionnaire section itself. For any subsequent validation of the model through questionnaires, it would be valuable to know of any problems encountered by judges in understanding either the content or organization of materials in the package.

### Method of Validation

Judgments were to be elicited from trained experienced school librarians about items in the proposed taxonomic model through a questionnaire designed to elicit the desired responses.

### Criteria for Judgments

It was decided that for any item to be accepted for inclusion in the proposed skills model, three out of the five judges must express agreement about its suitability. In essence, then, a 60 percent agreement would make an item acceptable for retention in the revised model. Items for which this extent of agreement was expressed would form the content of a revised skills model. Rejected items, it was also decided, would

not necessarily be discarded but instead would be listed as supplementary items for reaction by judges in a wider validation.

### The Questionnaire Package

Three items were developed for the validation package, specifically, (1) a questionnaire section, (2) a background information section embodying the proposed model, and (3) a covering letter.

Qu Questionnaire Section. This part of the package was described in the previous section on the development of the questionnaire instrument (see pp. 70-72).

Background Information Section. The purpose of this three-page enclosure was to provide judges with frames of reference considered essential in helping them make their judgments. The information given to judges was: (1) a statement of the problem, (2) a plan of the study and status to date, (3) information about the construction of the model, and (4) the nature and purpose of the judgments (see Appendix C, p. 221).

The statement of the problem was similar to that presented to judges in Questionnaire I.

When the covering letter, background information and questionnaire were ready they were placed in a pocket portfolio as in the first validation and then placed into a manila envelope for delivery to judges.

### Selection of Judges

The characteristics required for judges responding to Questionnaire I were also required for the pilot validation - namely, a library major or degree in school librarianship, five or more years' experience in library work, experience as an elementary school

librarian, or currently working with elementary school teachers or librarians and, ideally, experience as an elementary school teacher.

Since the five judges responding to Questionnaire I had all indicated an interest in continuing as judges, they were contacted first. Four of the five judges were willing to take part. The fifth judge, although expressing interest in the task, declined for two reasons: the demands of a doctoral programme out of the local area, and lack of elementary school library experience. An alternate judge was selected, a local elementary school librarian whose addition to the panel made the distribution as follows: two Faculty of Education members, two librarians at the school level, and one school district library supervisor.

As soon as the questionnaire package was ready it was delivered by the researcher to each of the five judges.

### Collection of Judgments

At a time mutually convenient to each judge and the researcher, a semi-structured interview was held. Following the format of the questionnaire the researcher collected responses, both objective and subjective, from each respondent. Interviews ranged from one-and-a-half to three hours. All materials were returned to the researcher including the working copies of the questionnaire.

## RESULTS OF THE PILOT VALIDATION

The final section of the chapter is organized according to: (1) the method of analysis and (2) the analysis of responses.

## Method of Analysis

The pilot validation yielded both subjective and objective data from a small number of judges. The size of the panel, therefore, made analysis by hand the most practical method. A summary of objective data was made on a copy of the response form and subjective data were categorized and attached as pertinent to each section.

## Analysis of Responses

In this section the objective data and pertinent comments are first presented according to each of the four sections of the questionnaire, specifically under the headings: (1) Section A, Skills Cluster #1, (2) Section A, Skills Cluster #2, (3) Section B, Subskills Cluster #1, and (4) Section B, Subskills Cluster #2. Results are reported in terms of frequencies and percentages for judgments about basic level items and library-based locale. General comments made by judges about various aspects of the questionnaire are also outlined, including comments about clarity of the definitions provided.

Section A : Skills Cluster #1 : Locating Materials in a Library (LMIL). As shown in Table 4.1 the five component skills in this cluster were the "arrangement of the library", "arrangement of materials in the library", "card catalogue", "vertical file" and the "Dewey Decimal Classification".

a. Results : Level. A majority of the panel of judges considered all component skills to be at a basic level. With the exception of the Dewey Decimal Classification (D.D.C.), all judges (100%), in fact, agreed that items listed were basic. Four out

of five (80%) respondents regarded the D.D.C. as basic.

Table 4.1

Frequency and Percent : Basic Level of Skills  
Cluster #1, Locating Materials in a Library (LMIL)

n=5

<u>Basic</u> Level Skills	Agreement	
	No.	%
arrangement of the library	5	100
arrangement of materials in the library	5	100
card catalogue	5	100
vertical file	5	100
Dewey Decimal Classification	4	80

b. Comments : Level. Some reservations were expressed by one judge about the Dewey Decimal Classification being appropriate to a basic level of instruction for primary pupils. This librarian felt that younger pupils, especially those in grades one and two, should find materials by other means, for example, by browsing along shelves or through assistance from library monitors or fellow pupils. However, this judge did consider the Dewey Decimal Classification to be basic learning for older students beginning at either high grade three or from grade four up.

The same judge commented on instructional procedures saying that he thought the Decimal Classification should be acquired inductively rather than by memorizing the main divisions. What was considered by this librarian to be the most important learning in locating materials was pupil understanding of the relationship between the number on the card catalogue and the order of books on library shelves, i.e., arrangement of materials within sections.

Four judges, then, agreed on the ability to use the Dewey Decimal System as basic while one judge did not consider it to be basic for primary pupils.

No additions were made to the five skills comprising the LMIL cluster.

c. Results : Locale. Eighty percent or four of the five librarians considered Skills Cluster #1, "Locating Materials in a Library", to have a library-based connotation.

d. Comments : Locale. One judge expressed a preference for introduction of these skills in the classroom and their utilization in the library, therefore agreeing only in part with a library-based locale. The judge added, however, that library skills should be taught in whatever locale – classroom or library – was considered to be the more physically comfortable and convenient for both pupils and teachers.

In this judge's opinion it was part of the role of the classroom teacher, not the librarian, to teach library skills. It was felt that the librarian should instead concentrate on building the collection, providing reference help for students and helping teachers with curriculum planning.

All other judges thought the library was the appropriate locale for instruction whether it was the librarian or classroom teacher who provided skills instruction.

Section B. Skills Cluster #2 : Locating Content/Data in Materials. There were two component skills in Cluster #2 – "format" and "bibliographic data".

a. Results : Level. Both items were regarded as basic by the majority of judges. Four respondents (80%) considered "format" as basic while three respondents (60%) felt "bibliographic data" should be so categorized.

b. Comments : Level. The one judge who checked both "format" and "bibliographic data" as being non-basic expressed the opinion that "locating the book" came first and was a basic skill while "use of book parts" would logically follow book location and, therefore, be beyond the basic level. From this response it was concluded that rather limited interpretation had been made of what might constitute a cluster of basic skills.

Another judge checked non-basic for bibliographic data but said no clearcut reason could be given for this choice. The judge simply stated that some skills under this category were considered basic and some were not.

No additions were suggested for Cluster #2 under either "format" or "bibliographic data".

b. Results : Locale. None of the judges considered Cluster #2, Locating Content/Data in Materials, to have a library-based connotation. That is, all judges checked the>NNLB column.

c. Comments : Locale. As a group the judges felt that instruction in the book skills definitely need not be library-based. They suggested, in fact, that such skills should preferably be taught by the classroom teacher and supplemented by librarians as needed. All judges agreed that such instruction should apply to standard fiction/non-fiction books, textbooks in various subject areas, dictionaries, atlases and standard encyclopedias. What was considered as more appropriate for library-based instruction was instruction in use of such specialized references as gazetteers, special dictionaries and The Readers' Guide to Periodical Literature, and various other indexes.



Results of the data for Section A, then, showed that three or more judges considered: (1) the component skills of Cluster #1, "Locating Materials in a Library", to be at a basic level and the locale for instruction to be library-based, and (2) the component skills of Cluster #2 "Locating Content/Data in Materials" (Books, Standard Fiction/Non-fiction) to be basic and the locale for instruction as not necessarily library-based.

According to these reactions, all judges were to complete the subskills section for Cluster #1, (LMIL), but not for Cluster #2 (LCIM). Through their responses to Section A of the questionnaire, therefore, the judges had begun to shape the model by accepting one skills cluster and rejecting the other. At this point in the data analysis, it was already evident that the model would consist at least of the skills cluster "Locating Materials in a Library" and whichever of its subskills in Section B were judged to be basic by the majority of respondents.

Section B : Subskills Cluster #1 : Locating Materials in a Library. Judges were asked in this section to respond only to the level of items as being basic or non-basic. Fifty-eight subskills were included, grouped under the following headings: (1) arrangement of the library, (2) arrangement of materials in the library (by sections and within sections), (3) card catalogue, (4) vertical file, and (5) classification/D.D.C. Objective data and related comments are ordered under these five headings.

Arrangement of the Library. The one subskill was "ability to comprehend and to use a simple library floor plan".

a. Results: Four judges (80%) checked this item as being basic, one of these checking it with certain qualifications. The remaining judge checked neither basic nor non-basic but responded instead with a comment.

b. Comment. The qualification given by the librarian who checked the basic column was that a three-dimensional model of the library would be more suitable for younger children. However, for older (intermediate grade level) pupils it was felt that a floor plan (diagram) was an appropriate guide.

The judge who marked neither the basic nor non-basic columns suggested it was unnecessary to give individual pupils a floor plan. What could be made available for upper primary and older students in larger school libraries was a wall chart of the library floor plan. It was this judge's opinion that primary students from kindergarten to Grade Two would probably have difficulty understanding a diagram, whereas they could readily understand information given in guided tours spread over two or three brief visits. This respondent, then, considered floor plans for individuals as non-basic but comprehension of the arrangement of the library as basic.

This judge also thought that the designation "by sections" fitted better under "Arrangement of the Library" than under "Arrangement of Materials in the Library". The reason given was that various sections either already existed physically or had been planned by the librarian before the materials were added. The four other judges interpreted the term "arrangement of the library" as it is commonly used in the literature, to mean layout of the library, its furnishings, shelving, and large areas such as the librarian's workroom. However, to avoid any possible confusion about this term in the wider validation, the decision was made by the researcher to provide a definition of

"arrangement of the library" in the next questionnaire.

No additional subskills were suggested by any judge.

Arrangement of Materials : By Sections. The six subskills comprising this category were picture books, easy books, fiction books, non-fiction books, reference materials, and magazines/periodicals.

a. Results. As shown in Table 4.2 the majority of judges checked the six items as being basic, with the first five items being regarded as basic by all judges (100%). One judge, while checking non-basic for magazines/periodicals, expressed ambivalence about the choice.

Table 4.2

Frequency and Percent : Basic Level Subskills (LMIL), Arrangement of Materials in the Library : By Sections

<u>Basic</u> Level Subskills	Agreement	
	No.	%
picture books	5	100
easy books	5	100
fiction books	5	100
non-fiction books	5	100
reference materials	5	100
magazines/periodicals	4	80

b. Comments. About picture and easy books, especially the latter, there was considerable discussion by four of the judges about the arrangement of these books, relationship between the two types, and rationale for their various arrangements.

One judge felt that all easy books should definitely be inter-shelved with the regular collection so that older pupils and those with reading problems could have access to them without embarrassment. In this person's experience, individual students from either group were not inclined to choose books marked "E" over unmarked books on the same topic, even when the "E" book was more appropriate in content or reading level.

Another respondent believed that there should be both a separate easy books section and a duplicate set of easy books inter-shelved with the regular collection. A third judge felt that either type - picture books or easy books - could be combined with regular fiction and non-fiction. The fourth judge suggested that very easy and picture books should be placed together in a section using the criterion "books that had very little print" while some relatively easy books with more print should be inter-shelved with the main collection. The criteria for applying a judgment of "very little print" and "more print" were not pursued by either judge or researcher. The main concern of this respondent, like that of the first judge, was consideration of students with reading problems and facilitating their access to easier books.

On the basis of statements made by four librarians, it could be concluded that "easy" books formed an important part of elementary school library collection. However, whether these books were to be kept separate or inter-shelved was a policy that seemed to vary from librarian to librarian. Two librarians explained that they maintained special reading or leisure corners in their libraries where they provided a mini-collection of many types and levels of reading matter for students of all ages. Overall, a desire was expressed by the majority of judges to avoid possible inhibition of easy reading by older pupils, a situation that might arise if a separate collection of these books were maintained.

The only other comment was that by a judge who suggested that paperback sections might have been included.

Majority agreement was expressed for the six items under "By Sections" with the variations noted in the handling of picture and easy books. No additional sub-skills were mentioned.

Arrangement of Materials in the Library : Within Sections. There were sixteen subskills listed in this category.

a. Results. As shown in Table 4.3, the majority of judges agreed that eleven items were basic and five items were non-basic. The items judged to be basic by 60 percent or more respondents were:

Books:

- fiction, alphabetical by author
- non-fiction, by subject
- (biography)
  - alphabetical by biographee
- call number - recognition
  - (parts of call number)
  - (letter identifiers)
  - E (content)
  - R (purpose)
- author's surname (initial)
- shelf labels
  - for section identification
  - for subject identification

Magazines

- alphabetical by title

The items judged to be non-basic were:

Books:

- (non-fiction, by subject)
  - then alphabetical by author
- biography by B
  - or 92
- PB (form)
- author's surname - number

Table 4.3

Frequency and Percent : Basic Level Subskills (LMIL),  
Arrangement of Materials in the Library : Within Sections

n = 5

<u>Basic</u> Level Subskills	Agreement	
	No.	%
<u>Within Sections: Books:</u>		
fiction, alphabetical by author	4	80
non-fiction, by subject (DDC), then alphabetical by author	4 1	80 20
biography by B or 92 then alphabetical by biographee	-- 1 3	-- 20 60
call number (recognition) (parts of call number) (letter identifiers) PB (form) E (content) R (purpose) author's surname (initial) (number identifiers) author's surname (number)	5   2 4 4 4  --	100   40 80 80 80  --
shelf labels:	3	60
for section identification	3	60
for subject identification	3	60
<u>Within Sections: Magazines:</u>		
alphabetical, by title (ignoring articles a, an, the)	4	80

b. Comments. Judges directed their remarks mainly to the designation for "biography" and, to a lesser degree, to "letter identifiers" and "shelf identification".

Two judges considered instruction on biography, whatever its symbolic representation, to be non-basic. Another judge preferred "921" as the symbolic representation, while a fourth favoured "920" and "921". It was suggested by both these judges that the three numbers were more consistent with the Dewey Decimal Classification than 92. Judges 3 and 4 regarded instruction as basic. A fifth judge also checked basic and accepted "92" as the appropriate classification.

Three judges indicated that currently the designations "B", "92" or "920/921" were issues in school library cataloguing. It was explained by one person that a major book jobber had almost settled on "92", then decided on "921" as being the most widely accepted classification. However, it was added, most librarians within this judge's acquaintance were using both 920 and 921 (group biography and individual biography). Overall, the greatest agreement was expressed about "921" as being the most appropriate choice and being at the basic level.

Regarding "letter identifiers" such as "PB" and "R" one judge expressed a preference for using such symbols as little as possible and of the three listed, would use only the "R" symbol. All other judges checked this item as basic.

Of the four judges checking "E" as basic one said this symbol should be considered basic if used in a particular library while another explained that a "+" symbol was substituted for "E" in the school district. The "+" in this instance was intended for use of library monitors and teachers only.

Judges considered "R" as the most useful of the three symbols presented and clearly regarded it as basic. That is, four judges checked "R" as basic and the fifth

said that it would be basic if used in a particular library.

Two judges made comments about shelf labels. One person agreed this item was basic if used in a school library but did feel that it was needed more in the public than school library. The one judge checking non-basic thought that shelf identification was a potential source of limiting a student's search for materials. Preference was expressed for students first locating items in the card catalogue, then using shelf arrangements to find those items. Shelf identification, therefore, was considered to be basic by three judges, basic with some qualifications by a fourth, and as non-basic by a fifth judge.

A few miscellaneous comments were offered under this subcategory. First, it was suggested by one judge that the first two letters and preferably the first three of the "author's surname (initial)" should be considered as basic. Secondly, the item "non-fiction, alphabetical by author" was regarded by one judge as basic in a large collection but non-basic in the average elementary school library.

As to additions to this sub-section, one judge suggested inclusion of a paperback rack (section) even if this section was already implied under fiction and non-fiction books.

Of the sixteen items designated AM/L - Within Sections, then, eleven were judged basic, and five as non-basic. For the biography items (B, 92) that were judged non-basic, the majority of librarians substituted "921" making a total of twelve basic items under this category.

In summary, for Arrangement of Materials in a Library - By and Within Sections, judges expressed agreement about seventeen of twenty-two skills being basic, all six subskills under "by sections" and eleven subskills under "within sections". A substitution



by judges raised the latter category to twelve items, a total of eighteen subskills.

Card Catalogue. This section included twenty-seven subskills, seventeen related to different types of catalogue cards and eight concerned with filing rules.

a. Results. As shown in Table 4.4, of the twenty-seven subskills, the majority of judges agreed that nineteen items were basic, and eight items were non-basic. The nineteen items judged to be basic were as follows:

- outside labels
- guide cards
- author card
  - author - top line
  - surname first
- title of book
- call number (recognition)
- title card
  - title on first line
- subject card
  - subject on first line
  - heading capitalized
- cross-reference cards
  - "see"
- filing rules
  - alphabetical order
  - numbers as if spelled out
  - abbreviations as if spelled out
  - an, a, the, - disregarded at beginning of title

The non-basic items were:

- date of publication (author card)
- subject identifiers - D.D.C. (call no. - parts)
- number identifiers - author's surname :
  - number
- "see also" (cross-reference cards)
- word by word arrangement (filing rules)
- "Mc/Mac" as if spelled "Mac"
- books by before about an author

Table 4.4

Frequency and Percent : Basic Level Subskills (LMIL), Card Catalogue  
n=5

<u>Basic</u> Level Subskills	Agreement	
	No.	%
outside labels	5	100
guide cards (inside trays)	5	100
author card (see also: filing rules)	5	100
author - top line	5	100
surname first	4	80
title of book	3	60
date of publication	2	20
call number (recognition)	3	60
(parts of call number) <sup>2</sup>		
subject identifiers ( D.D.C.	2	40
letter identifiers	2	40
number identifiers, author's		
surname: number	--	--
title card (see also: filing rules)	5	100
title on first line	4	80
subject card (see also: filing rules)	5	100
subject on first line	3	60
heading capitalized	3	60
cross reference cards	4	80
"see"	4	80
"see also"	2	40
filing rules	4	80
alphabetical order	4	80
word-by-word arrangement	2	40
'Mac'/'Mc' as if spelled "Mac"	2	40
numbers as if spelled out	3	60
abbreviations as if spelled out	3	60
books by an author before books		
about an author	--	--
'an, 'a', 'the' in titles disregarded		
(at beginning of title)	3	60

The two items falling between basic/non-basic were letter identifiers (under call number) and word-by-word arrangement (under filing rules). Each subskill was judged basic by two librarians and non-basic by two others. The fifth librarian responded in a way that placed the item somewhere between the two categories. In the end it was decided that since some ambiguity existed these two subskills should be considered as non-basic.

No additions were suggested for the card catalogue cluster.

b. Comments. Six comments arose mainly from judgments about non-basic subskills or those not receiving a clear majority. While "date of publication" under "author card" was judged to be non-basic by the majority of judges, four librarians said they would check this item as basic for non-fiction books. It was decided by the researcher that for a wider validation the two choices "fiction" and "non-fiction" should be included under this item. Since this kind of explicit breakdown had not been used in the validation package, the subskill "non-fiction" was then regarded as an additional item provided by the judges.

One judge felt that "letter identifiers" would be non-basic in an average school library collection but basic in a large collection. He added that he would apply the same criteria to the item "number identifiers, author's surname : number".

Three judges checked "see also" as non-basic expressing their preference for its postponement until high school level. One person felt that instruction about "see also" cards would be basic in elementary schools having large collections.

About "word-by-word arrangement" under "filing rules" one respondent was ambivalent, checking non-basic with a question mark. No firm decision was reached

about this item during the interview.

Commenting about basic level items one participant stated an opinion that only four subskills were basic and the remainder were a somewhat higher level. The four subskills suggested were "outside labels", "author card", "subject card" and "title card". Although all other judges agreed that these items were indeed basic they also selected other items as being at this level.

Overall, there was considerable agreement expressed among judges about the twenty-seven subskills listed for the card catalogue. Nineteen items were judged to be basic by 60 percent or more judges. Eight items were designated as non-basic including "date of publication" and two items for which a clear majority was not obtained (letter identifiers, and word-by-word arrangement). "Date of publication - non-fiction" was considered by all to be a more appropriate item than just "date of publication" and this substitution was made. Based on these judgments, then, there were twenty card catalogue subskills to be included in the revised form of the model.

### Vertical File

Three subskills were listed in the questionnaire, specifically, drawer labels, envelope/folder labels, and alphabetical by subject headings.

a. Results. Table 4.5 shows that the majority of judges agreed that the three subskills were regarded as basic, drawer labels by 100 percent, envelope folder/labels by 80 percent, and alphabetical according to subject headings by 60 percent of the judges.

b. Comment. In the discussion some judges wished to add organization of vertical file "by Dewey Decimal Classification" and suggested that basic instruction should be

Table 4.5

Frequency and Percent : Basic Level Subskills (LMIL), Vertical File  
n = 5

<u>Basic</u> Level Subskills	Agreement	
	No.	%
drawer labels	5	100
envelope/folder labels	4	80
alphabetical by subject headings	3	60
by D.D.C. <sup>1</sup>	3	60
main divisions only <sup>1</sup>	4	80

<sup>1</sup> items added during data collection.

Table 4.6

Frequency and Percent : Basic Level Skills (LMIL),  
Classification by Subject/D.D.C.  
n = 5

<u>Basic</u> Level Skills	Agreement	
	No.	%
the ten general divisions of the D.D.C.	4	80
some subdivisions in relation to a subject area, say, social studies	2	40
to first decimal	1	20
classification by		
fairy tales	1	20
biography	1	20

concerned with "main divisions only". These additions were acceptable to the researcher and considered as useful items for inclusion in a revised model and any further validation.

With an option provided for either "alphabetical by subject headings" or "by D.D.C." according to a particular library's preference, this section was expanded to five items, all of which were considered to be basic by the judges. No other additions were suggested for the vertical file cluster.

### Classification by Subject/D.D.C.

The subskills in this last category were the ten general divisions, some subdivisions, some subdivisions to the first decimal and classification by fairy tales and biography, five items in all.

a. Results. As shown in Table 4.6 the only one item clearly judged to be basic was the ten general divisions of the D.D.C. (80% agreement).

Three items judges as definitely non-basic (20%) were some subdivisions... to the first decimal, and classification by fairy tales, and by biography. Only one person checked each of these subskills. Ambivalence was expressed by one judge about the item "some subdivisions in relation to a subject area, say social studies". Based on discussion about the item it was decided to regard it as a non-basic subskill.

b. Comments (Level). The one judge marking non-basic for "the ten general divisions..." referred again to a preference for inductive learning rather than directed instruction for this subskill.

No clear majority was expressed under either basic or non-basic for "some subdivisions...". While three judges checked basic for the former item, one person

explained that this item was not regarded as so basic as the "ten main divisions...".

One respondent who selected non-basic for this item suggested that learning a few subdivisions could limit student exploration of the collection. It was added that students when seeking information on particular topics, say in social studies, should be encouraged not to consider only that subject, but also to explore related information under such topics as science, mythology and animals.

One of the two judges choosing as basic (D.D.C.) "to the first decimal" explained that this subskill was more appropriate for instruction at upper elementary school level (Grade 7).

Under the final item the one judge checking basic for such categories as "fairy tales" and "biography" said this kind of instruction had been found to be useful to students, helping make them feel independent in locating popular book sections.

On the basis of the data obtained, and comments, it was clear for "Classification by Subject/D.D.C." one subskill should be retained in the model (the ten general divisions) and the other four would become supplementary items in a revised model and future validation. No additions were made by judges.

As well as providing objective data for all subskills and comments on some items, judges also offered a number of related remarks. First, one judge was concerned about the phrase "whatever their age level" in the definition of basic. This qualification was considered to be confusing rather than clarifying as it implied to the judge that very young children would be involved. Deletion of the phrase, it was suggested, would make the selection of basic versus non-basic level skills/subskills an easier task. It was concluded that the phrase should be deleted.

Another judge commented that a definition of "format" would have been useful. It was intended by the researcher that this subskills cluster convey the meaning "organization or layout of the book". It was, however, felt that such a definition might well have been included.

Judges were asked individually if they could suggest terms for "book parts" other than those used in the study, preferably a single term. At the time judges felt that they had no more appropriate terms to suggest.

Judges indicated that they had no problems in using the questionnaire package other than questions about the terms and definitions already mentioned.

#### Summary : The Revised Model

The majority of judges, (60% or more), designated Skills Cluster #1, "Locating Materials in a Library", as being library-based and its five component skills as being basic.

While the majority of judges agreed that the two component skills of Skills Cluster #2, "Locating Content/Data in...Books", were basic they did not consider this cluster to be library-based.

Sixty percent or more judges classified LMIL subskills as follows:

<u>LMIL Skills</u>	<u>Subskills</u>	
	Basic	Non-Basic
Arrangement of the Library	1	--
Arrangement of Materials in the Library		
By Sections	6	--
Within Sections	11	5
Card Catalogue	19	8
Vertical File	3	--
Classification by Subject/D.D.C.	1	4
	<u>41</u>	<u>17</u> (58)



Two of the 17 non-basic subskills were adjusted on the basis of judges' reactions by making substitutions for these items. "Biography by 921" was substituted for "biography by B" or "by 92" and "date of publication - non-fiction" was substituted for "date of publication". These adjustments resulted in 43 basic subskills and 15 non-basic subskills.

To the 43 subskills, 2 items were added under the vertical file category (arrangement by D.D.C. and main divisions only) making a total of 45 basic and 15 non-basic subskills. As shown in Figure 4.7 the tentative model had been refined and altered by 60 percent or more of the panel to consist of 5 skills and 45 subskills under the skills cluster "Locating Materials in a Library".

In analyzing the data it was also noted which of the skills and subskills were identified as basic by an even larger majority of judges, that is, 4 or 5 librarians (80 or 100%). That set of skills, as shown in Figure 4.8, consisted of the 5 component skills of the LMIL cluster and 31 subskills. These results, then, indicated existence of potential categories that were identified as first and second level of basic skills/subskills. "First level" skills/subskills emerged as those designated basic by the larger majority of judges, that is 4 or 5 librarians (80 or 100%), while "second level" skills/subskills emerged as those so designated by the smaller majority, that is, 3 of the 5 judges (60%). Based on these data it was decided that "skills/subskills" falling within the first level of judgments, as shown in Figure 4.8, could be regarded as the most fundamental of the library locational skills.

Conclusions About the Data Analysis: Overall it was concluded by the researcher and her library adviser that through the pilot validation a satisfactory initial revision and refinement of a model of basic library locational skills had been achieved.

Figure 4.7

Revised Model of Basic Library Locational Skills and Subskills Obtained in the Pilot Validation : Agreement Shown by Three out of Five Judges (60 Percent)

## ARRANGEMENT OF THE LIBRARY

simple library floor plan

## ARRANGEMENT OF MATERIALS IN THE LIBRARY

### By Sections

picture books  
easy books  
fiction books  
non-fiction books  
reference books  
magazines/periodicals

### Within Sections:

#### Books:

fiction, alphabetical by author  
non-fiction by subject (D.D.C.)  
biography by 921<sup>a</sup>  
    alphabetical by biographee  
call number - recognition  
    (parts of call number)  
    (letter identifiers)  
        E - content  
        R - purpose  
        author's surname - initial

#### shelf labels

for section identification  
for shelf identification

#### Magazines:

alphabetical by title

## CARD CATALOGUE

outside labels  
guide cards  
author cards  
    author - top line  
        surname first  
    title of book  
    date of publication - non-fiction<sup>a</sup>  
    call number - recognition  
title card  
    title on first line  
subject card  
    subject on first line  
    heading capitalized  
cross-reference cards  
    "see"  
filing rules  
    alphabetical order  
    numbers as if spelled out  
    abbreviations as if spelled out  
    'an' 'a' 'the' rule

## VERTICAL FILE

drawer labels  
envelope/folder labels  
alphabetical by subject headings  
by D.D.C.<sup>b</sup>  
    main divisions only<sup>b</sup>

## CLASSIFICATION BY SUBJECT/D.D.C.

ten general divisions

<sup>a</sup> items substituted during data collection

<sup>b</sup> items added during data collection

Figure 4.8

Revised Model of Basic Library Locational Skills and Subskills Obtained in the Pilot Validation : Agreement Shown by Four out of Five Judges (80 Percent)

## ARRANGEMENT OF THE LIBRARY

simple library floor plan

## ARRANGEMENT OF MATERIALS IN THE LIBRARY

### By Sections

picture books

easy books

fiction books

non-fiction books

reference books

magazines/periodicals

### Within Sections:

#### Books:

fiction, alphabetical by author

non-fiction by subject - D.D.C.

call number - recognition

(parts of call number)

(letter identifiers)

E - content

R - purpose

author's surname - initial

#### Magazines:

alphabetical by title

## CARD CATALOGUE

outside labels

guide cards

author cards

author - top line

surname first

date of publication - non-fiction

title card

title on first line

subject card

cross-reference cards

"see"

filing rules

alphabetical order

## VERTICAL FILE

drawer labels

envelope/folder labels

by D.D.C.

main divisions only

## CLASSIFICATION BY SUBJECT/D.D.C.

ten general divisions

Conclusions About the Final Validation. Conclusions were drawn about the model to be presented in the final validation and about criteria to be used for determining the basic level of items.

It was concluded that when presented to the larger group of judges the model should reflect the following: (1) the skills and subskills cluster selected as being basic by the majority of judges, (2) inclusion of the three items not clearly selected by the judges as basic or non-basic items, (3) inclusion of most non-basic items in supplementary lists, (4) addition or revisions of definitions suggested by judges or perceived to be useful by the researcher, and (5) provision for judges to react to the book locational skills as part of the model.

The conclusion was also drawn that, in establishing criteria for the final set of judgments, the concept of first and second level should be acknowledged. Criteria, it was decided, should be determined for the ranges of agreement constituting a small and a large majority. Addition of these criteria would be useful, it was felt, both for identifying the most fundamental set of items and providing a logical basis for comparing data obtained in the pilot and final validations.

## Chapter 5

### VALIDATION OF THE REVISED MODEL OF BASIC LIBRARY LOCATIONAL SKILLS

Two major topics are discussed in the chapter: (1) procedures used in the validation of the revised model, and (2) analysis of the data obtained in the validation.

#### VALIDATION PROCEDURES

Validation procedures are presented under the following headings: (a) purpose, (b) method, (c) criteria to be applied, (d) the questionnaire package, (e) selection of judges, (f) advance letters, (g) distribution of questionnaire materials, and (h) collection of responses.

Procedures followed in the pilot survey were replicated wherever possible in the second validation. Therefore the discussion highlights any differences in procedures.

#### Purpose of the Validation

The general purpose of the validation was to derive the final version of a basic library locational skills model.

Specifically, the validation was intended to determine: (1) which skills and subskills were judged by the majority of judges to be the basic library locational skills and (2) the extent of agreement between judges in the pilot and second validations about the content of the model.

## Method of Validation

Selected groups of school librarians across Canada were provided with a questionnaire package developed around structured response forms containing items on locational skills and subskills. The final model was to be based on analysis of the data provided by the responses, and on comparisons with the findings of the pilot study. Essentially, skills in the tentative model were to be rated as basic or non-basic and library-based or not necessarily library-based to derive a model of basic library locational skills.

## Criteria to be Applied

The various skills and subskills to be accepted as part of the basic model must, it was decided, be judged to be basic and library-based by 51 per cent of the judges. Any skills and subskills falling below this range of judgments, i.e., below 51 per cent, would be regarded as being at a higher level on the skills continuum.

To provide refinement of the concept "basic" a decision was made to apply criteria to separate Basic : Level 1 and Basic : Level 2. Skills and subskills judged to be basic by 75 to 100 per cent of the respondents were to be considered as being Basic : Level 1, or those library locational skills and subskills that would most logically be learned initially.

Skills and subskills judged to be basic by 51 to 74 per cent of the respondents were to be regarded as Basic : Level 2, or those fundamental library locational skills and subskills that would most logically be learned after the first level skills in the continuum.

A further decision was made that no mention of these criteria should be included in the questionnaire for the final validation on the grounds that the length of the questionnaire package as it had originally been prepared would in itself be a deterrent to its being completed by the judges. The addition of a further concept to be judged might, it was felt, prevent the questionnaires from being returned at all. In any case, it seemed that the addition of criteria in a post-hoc analysis did not in any way distort the goal of the study, to produce a basic library locational skills model. Users of the two additional models, it was felt, need only be aware of their origins. It was concluded, therefore, that the plan to use special criteria could be supported on logical grounds.

### The Questionnaire Package

In the production of the package there were five main steps. The steps were: (1) a revised form of the questionnaire, (2) demographic information on judges, (3) background information on the study, (4) the covering letter, and (5) assembly of the questionnaire package.

A Revised Form of the Questionnaire. This section of the validation package consisted of: (1) statement of purpose, (2) response forms, (3) definitions, and (4) sets of directions. Each aspect is described in terms of its content and organization within sections of the questionnaire.

As in the pilot survey, the statement of purpose dealt with the intent of gathering judges' reactions about the appropriate level and locale of two sets of

skills and the level of two sets of subskills. The purpose was stated in three parts of the questionnaire, in each case preceding the definitions (see Appendix D, Questionnaire III, pp. 257, 264, 274).

Response forms were almost the same in both content and organization as those in Questionnaire II. For the two skills cluster sections "Locating Materials in a Library" (LMIL) and "Locating Content/Data in Materials : Books" (LCIM), the only difference between Questionnaire II and Questionnaire III was placement of the LCIM cluster. In Questionnaire III it was placed after the LMIL subskills, rather than after the LMIL skills cluster. With this slight rearrangement of sections, judges reacted first to the revised basic skills model obtained in the pilot survey, that is, the LMIL skills cluster and its subskills.

The content was the same as in Questionnaire II for the subskills section of "Locating Materials in a Library", except for five items. Based on data from the pilot validation, changes were made in one subskill under "Arrangement of Materials in a Library" (AM/L), two subskills under "Card Catalogue" (CC) and two subskills under "Vertical File (VF) (see Appendix D, pp. 266-268).

The changes made were as follows:



<u>Page</u>	<u>Category</u>	<u>Questionnaire II</u>	<u>Questionnaire III</u>
10	Arrangement of materials	1. biography by B or 92	biography by 921
12	Card Catalogue	1. cross-reference cards	cross-reference cards (recognition)
		2. date of publication	date of publication non-fiction
12	Vertical File	1. alphabetical by subject headings	alphabetical by subject headings or D.D.C.
		2. - - - -	main divisions only

A number of changes were also made in the organization of LMIL subskills, two involving items within sections and three concerned with arrangement or designation of sections. First, to help ensure accuracy, and for convenient reference by judges in writing comments, the numbers 1 to 45 were assigned to those basic subskills selected in the pilot validation (p. 97). For the same reasons, abbreviations of the five LMIL skills categories were inserted in parentheses after the full label, for example, (CC) after "Card Catalogue" and (VF) after "Vertical File".

One change in section organization involved placement of thirteen items eliminated in the pilot validation on a separate page immediately following the forty-five basic subskills. It was designated as a "Checklist of Supplementary Subskills" (see Appendix D, p. 269). Below this list of thirteen subskills, space was left for judges to note any additional subskills they thought should be included. However, in Questionnaire III, no items were listed for judges as possible choices for additional card catalogue subskills as had been done in Questionnaire II, page 13. No pilot

judges had drawn upon these seven items, and a supplementary checklist had been incorporated within LCIM subskills. It was felt, therefore, that enough items had been included for reaction. Any additions made would instead reflect unaided judgments of respondents.

A final minor change in organization arose from re-ordering the LMIL and LCIM sections. In Questionnaire II the LMIL skills and subskills had been labelled Sections A and B respectively. They were now ordered consecutively and, therefore, designated more logically as Section A in Questionnaire III. Section A, then, included the skills, subskills and supplementary subskills of "Locating Materials in a Library" (see Appendix D, 263).

On response forms for the second set of subskills, "Locating Content/Data in Materials/Books", all items were the same in Questionnaires II and III. As an optional addition, however, judges were asked if they could suggest alternate terms for the labels "book parts" (as used in library literature) or "format/bibliographic data" (as used by the researcher).

Three changes were made in organization of LCIM subskills, all concerned with arrangement or designation of sections. First, although the book locational skills had largely been eliminated by the judges of the pilot validation, it was considered important to have the larger group of judges express opinions about the inclusion or exclusion of these same skills. The decision was made to place the book skills in a separate appendix including the original twenty-four skills and some optional subskills. Following the internal organization of Questionnaire II, the five items under "Format" and nineteen under "Bibliographical Data" were placed in the separate appendix.

Using a similar rationale, a decision was made to use the seventeen items from the "not included" category of Questionnaire II, (p. 19), as supplementary content in the LCIM section. On a separate sheet attached to the LCIM subskills three supplementary subskills under "Format" and fourteen under "Bibliographic Data" were listed. Judges were asked to add further subskills if they wished.

Labelling of the book skills and subskills as Section B was the final organizational change in the response forms. LCIM skills became Section B (part 1) of the main questionnaire while LCIM subskills and supplementary checklist were designated as Section B (part 2).

In Questionnaire III, including all objective items dealing with basic level, there were provided for judges' reactions 106 objective items - 5 LMIL skills, 45 LMIL subskills, 13 LMIL supplementary subskills, 2 LCIM skills, 24 LCIM subskills, and 17 LCIM supplementary subskills. There also 2 objective items concerned with locale for instruction, making a total of 108 items. On the response forms in the second validation, then, judges were asked to react to essentially the same content as in the pilot survey. The changes were minor changes in certain items and in re-organization.

Changes in definitions were based largely on the results of the pilot validation, taking into account both objective data and judges' comments. Two definitions were expanded and another modified. A fourth change, addition of a definition, was made to help ensure clarity and balance.

The definitions for Skills Cluster #1, LMIL, was enlarged to include explanations of "arrangement of the library" and "arrangement of materials in the library". Within Skills Cluster #2, LCIM, definitions were added of its component skills "format" and "bibliographic data" and of "materials". As suggested by a pilot judge, the phrase "whatever their age level" was removed from the definition of basic subskills. With the addition of a brief explanation and example of the term "subskills", changes to the definitions were completed.

The placement of definitions following the statement of purpose and preceding directions was maintained in Questionnaire III.

Minor alterations were made in wording and numbering of directions for responding to the questionnaire both in those directions preceding each set of response items and branching directions between sections. (see Appendix

When all parts of the questionnaire had been completed, they were assembled into a main questionnaire section (Enclosure #2) and an appendix with a table of contents page attached to each. The LMIL skills and subskills were printed in goldenrod colour, the LCIM sections in green, and the rest of the questionnaire on white paper.

Demographic Information on Judges. It was considered essential to gather accurate information about respondents as a basis for (1) preparing a list of judges' names, position and place of employment to be included in the study, and (2) reporting judges' characteristics as part of the data analysis. In the pilot validation it had been possible to gather such information in an interview. It now became necessary to design a form to accompany Questionnaire III. The same type of identification data was requested in both validations.

On the form constructed, the purpose was stated, with the indication in parentheses that the judge's name need not be included on this sheet. Names were not needed since judges could be identified by the researcher from the inside address of the covering letter when questionnaire packages were returned.

Four categories of information were requested: place of employment, position, experience and training, with various options given under the last three categories. A checklist format was employed under each heading, whenever possible.

The content was arranged on a single sheet and entitled "Background on Judges" (see Appendix D, pp.250). This form, along with the main questionnaire and its appendix, constituted three of the four enclosures of the package.

Background Information on the Study. As in the pilot validation a "Background Information" section was developed to give librarians necessary frames of reference for the study as part of the understanding needed for making their judgments. The content and organization in both validations was basically the same, with incidental adjustments in wording or format and two additions.

One addition was simply the updating of progress under "Plan of the Study and Status to Date" while the other was the inclusion of a brief statement of the rationale for the study, information that had been communicated verbally to pilot judges.

With the addition of a table of contents page, the background information section was assembled as Enclosure #1 of the package (see Appendix D, p. 251).

The Covering Letter. When the four parts of Questionnaire III had been prepared, a covering letter was written to invite selected librarians to participate and to outline the task and contents of the questionnaire package. Essentially, there were no differences

in organization of the letter in the two validations and only slight changes in content. For example, in the Questionnaire III covering letter, reference was made to the pilot survey, additional telephone information was included, and four rather than two enclosures were mentioned (see Appendix D, p. 248).

Assembly of the Questionnaire Package. Six items were assembled in a two-pocket portfolio ready for mailing to each potential judge. In one pocket were placed a folded self-addressed kraft envelope for returning the package, a copy of "Background Information", a form for gathering demographic data on judges and, on top, a covering letter. In the other pocket were inserted a copy of the appendix and, on top, a main questionnaire section.

### Selection of Judges

For this part of the validation, criteria for selecting judges was first established and then procedures were followed for identifying those librarians who met the criteria.

Criteria for Selecting Judges. Three general and three specific criteria were outlined for selecting judges.

A first general guideline provided that all judges should be responsible for leadership in some aspect of school library curriculum development and implementation. The three groups considered to have a definite leadership role were those employed at (1) the department of education supervisory level, (2) the university level, and (3) the school district supervisory level. These were designated as the three groups of judges for the validation. For brevity in reporting data it was decided to use "provincial",

"university" and "school district" as the labels for identifying the three groups of judges.

It was felt that department of education personnel would probably be responsible for directing development of curriculum, those at university level for providing instruction about its development, and those in school supervision for guiding its implementation. It was also assumed that all three groups would be in influential positions to initiate curriculum projects and offer guidance on their development and use.

When the first general guideline had been determined and weighed in regard to identifying all potential judges, the decision was made to limit the validation to Canadian librarians. The adoption of this plan made it feasible in terms of available resources and the time available to identify most qualified librarians within each category of respondent. Also, since it was estimated that between fifty to one hundred qualified Canadian librarians could be located, the decision raised no obstacles to the goal of establishing reasonable content validity for the skills model.

The final general guideline was concerned with the parts of Canada to be included in the second survey. Since the pilot validation had been done by British Columbia school librarians it was decided that the final validation should involve school librarians in all other provinces and territories of Canada - i.e., the provinces of Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland/Labrador, and the Yukon Territory, and the Northwest Territories.

Specific criteria beyond the general criteria for selecting judges largely reflected those used in the previous validations. Desired characteristics for judges were: (1) five or more years experience in library work, (2) library training in the form of

a school library major, B.L.S. degree, M.L.S. degree or comparable training, (3) elementary school library experience or presently working with elementary teacher-librarians, and (4) ideally, elementary school teaching experience.

Respondents from the university level category, as well as having the three main characteristics, were to be responsible for teaching a course about elementary school libraries, that is, a course that, in part, involved instruction about school library curriculum development and its application. Provincial school library supervisors, owing to the leadership role in programme development, were to be requested to participate whether or not they met the first qualification.

Procedures Used in Selection of Judges. The specific purpose of the procedures was identification of Canadian librarians within each of the three proposed categories of respondents and selection of those who met the various criteria outlined for the validation. This process took approximately two months beginning in late April, and ending past mid-June, 1976.

Procedures mainly involved location of data sources and gathering of relevant information from these sources. The search focussed on three approaches - a hand search for print information, consultation with local librarians and contact with provincial library supervisors.

First, the university library collection was searched, including library school holdings, as a source of useful directories and listings of Canadian school librarians. Any information found, however, was not specific enough in terms of position, training and experience of the librarians listed to be pertinent to the projected selection of judges.



Consultation with several local librarians, including most of the pilot judges who were very helpful, proved to be very profitable in obtaining names and general information about the Canadian school library scene. Especially useful were three lists of personnel, one at each level - provincial, university and school district (Provincial Supervisors, 1974; C.S.L.A., 1975; Jenkinson, 1975). Although this information was not entirely current or complete it did provide valuable guidance for further exploring the three groups of potential judges.

Based on information from the 1974 list of provincial supervisors, letters were written or contacts made with each person identified at the department of education level. In the letter a brief description was given of the study and the proposed validation and the need for judges of three types was explained. On a hand-printed enclosure, supervisors were asked to respond to four questions, three about identification and relevant qualifications of school district supervisors and one about identification of university lecturers. On this enclosure reference was made to the 1975 C.S.L.A. Directory for obtaining information about supervisors while for university personnel a list of individuals tentatively identified as having the required characteristics were given for verification and possible additions. (see Appendix 2 p. )

Contact other than by letter was also made with some department of education librarians. In all, nine letters were written, two personal contacts made at a local library conference, and nine long-distance calls completed. As a result of these various communications, responses were received from supervisors or their assistants in the nine target provinces and two territories. The information, usually a letter and list of names, was extremely useful in identifying the names for the final group, which included ten provincial librarians, sixteen university lecturers and fifty-four school library supervisors.

With the exception of Quebec and the Yukon Territory, representation was obtained for at least one or more of the three groups in all provinces outside British Columbia and in the Northwest Territories.

Besides the three main procedures followed, other personal contacts were made and letters written as a means of identifying university and school district personnel. These communications were generally more helpful in verifying than in extending information gathered from provincial librarians and local judges.

### Advance Letters

A two-page advance letter was prepared during the period of package assembly and initial states of identifying judges. Like the covering letter, its main purpose was to invite certain school librarians to participate as independent judges in validating the skills model.

The content dealt in part with relevant information about the study, the perceived contribution of judges and some mechanics of responding to the questionnaire. Librarians were also informed about how judges were being selected and of the two ways in which their participation would be acknowledged. Lastly, an explanation was made about distribution procedures and the general nature of the validation task (see Appendix D, p.p246).).

For all school district supervisors in Nova Scotia and some in Ontario - the last groups of librarians to be contacted - a one-page handwritten form letter was prepared and attached to the advance letter. Apologies were made in this letter for contacting individuals so late in the school year (Nova Scotia, June 16; Ontario, June 19). Brief reference was made to the composition of the three groups as well as

to the number of selected judges in Nova Scotia and Ontario respectively. Encouragement was given for each person's participation so that his/her province might be adequately represented in the survey. In conclusion, the researcher indicated when packages might be expected to arrive, and a range of time suggested for responses to be returned.

Unlike the pilot validation, then, in which personal contact was feasible, Questionnaire III involved preparation of an advance letter and, for about twenty librarians, inclusion of an informal supplement to that letter.

#### Distribution of Questionnaire Materials

Eighty sets of questionnaire materials were distributed by mail from late April through June 22, 1976. The period of distribution was governed by availability of information about qualified judges.

In most cases advance letters preceded the questionnaire package by from five to seven days. Towards the end of the school year in June, less time was allowed between letter and package and sometimes the period was as little as two days. However, the principle was adhered to of preparing the way for the questionnaire.

Distribution of follow-up materials is discussed in the next section and under the "analysis of data" section of this chapter.

#### Collection of Questionnaire Responses

In the covering letter librarians had been requested to return all materials to the researcher when their responses had been completed. Packages were to be mailed

in a self-addressed envelope enclosed in the pocket portfolio.

Initial Responses. The period for collection of data ranged from late May into early fall. Originally, it had been estimated that most data would be returned through late May, June and July. However, it was apparent that the establishment of groups would continue into June and it was realized that, considering year-end responsibilities and summer holidays, few questionnaires would be returned during the summer. The period for returns was, therefore, extended through August and September.

General Follow-up. About a month after distribution of the last sets of questionnaires, as returns began to taper off, follow-up letters were sent. Forty letters were distributed, mostly of a form letter type. In a few instances, where correspondence had been received from a librarian, a personal reply seemed to be more appropriate.

The follow-up letter simply encouraged librarians to consider completing the questionnaire if they had not already done so. Enclosed were a stamped self-addressed envelope and a checklist. On the checklist judges were first asked to check whether or not they would plan to complete the questionnaire. If the response was to be "Yes", they were asked to decide from among five time options when they might respond. Options ranged from July to the "deadline", September 5. Alternatively, if the response was to be "No", judges were asked to indicate by a check whether or not they would return unused materials. Below the four choices a note was added reminding judges to return the covering letter for identification purposes or to otherwise identify themselves (see Appendix E, p. 280).

During late August and early September, another type of follow-up was sent. Extension notices, mostly on pre-stamped postcards, informed judges that a week or

two more could be taken for returning material. Nineteen were sent making, in all, fifty-nine follow-up forms.

With the distribution of extension notices in early September, procedures to obtain validation data were essentially complete. The only other procedures involved during the validation period were communications with some judges about omissions of certain responses in their returns.

### ANALYSIS OF DATA : FINAL VALIDATION, QUESTIONNAIRE III

For the final validation three sets of data were analyzed: (1) numbers of returns from the questionnaire survey, (2) characteristics of judges, and (3) the questionnaire responses on skills and subskills.

In this section of the chapter the analysis is described, and the description followed by a presentation of results of each analysis.

#### Design of the Analysis

The first set of data, that is, the data on numbers of returns, was processed by hand. As the questionnaires arrived the data were tallied, including returns obtained through follow-up letters and notices.

Responses to questionnaire items were processed partly by hand and partly by computer - depending on the type of response involved. Hand processing was used mainly for subjective data and a few irregular objective items. Subjective data provided by librarians in letters or response forms were organized into several categories and subcategories. Within each category, if it was considered relevant, names of

judges were listed and the essence of their remarks noted. This indexing procedure provided a useful overview and means of clustering comments.

The bulk of the objective data lent itself readily to computer processing. Included were 8 items of background information, 110 objective items on skills and sub-skills sections, and 5 other items, mainly "additions". The 123 responses and identification data were coded and transferred to Fortran computer forms. A master form was also prepared as a reference to each item of data.

UBC MVTAB (The University of British Columbia Multivariate Contingency Tabulations) (1974) was the computer programme used for data analysis. The programme is one commonly employed for analyzing questionnaire data in the social sciences.

As applied to Questionnaire III, the programme considered two variables at a time and constructed a bivariate frequency table for each pair of responses. The variables of groups and questionnaire items were therefore accommodated. MVTAB also counted the number of subjects who gave each response and produced tables of horizontal, vertical and total percentages for each bivariate entry.

Small bivariate tables were appropriate, that is, tables with a maximum size of 8 x 8 and in which variable values eligible for tabulation were 0, 1, ..., 7. The majority of Questionnaire III responses had been given values of either 1 or 2 for basic or non-basic while a few responses had a value of 1, 2 or 3, such as those referring to positions held by judges. Irregular responses were coded as '6'. These four values (1, 2, 3 and 6), then, were considered in the type of table selected.

#### Analysis : Number of Returns from the Questionnaire Survey

For each set of data throughout the section, results are reported by group and total percentages rounded to the nearest whole number. On all tables the name of

each group is abbreviated to "P" (provincial), "U" (university) and "SD" (school district). The key to these symbols is presented only on the first table.

As shown in Table 5.1, three groups of data were obtained, those received (1) on original mailing, (2) with follow-up letters, and (3) with follow-up extensions. Of these categories the largest percentage of returns was received without follow-up during the period of late May, 1976 until the close of the survey in mid-September, 1976.

For the original mailing category Table 5.1 shows that by groups the return was 50 percent for the provincial group, 63 percent for the university group, and 43 percent for school district supervisors. In this May to September period, then, 48 percent of the judges responded by providing either a completed questionnaire or notice that they would not be participating in the survey.

Follow-up letters sent through July and August brought another 10 percent response from provincial judges, 25 percent from university judges and 24 percent from school district judges. The eighteen additional questionnaires represented 23 percent of possible returns and with returns already received totalled fifty-six questionnaires or approximately a 71 percent return.

Extension notices sent in late August and early September brought a further 33 percent response from provincial librarians and 13 percent from the school district group, giving overall about 13 percent added response. Combined with previous returns the ten additional sets brought the total to sixty-six sets of data, about 83 percent of returns possible.

Of the sixty-six questionnaire responses 92 percent provided data that were useable in the analysis. These returns were provided by 81 percent of provincial

Table 5.1

Number and Percent of Questionnaire Returns : Responses by Groups<sup>a</sup>

	P n=10	U n=16	SD n=54	Total n=80
<b>Original Mailing</b>				
May	1			1
June	3	9	21	33
July	1	1	1	3
September			1	1
	5 (50.0)	10 (62.5)	23 (42.6)	38 (48.0)
<b>Follow-up Letters</b>				
(July/August)	1 (10.0)			
	1 (10.0)	4 (25.0)	13 (24.1)	18 (22.5)
<b>Follow-up Extensions</b>				
(August/September)	3 (33.3)		7 (13.0)	10 (12.5)
<b>Total Returns</b>				
U Useable and Non-useable Returns	9 (90.0)	14 (87.5)	43 (79.6)	66 (82.5)
Useable Returns	8 (80.0)	13 (81.3)	40 (74.1)	61 (76.3)
Non-useable Returns	1 (10.0)	1 (6.2)	3 (5.5)	5 (6.3)

<sup>a</sup>Groups : P = provincial, U = university, SD = school district.



judges, 81 percent of university judges and 74 percent of school district supervisors.

The remaining 8 percent of the data was non-useable. That is, judges had indicated that they would not be completing their questionnaires. Of the five judges providing non-useable data one was in the provincial group, one in the university group, and three in the school district group.

Four of the five judges explained that either travel plans or work commitments prevented them from participating in the survey. The fifth judge requested more comprehensive information about the study as a prerequisite to responding. Further background on some aspects of the study was given by letter to this fifth judge but apparently did not provide the specific background sought, and no further communication was received.

Seventeen percent of librarians did not respond in any way. Of the fourteen non-respondents, one person was in the provincial group, two were at university and eleven were part of the school district group.

When final returns had been received and the distribution analyzed, it was concluded that response by librarians had been most satisfactory. In fact, considering potential hindrances to a successful outcome (selection and mailing delays, time of year) the response, it was felt, could be regarded as excellent. Not only did 92 percent of the 66 respondents provide useable data, but 100 percent of the librarians contacted subsequently about minor omissions in questionnaire data responded promptly with the information requested.

## Analysis : Characteristics of Judges

Data were collected from judges on professional background. As shown in Table 5.2 data on background was categorized broadly as "experience" and "training". "Experience" was further categorized by "number of years service" and "type of experience".

Experience : Number of Years' Service. Table 5.2 shows that of the eight provincial supervisors providing data, 25 percent indicated they had less than five years experience and 75 percent indicated they had more than five years' experience.

Of the thirteen librarians in the university group, 100 percent indicated that they had more than five years' experience.

Data provided by forty school district respondents showed that 20 percent had less than five years' experience, 10 percent had five years, and 70 percent had more than five years' experience.

In total, the three groups ranged from 16 percent with less than five years service, through 7 percent with five years' service to 77 percent with more than five years. Of the sixty-one judges responding, then, about 84 percent (51 judges) had five or more years' library experience while only 16 percent (10 judges) indicated they had less than five years' experience. It seems appropriate to suggest, on the basis of these data, that the validation of the questionnaire reflects the judgment of a well-experienced group of school librarians.

Experience - Type. All judges were asked about elementary school library experience. The results, as shown in Table 5.2 indicated that 38 percent of the provincial

Table 5.2

Judges' Characteristics : Percentages by Groups  
n = 61

Characteristics	P n=8	U n=13	SD n=40	Total
<b>Experience</b>				
Number of years				
less than five	25.0		20.0	16.4
five			10.0	6.6
more than five	75.0	100.0	70.0	77.0
<b>Type</b>				
elementary school	37.5	41.7	81.6	67.2
library experience				
elementary school	25.0	45.5	66.7	57.0
teaching experience				
pre-service course, elementary <sup>a</sup>	(20.0)	92.3	(12.5)	92.3
<b>Training</b>				
library major	50.0	46.2	24.0	16.4
B.L.S. <sup>b</sup>	50.0	54.6	27.5	34.4
M.L.S. <sup>c</sup>	25.0	53.9	37.5	39.3
alternate training	25.0		10.5	10.0

<sup>a</sup> Required only of the university group

<sup>b</sup> Bachelor of Library Science

<sup>c</sup> Master of Library Science

supervisors and 42 percent of the university librarians had such experience. Of the forty school district supervisors involved, two did not respond to this item. Of the thirty-eight who did respond, 82 percent indicated that they had such experience. In combination, 67 percent of the fifty-nine responding judges answered that they had elementary school library experience.

As an additional desired characteristic all judges were asked to indicate whether or not they had elementary school teaching experience. Table 5.2 shows that 25 percent of the provincial group had this qualification. Of the eleven university participants responding, 46 percent had this characteristic while 67 percent of the thirty-nine school district judges had elementary school teaching experience. No response to this item was received from two university judges and one school district supervisor. Overall, 57 percent of the fifty-eight responding judges replied affirmatively to this item.

For this third type of experience only individuals at university were asked to respond. These judges were to indicate whether or not they had taught a pre-service course on elementary school libraries. Although these data were not requested from other judges, their responses were noted wherever given.

Of the thirteen university judges providing data, 92 percent checked this item. Within the other two groups, 20 percent of the provincial supervisors and 12 percent of school district personnel replied that they taught such a course. It was assumed by the researcher that percentages for these two groups might have been higher had the information been specifically sought from them.

Data for one other experience qualification was not collected directly on the background information form. All judges were to be currently or recently working with elementary school librarians, a characteristic considered implicit in positions held within all groups and reflected in certain background items (such as that on a pre-service course). When all background data had been gathered it seemed that all judges except one university librarian did meet this qualification. The judge in question, when contacted about this matter, confirmed the lack of such qualification. Of the sixty-one judges, then, 100 percent of the provincial group, 92 percent of the university group and 100 percent of the school district group had had experience in working with elementary school teacher-librarians.

Training. Table 5.2 shows that there were four possible categories of training - a library major, B.L.S., M.L.S., or alternate training. A number of librarians indicated that they had two library degrees or an academic degree and library training. The results presented reflect the main information needed from judges, i.e., the highest library degree held, and the identification of the category into which the individual's training best fitted.

Table 5.2 shows that 50 percent of the eight provincial supervisors had a B.L.S. degree, 25 percent had an M.L.S., and 25 percent had other training. Of the two librarians who indicated they had other training one had training considered comparable to a B.L.S., and had been granted permission to begin an M.L.S. programme. The other person had taken library training in the United Kingdom.

Data provided by the thirteen university judges showed that 46 percent had B.L.S. degrees and 54 percent had M.L.S. degrees. Of the six librarians with a B.L.S., three added that they had a master's degree in either Arts or Education. Of the seven librarians with an M.L.S., one also indicated an advanced M.L.S., and another an Ed.D. with a minor in library science.

Among school district supervisors 24 percent had a library major, 28 percent had a B.L.S. degree, 38 percent a M.L.S., and 11 percent indicated another type of training. Where Ontario specialist certificates in school librarianship were mentioned by judges, and no category checked, the data were added to the "library major" category.

For the four respondents with alternate responses, training could be categorized as "library" for two persons and "non-library" for the other two. In the library category one person had taken four school library courses, all that were available in the local area, and the other had taken library training in the United Kingdom. In the non-library category one judge had taken an audio-visual major and the other a master's degree in curriculum and instruction with a media major.

For the total group, it was found, a library major, including Ontario specialist certificates, were held by 16 percent, a B.L.S. degree by 34 percent, an M.L.S. by 39 percent, and alternate library training by 10 percent. Of the judges with alternate training, four had background in librarianship and two were trained in audio-visual or media programmes.

In sum, 84 percent of the respondents had five or more years' experience. The criterion of experience as elementary school librarians or the alternate qualification of working with elementary school librarians was met by 67 percent and 92 percent of the judges respectively. Pre-service courses on elementary schools library programmes were taught by 92 percent of the university librarians.

Library training ranging from some coursework to an advanced M.L.S. degree was held by 97 percent (59) of the judges. The most commonly reported training was in the B.L.S. and M.L.S. categories, accounting for 73 percent of the total response.

Based on all data received it was concluded that judges met the desired characteristics to a high degree both in the experience and training categories.

#### Analysis : Questionnaire Responses on Skills and Subskills

Results of the data analysis are presented in order of questionnaire response sections, i.e., (1) Skills Cluster #1, Locating Materials in a Library (LMIL), (2) Subskills Cluster #1, (3) Skills Cluster #2, Locating Content/Data in Materials #2, and (4) Subskills Cluster #2.

Data analysis for the total group, i.e., the provincial, university and school district responses in combination, is reported in three ways: These ways are:

1. identification of items judged basic by the majority of judges, i.e., more than 50 percent of all respondents;
2. categorization of these items as either Level One or Level Two-Basic skills/subskills; i.e., items for which agreement was expressed by either 75 to 100 percent of respondents (Basic : Level One) or by 51 to 74 percent of respondents (Basic : Level Two).

3. identification of items judged non-basic by the majority of judges.

Data analysis by-groups, i.e., the provincial, university and school district responses considered separately, is presented mainly in terms of items judged to be non-basic by one or more groups.

Titles and contents of tables are kept concise with wording abridged and abbreviations used for frequently repeated items. The one abridged item requiring explanation here is the term "ability to use...". Whenever this phrase appears in tables or text it means ability to use in locating... .

Brief reference is also made to subjective data obtained in the validation.

Section A : Skills Cluster #1 : Locating Materials in a Library (LMIL). For the skills sections there are items on both level and locale for instruction.

Level. As shown in Table 5.3 the five skills were judged basic by the majority of judges. Of these skills, four were considered basic by 75 to 97 percent of the total group. They were:

arrangement of the library	91.7%
arrangement of materials in the library	96.7%
Card catalogue	90.2%
Dewey Decimal Classification	75.0%

These skills, then, would all be categorized as Level One - Basic Skills.

The remaining component skill, the vertical file, was judged basic by 57 percent of the respondents and was, therefore, considered as a Level Two - Basic Skill.



Table 5.3

LMIL : Basic Level Skills - Percentages by Groups  
n = 61

Skills	P n=88	U n=13	SD n=40	Total
Arrangement of the Library (A/L)	62.5	84.6	100.0	91.7
Arrangement of Materials in the Library (AMIL)	87.5	100.0	97.4	96.7
Card Catalogue (CC)	87.5	84.6	92.5	90.2
Vertical Files (VF)	75.0	38.5	59.0	56.7
Dewey Decimal Classification (DDC)	87.5	69.2	74.4	75.0

By-groups analysis showed that the same four skills were considered to be basic by the majority of judges. The fifth skill, ability to use the vertical file, while judged basic by provincial and school district groups, received only a 39 percent agreement from the university group.

For the LMIL skills cluster, then, results showed that all five skills were checked as basic by 51 percent of the total group. The by-groups analysis, however, showed that the majority of university judges regarded the vertical file as a non-basic skill.

Locale. Judgments about locale for instruction are shown in Table 5.4. A library-based (LB) locale was selected by 90 percent of all respondents while 8 percent checked not necessarily library-based (NNLB) and 2 percent marked both LB and NNLB.

Table 5.4

LMIL : Locale for Instruction – Percentages by Groups  
n = 61

Criteria for Locale	P n=8	U n=13	SD n=40	Total
Library-based (LB)	87.5	84.6	92.5	90.2
Not necessarily library-based (NNLB)	12.5	7.7	7.5	8.2
Alternate Response	--	7.7	--	1.6

By-groups analysis showed agreement expressed for a library-based locale (LB) by 88<sup>88</sup> percent of the provincial group, 85 percent of the university group and 93 percent of the school district group. Thirteen percent or fewer of the judges in any group considered instruction to be not necessarily library-based (NNLB) and 8 percent of the university group regarded instruction as being either LB or NNLB.

Both total and group percentages, therefore, showed clear agreement about a library locale being most appropriate for the LMIL skills.

Based on their reactions to the LB column, a group of fifty-four (90%) of the judges were to complete the LMIL subskills section. However, this group was made even larger by the reactions of certain judges. First, the two judges who had checked both the LB and NNLB columns were also to respond to the subskills section thereby increasing the group to fifty-six judges (about 92%). Secondly, another three judges who had checked NNLB voluntarily completed the subskills section bringing the total number of respondents to fifty-nine judges (about 96%). Of those

responding>NNLB yet completing the subskills, one judge was in the provincial group and two in the school district group. Apparently, despite their>NNLB responses, these individuals were interested in expressing judgments about which were the basic subskills. Two judges (about 4%), then, did not react to the LMIL skills. These librarians, one in the university group and one in the school district group responded>NNLB and, according to the directions provided, were not required to complete the subskills section. Fifty-nine judges in all, then, responded to the LMIL subskills section.

Section A : Subskills Cluster #1 : Locating Materials in a Library. For both subskills sections, items are concerned only with level as being basic or non-basic. The LMIL cluster consisted of forty-five core subskills and thirteen supplementary subskills. categorized as appropriate under the five components skills: (1) arrangement of the library, (2) arrangement of materials in the library (by and within sections), (3) card catalogue, (4) vertical file, and (5) classification/D.D.C.

Arrangement of the Library. Results of data for the one subskill, "ability to use a simple library floor plan", are shown in Table 5.5.

Table 5.5

LMIL Subskills : Arrangement of the Library - Percentages by Groups  
n = 59

Subskill Item	P n=8	U n=12	SD n=39	Total
A/L : simple library floor plan	87.5	36.4	76.9	70.7

This subskill was judged as basic by 71 percent of all respondents, that is, a Level Two - Basic Subskill. By-groups analysis showed that 88 percent of provincial judges and 77 percent of school district judges considered the subskill to be basic, while only 36 percent of the university group so judged it. Obviously the university group did not consider this item to be appropriately placed among most fundamental subskills.

Ability to use a simple library floor plan, then, was judged as a basic-level subskill by the majority of librarians (71%) and, therefore, within the range of a second-level basic subskill.

No items were added to this category.

Arrangement of Materials in the Library: In Table 5.6 are shown the data obtained for the nineteen subskills of this cluster, six subskills in the "by sections" category and thirteen in the "within sections" category.

The six items concerned with Arrangement of Materials - By Sections were judged as basic by the majority of respondents, that is, picture books, easy books, fiction books, non-fiction books, reference materials, and magazines/periodicals. For the total group percentages of agreement ranged from 80 to 98 percent. All subskills, therefore, met the criteria for Level One - Basic.

By-groups analysis also showed agreement on these six subskills as being Level One - Basic with percentages of agreement ranging from 77 percent for the university group to 87 percent for the provincial group.

Of the thirteen subskills under Arrangement of Materials - Within Sections, it is shown that twelve items were judged basic by the majority of librarians. Eight of these items, so judged by 77 to 97 percent of the librarians, met the criteria for Level One - Basic subskills. These were:

Table 5.6

LMIL Subskills : Arrangement of Materials in the Library - Percentages by Groups  
n = 59

Subskill Item	P n=8	U n=12	SD n=39	Total
<u>By Sections</u>				
Picture books	87.5	91.7	94.9	93.2
Easy books	87.5	100.0	94.9	94.9
Fiction books	87.5	91.7	87.4	94.9
Non-fiction books	100.0	91.7	100.0	98.3
Reference materials	87.5	91.7	89.7	89.8
Magazines/periodicals	87.5	76.9	83.3	79.7
<u>Within Sections</u>				
<u>Books</u>				
Fiction, alphabetical by author	100.0	83.3	94.9	93.2
Non-fiction by subject (D.D.C.)	100.0	83.3	87.1	88.1
Biography by 921	87.5	45.5	69.2	67.2
alphabetical by biographee	87.5	50.0	64.1	64.4
Call number (recognition)	100.0	91.7	82.0	86.4
Parts of call number:				
Letter identifiers				
E (content)	62.5	75.0	81.1	77.2
R (purpose)	62.5	50.0	75.7	68.4
Author's surname (initial)	100.0	58.3	82.0	79.3
Number identifiers				
Author's surname (number)	50.0	25.0	44.7	41.1
Shelf labels	100.0	91.7	94.6	94.6
For section identification	100.0	91.7	97.4	96.6
For shelf identification	100.0	75.0	81.6	82.5
<u>Magazines</u>				
Alphabetical, by title (ignoring articles a, an, the)	75.0	63.0	59.0	62.1

Books:

fiction, alphabetical by author	93%
non-fiction by subject - D.D.C.	88%
call number - recognition	86%
(parts of call number)	
(letter identifiers)	
E - content	77%
author's surname - initial	79%
shelf labels	95%
for section identification	97%
for shelf identification	83%

For four of the twelve subskills agreement was expressed by 62 to 68 percent of the respondents placing them within the category of Level Two - Basic subskills.

Books:

biography by 921	67%
alphabetical by biographee	64%
(letter identifiers - call no.)	
R - purpose	68%

Magazines:

alphabetical by title	62%
-----------------------	-----

One skill, "author's surname (number)" was considered basic by only 41 percent of the total group.

Analysis by-groups showed that three other subskills were checked by less than 51% percent of the university librarians, placing these items in a non-basic category in the opinion of this group. These items were:

biography by 921	46%
alphabetical by biographee	50%
(letter identifiers)	
R - purpose	50%

Viewed in combination, the results of data analysis for Arrangement of Materials - By and Within Sections showed that the majority of judges expressed

agreement about eighteen of the nineteen subskills being basic, all six items under "by sections" and twelve "within sections" items. The one subskill designated as non-basic was the author's surname - number as part of the call number.

Card Catalogue. In Table 5.7 results are shown for the twenty card catalogue subskills. All items were judged basic by 51 percent or more of the total group.

Of the twenty subskills listed, fourteen were checked as basic by 78 to 98 percent of the judges, that is, within the Level One - Basic category. These subskills were:

outside labels	98%
guide cards	83%
author card	83%
author - top line	81%
surname first	83%
title of book	91%
call number - recognition	95%
title card	86%
title on first line	86%
subject card	91%
subject on first line	86%
heading capitalized	78%
(filing rules)	
alphabetical order	88%
'an', 'a', 'the' rule	85%

The remaining six subskills were judged basic by 55 to 66 percent of respondents or as items belonging in the Level Two - Basic category. These were:

date of publication : non-fiction	55%
cross reference cards - recognition	61%
'see'	60%
filing rules	66%
numbers as if spelled out	56%
abbreviations as if spelled out	56%

Table 5.7

LMIL Subskills : Card Catalogue - Percentages by Groups  
n=59

Subskill Items	P n=8	U n=12	SD n=39	Total
outside labels	100.0	91.7	100.0	98.3
guide cards (inside trays)	87.5	58.3	89.7	83.1
author cards	87.5	90.9	79.5	82.8
author-top line	87.5	82.0	75.0	81.4
surname first	100.0	66.7	84.2	82.8
title of book	100.0	91.7	89.5	91.4
date of publication				
non-fiction	75.0	27.3	59.0	55.2
call number (recognition)	100.0	100.0	92.3	94.9
title card	87.5	83.3	87.2	86.4
title on first line	87.5	66.7	92.1	86.2
subject card	87.5	100.0	89.5	91.4
subject on first line	87.5	75.0	89.7	86.4
heading capitalized	87.5	58.3	81.6	77.6
cross reference cards (recognition)	62.5	50.0	64.1	61.0
"see"	62.5	50.0	62.2	59.7
filing rules	75.0	60.5	80.0	66.1
alphabetical order	87.5	91.7	87.2	88.1
numbers as if spelled out	62.5	50.0	56.4	56.0
abbreviations as if spelled out	62.5	50.0	56.4	56.0
'an', 'a', 'the' in titles disregarded (at beginning of title)	85.7	83.3	84.7	84.5



Analysis by-groups showed that provincial and school district groups would consider all items basic while the university group checked five items as non-basic, one item as definitely non-basic and four items as marginally non-basic. These were:

non-fiction - date of publication	27%
cross-reference card - recognition	50%
'see'	50%
(filing rules)	
numbers as if spelled out	50%
abbreviations as spelled out	50%

Results of data analysis for 51 percent or more of the total group, then, showed that the twenty subskills of the card catalogue cluster were judged as being basic items in the skills model.

Vertical File. For the vertical file it was originally intended that results would be reported for four rather than five subskills. However, many judges responded to both parts of what was intended as an either/or item, that is, item 43 - alphabetical by subject headings or by D.D.C. Since the additional data obtained was considered to be useful the decision was made to regard the D.D.C. item as a forty-sixth subskill in the model.

Of the five items listed in Table 5.8 all were judged basic by the total group. Items falling within the Level One - Basic range were "drawer labels" (90%), "envelope/folder labels" (88%), and "alphabetical by subject headings" (85%). Those falling within the Level Two - Basic range were arrangement "by D.D.C." (54%) and D.D.C. by "main divisions only" (69%).

Analysis by-groups showed that all items were judged basic by the provincial and school district groups. The last two items, however, were considered non-basic by university judges. Thirty-three percent agreement was expressed by these judges about the D.D.C. item and 36 percent about the main divisions only item.

Overall, percentage response by the total group placed the five subskills into the basic skills category, i.e., Level One and Two - Basic combined.

Table 5.8

LMIL Subskills : Vertical File and Dewey Decimal Classification -  
Percentages by Groups  
n = 59

Subskill Items	P n=8	U n=12	SD n=39	Total
Vertical File				
drawer labels	100.0	83.3	89.7	89.8
envelope/folder labels	100.0	91.7	84.6	88.1
alphabetical by subject				
headings	100.0	91.7	79.0	84.5
<u>or</u> by D.D.C.	66.7	33.3	56.0	54.1
main divisions only	83.3	36.4	76.5	68.6
Dewey Decimal Classification				
the ten general divisions				
of the D.D.C.	100.0	54.6	82.1	79.3

Classification by Subject/D.D.C. Table 5.8 shows that 79 percent of the respondents considered the one item "ten general divisions..." as basic and, therefore, among the Level One - Basic subskills.

By groups analysis indicated that the majority of judges would assign the item to a basic skills model with agreement ranging from 100 percent of the provincial judges, 82 percent of the school district group to 55 percent of the university group. That is, in the judgment of the provincial and school district groups, the item would be at Level One, while the university group's judgments would place the item within Level Two -

## Basic subskills.

Checklist of Supplementary Subskills. Results of the supplementary skills checklist are shown in Table 5.9. It is shown that only three of the thirteen subskills were judged as basic by the total group. These were "non-fiction, alphabetical by author" (57%), "subject identifiers, D.D.C." (53%), and "the ability to use classification by particular categories such as fairy tales, biography etc." (59%). These items would, therefore, be considered as Level Two - Basic subskills.

Analysis by-groups showed that the university group regarded all supplementary items as non-basic.

Provincial judges indicated that all other items were non-basic with three exceptions, all within the card catalogue cluster. These were:

subject identifiers - D.D.C. (call no.)	63%
word-by-word arrangement (filing rules)	63%
'Mac/Mc' rule	63%

The provincial group would, therefore, reassign five supplementary subskills to the model all within the Level Two - Basic category.

The school district group judged all other items as non-basic with the following five exceptions:

letter identifiers (AM/L)	51%
letter identifiers (CC)	59%
number identifiers	51%
cross-reference cards - "see also"	51%
some subdivisions... social studies (D.D.C.)	54%
some subdivisions... social studies (D.D.C.)	54%

Table 5.9

LMIL Subskills : Supplementary Checklist - Percentages by Groups  
n = 59

	P n=8	U n=12	SD n=39	Total
ARRANGEMENT OF MATERIALS IN A LIBRARY				
<u>within sections : books</u>				
non-fiction, alphabetical by author	87.5	33.3	59.0	57.0
letter identifiers - PB	50.0	16.7	51.3	44.1
CARD CATALOGUE				
date of publication - fiction	25.0	8.3	33.3	27.1
call number - parts				
subject identifiers (D.D.C.)	62.5	8.3	64.1	52.5
letter identifiers - R, E etc.	37.5	25.1	59.1	49.6
number identifiers				
author's surname/number	25.0	25.0	51.3	42.4
cross-reference cards -				
"see also"	50.0	25.0	51.3	45.8
filing rules				
word-by-word arrangement	62.5	33.3	51.3	49.6
Mac/Mc as if spelled 'Mac'	62.5	25.0	48.7	45.8
books by an author before				
books about an author	37.5	--	25.6	22.0
CLASSIFICATION BY SUBJECT (D.D.C.)				
some subdivisions in relation to a				
subject area, say social studies	25.0	8.3	53.8	40.7
to first decimal	37.5	--	35.9	28.8
ability to use classification by parti-				
cular categories such as fairy tales,				
biography, etc.	50.0	25.0	74.3	61.0

While some of these items are barely within the Level Two – Basic criteria, the results do, however, show that at least a small majority of the school district group would reassign eight supplementary subskills to the model. Apparently the provincial and school district groups were more inclusive in their allocation of basic subskills than the university group.

Of the thirteen subskills, then, results for the total group show that three subskills were judged as basic, all within the range of Level Two – Basic. These were:

non-fiction, alphabetical by author	(AM/L)	58%
subject identifiers (D.D.C.)	(CC)	53%
ability to use classification...	(D.D.C.)	61%

Based on these data, the three subskills were returned to the skills model.

Skills Cluster #2, Locating Content/Data in Materials:  
Books : Standard Fiction/Non-Fiction

Data are presented first by level, then by locale for instruction. One provincial judge omitted responses under both categories.

Level. Table 5.10 shows that the majority of the sixty judges checked the two component skills, "format" and "bibliographic data", as basic. However, format was so designated by 88 percent of the judges (Level One – Basic) while bibliographic data received a 60 percent positive response (Level Two – Basic).

Table 5.10

LCIM : Basic Level Skills - Percentages by Groups  
n=61

Skill Items	P n=8	U n=13	SD n=40	Total
Format	100.0	76.9	89.7	88.3
Bibliographic Data	62.5	46.2	64.1	60.0

Considered by-groups, both items were judged basic by provincial and school district groups. However, only 46 percent of the university librarians checked bibliographic data as basic, therefore placing it with a non-basic level of subskills.

No additions were suggested for this skills cluster.

Locale. As shown on Table 5.11, "Locating Content/Data in Books" was considered to be basic by only 17 percent of the sixty respondents, and not necessarily library-based by 80 percent. Three percent of the judges checked both LB and NNLB.

Table 5.11

LCIM : Locale for Instruction - Percentages by Groups  
n=60

Criteria for Locale	P n=7	U n=13	SD n=40	Total
Library-based (LB)	14.3	7.7	20.0	16.7
Not necessarily library-based (NNLB)	85.7	92.3	75.0	80.0
Alternate response	--	--	5.0	3.3

Analysis by-groups showed that a majority of librarians in each group judged the locale to be not necessarily library-based with agreement ranging from 92 percent for the university group, 86 percent for the provincial group, to 75 percent for the school district group.

Based on judges' responses to the locale for book locational skills, it was decided that book skills and subskills should be eliminated from the model. The subskills appendix was completed by only a small percentage of judges and the results are not reported.

In addition to the objective data, a considerable amount of subjective data were received in the form of letters or notations on the response forms. These data can be largely categorized under comments about (1) the study, (2) the questionnaire, and (3) library instruction. Comments on response forms were directed mainly to specific items, including suggestions for additions. Some reference was also made to definitions or directions.

The main concern of the researcher in examining data was to identify possible appropriate additional skills. Any such items recommended by the majority of judges might have had direct bearing for the final model. However, after the data had been categorized and studied it was concluded that no additions should be made, since items were usually suggested by one or two librarians and often had been covered in another part of the study. For example, under the LMIL skills cluster, one librarian suggested as an addition "alphabetization", an item considered for the tentative model, but not included.

### Summary : The Final Model

The majority of the total group of judges (51% or more) designated Skills Cluster #1, "Locating Materials in a Library", as being library-based and its five

component skills as being basic.

While the majority of judges agreed that the two component skills of Cluster #1, "Locating Content/Data in...Books", were basic they did not consider this cluster to be library-based.

In responding to the 46 core subskills and 13 supplementary subskills of Cluster #1 (LMIL) 51 percent or more judges classified subskills items as follows:

<u>LMIL Skills</u>	<u>Core Subskills</u>	
	Basic	Non-Basic
Arrangement of the Library	1	--
Arrangement of Materials in the Library		
By sections	6	--
Within sections	12	1
Card Catalogue	20	--
Vertical File	5	--
Classification by Subject/D.D.C.	1	--
	<u>45</u>	<u>1</u> (46)
	Supplementary	Subskills
	<u>3</u>	<u>10</u> (13)
	48	11 (59)

As shown in Figure 5.1, the final model consisted of 5 LMIL basic skills and 48 subskills under the skills cluster "Locating Materials in a Library".

By-groups data analysis showed that 51 percent or more of each group agreed upon the following numbers of skills and subskills as being basic.

<u>Group</u>	<u>LMIL Skills</u>	<u>Subskills</u>
Provincial	5	45
School District	5	44
University	4	37



Figure 5.1

Model of Basic Library Locational Skills and Subskills Obtained in the Final Validation,  
Levels One and Two : Agreement shown by 51 to 100 Percent of the Total Group

## ARRANGEMENT OF THE LIBRARY

simple library floor plan

## ARRANGEMENT OF MATERIALS IN THE LIBRARY

### By Sections

picture books  
easy books  
fiction books  
non-fiction books  
reference books  
magazines/periodicals

### Within Sections:

#### Books:

fiction, alphabetical by author  
non-fiction by subject - D.D.C.  
non-fiction, alphabetical by  
author  
Biography by 921  
alphabetical by biographee  
call number - recognition  
(parts of call number)  
(letter identifiers)  
E - content  
R - purpose  
author's surname - initial  
shelf labels  
for section identification  
for shelf identification

#### Magazines:

alphabetical by title

## CARD CATALOGUE

outside labels  
guide cards  
author card  
author - top line  
surname first  
title of book  
date of publication - non-fiction  
call number (recognition)  
subject identifiers - D.D.C.  
title card  
title on first line  
subject card  
subject on first line  
heading capitalized  
cross-reference cards  
"see"  
filing rules  
alphabetical order  
numbers as if spelled out  
abbreviations as if spelled out  
'an' 'a' 'the' rule

## VERTICAL FILE

drawer labels  
envelope holder labels  
alphabetical by subject headings  
by D.D.C.  
main divisions only

## CLASSIFICATION BY SUBJECT/D.D.C.

ten general divisions  
ability to use some classifications  
by particular categories... .

Apparently the university group was the most stringent about placement of items into a basic or first level skills model.

The data were also analyzed to determine which were the Level One - Basic skills/subskills, that is, those items judged basic by 75 to 100 percent of the judges. As shown in Figure 5.2 this Level One model consists of 4 skills and 32 subskills. The vertical file (shown in parentheses) was excluded from this form of the model since it received only 57 percent agreement by the total group as being a basic skill.

On the skills chart, asterisks indicate the skills and subskills for which agreement was expressed by 75 to 100 percent of each group as well as the total group. Figure 5.2 shows that there are 2 component LMIL skills and 25 subskills. This set of skills/subskills would, then, be considered the most fundamental items of the final model.

A comparison was made of the models obtained through the pilot and the final validations. The basic model derived from judgments by 60 percent of the pilot judges (Figure 4.7, p.97) and by 51 percent or more of the final judges (Figure 5.1) differed only by 3 subskills. The revised model consisted of 5 LMIL skills and 45 subskills while the final model consisted of 5 LMIL skills and 48 subskills. The 3 additional subskills in the final validation were items on the supplementary checklist judged as basic and re-assigned to the model, specifically non-fiction alphabetical..., subject identifiers, D.D.C., and some divisions, ...D.D.C.

The model derived from judgments by 80 or 100 percent of the pilot judges and by 74 to 100 percent of the final judges (Level One - Basic) differed by one component skill and by several subskills. The revised (pilot) model was comprised of 5 LMIL skills (AL, A/ML, CC, VF and the D.D.C.) and 31 subskills while the final model was comprised of 4 LMIL skills (AL, A/ML, CC and the D.D.C.) and 32 subskills. The two

Figure 5.2

Model of Basic Library Locational Skills and Subskills Obtained in the  
Final Validation, Level One: Agreement Shown by 75 to 100 Percent  
of The Total Group

## ARRANGEMENT OF THE LIBRARY

### \*ARRANGEMENT OF MATERIALS IN THE LIBRARY

#### By Sections

- \* picture books
- \* easy books
- \* fiction books
- \* non-fiction books
- \* reference books
- \* magazines/periodicals

#### Within Sections:

##### Books:

- \* fiction, alphabetical by author
- \* non-fiction by subject - D.D.C.
- \* call number - recognition  
(parts of call number)  
(letter identifiers)  
E - content  
author's surname - initial
- \* shelf labels
- \* for section identification
- \* for shelf identification

##### Magazines:

-----

## \*CARD CATALOGUE

- \*outside labels
- guide cards
- \*author cards
  - \* author - top line  
surname first
- \* title of book
- \* call number - recognition
- \*title card
  - title on first line
- \*subject card
  - subject on first line
  - heading capitalized  
(filing rules)
- \* alphabetical order
- \* 'an' 'a' 'the' rule

## (VERTICAL FILE)

- \* drawer labels
- \* envelope/folder labels
- \* alphabetical by subject headings

## CLASSIFICATION BY SUBJECT/D.D.C. ten general divisions

\*items considered basic by 75 to 100 percent of each of the three groups (Level One)

Level One – Basic models shared 4 component skills and 25 subskills in common.

Summary: In this part of the chapter the analysis of data was presented for number of returns and responses to the questionnaire items. Of the questionnaires returned 92 percent provided useable data and 8 percent provided non-useable data.

Background information included data about judges' education and experience. Judges were apparently well qualified in terms of training and experience.

Responses to the questionnaire showed that essentially few changes were made in the model obtained through the pilot validation. In its final form, the model as judged by the majority of judges (51 percent or more) consisted of 5 LMIL skills and 48 subskills. The model as judged by the larger majority of judges (74 to 100 percent) consisted of 4 skills and 32 subskills. It was concluded that a valid model of basic library locational skills had been identified.

## Chapter 6

### SUMMARY AND CONCLUSIONS

The purpose of the study was the development and pilot validation of a model of basic library locational skills for print sources. This chapter includes (1) a summary of findings, (2) the conclusions reached, (3) a statement of suggested implications, and (4) recommendations for further studies.

### SUSUMMARYOF FINDINGS

The study involved three validations: a quality of the search validation; a pilot validation of the model by five British Columbia school library educators; and Canada-wide validation by sixty-one Canadian school library educators.

#### Findings : Quality of the Search Validation, Questionnaire I

In a validation of the quality of the search for school library literature, the quality was judged to be satisfactory. That is, the five librarian judges considered the sources appropriate and the search comprehensive enough to provide a valid information base for developing the proposed skills model.

#### Findings : Pilot Validation of the Skills Model, Questionnaire II

A tentative skills model was submitted to five local school librarians for their reactions. It consisted of two major skills clusters: (1) Locating Materials in the Library (LMIL) and (2) Locating Content/Data in Materials (LCIM). The first skills cluster (LMIL) included 5 skills and 58 subskills. The second skills cluster (LCIM) included

2 skills and 24 subskills. Judges were asked to rate the content of the model as Basic or Non-Basic and Library Based or Not Necessarily Library Based according to definitions provided for these terms.

As shown in Figure 6.1 the form of the skills model agreed upon by 3 out of 5 (60 percent) of the judges consisted of one major skills cluster "Locating Materials in the Library" (LMIL), its 5 component skills and 45 subskills.

Figure 6.1 also shows that 4 or 5 (80 or 100 percent) of the judges expressed agreement about the five component LMIL skills and 31 of the subskills as being basic.

It was concluded that data from the final validation should be analyzed to make it possible to present the skills and subskills in terms of a Level One - Basic and Level Two - Basic criterion. Level One - Basic skills were to be those skills regarded by 75 to 100 percent of the judges as basic. Level Two - Basic skills were to be those skills regarded by only 51 to 74 percent of the judges as basic.

All respondents in the pilot validation agreed that the second major skills cluster, "Locating Content/Data in Materials : Books - Standard Fiction/Non-Fiction" (LCIM) should not be considered to be library-based. That is, they felt this cluster was not appropriate for inclusion in a basic library locational skills model.

The revised form of the model obtained in the pilot validation was then prepared for the final validation and another questionnaire package constructed. Response forms were almost the same in content and organization as those in Questionnaire II with some adjustments made according to results of objective and subjective data from the pilot validation. Basically, definitions were adjusted and others added, the LCIM subskills section that had been eliminated from the model was included as an appendix, and all subskills were assigned numbers for more convenient reference and identification.

Figure 6.1

Model of Basic Library Locational Skills and Subskills Obtained in the Pilot Validation : Agreement Shown by 60 Percent and 80 Percent of the Five Judges

\*ARRANGEMENT OF THE LIBRARY

- \* ~~simple~~ library floor plan

\*ARRANGEMENT OF MATERIALS IN THE LIBRARY

By Sections

- \* picture books
- \* easy books
- \* fiction books
- \* non-fiction books
- \* reference books
- \* magazines/periodicals

Within Sections:

Books:

- \* fiction, alphabetical by author
- \* non-fiction by subject - D.D.C.
- \* biography by 921
  - alphabetical by biographee
- \* call number - recognition
  - (parts of call number)
  - (letter identifiers)
    - E - content
    - R - purpose
    - author's surname - initial
- \* shelf labels
  - for section identification
  - for shelf identification

Magazines:

- \* alphabetical by title

\*CARD CATALOGUE

- \* outside labels
- \* guide cards
- \* author cards
  - \* author - top line
  - \* surname first
  - title of book
- \* date of publication - non-fiction
- call number - (recognition)
- \* title card
  - \* title on first line
- \* subject card
  - subject on first line
  - heading capitalized
- \* cross-reference cards
- \* "see"
- \* filing rules
  - \* alphabetical order
  - numbers as if spelled out
  - abbreviations as if spelled out
  - 'an' 'a' 'the' rule

\*VERTICAL FILE

- \* drawer labels
- \* envelope/folder labels
  - alphabetical by subject headings
  - by D.D.C.
- \* main divisions only

\*CLASSIFICATION BY SUBJECT/D.D.C.

- \* ten general divisions

\*items judged basic by four judges (80 percent)

### Findings : Final Validation, Questionnaire III

For the final validation the revised skills model was submitted to three groups of Canadian school librarians (provincial, university and school district groups), eighty judges in all. This version of the model included the skills cluster "Locating Materials in the Library" (LMIL) and its accompanying 5 skills and 45 subskills, and the skills cluster, "Locating Content/Data in Materials" (LCIM) with its accompanying 2 skills and 24 subskills. Judges were again asked to react to the content of the model as being Basic/Non-Basic and Library-Based/Not Necessarily Library-Based.

As shown in Figure 6.2 the final form of the skills model agreed upon by 51 percent or more of the sixty-one judges completing the questionnaire consisted of one major skills cluster "Locating Material in the Library" (LMIL), its 5 component skills and 48 subskills. Three of the subskills from the supplementary checklist had been reassigned to the model by these judges. The items shown comprise both Level One and Level Two - Basic skills and subskills or those considered to be basic by 51 to 100 percent of the judges.

Figure 6.2 also shows that 75 to 100 percent of the judges expressed agreement about the 4 component LMIL skills and 32 of the subskills as being basic. The vertical file was the component skill eliminated from the final model. The items shown comprise only Level One - Basic skills and subskills or those considered to be the most fundamental learnings by the larger majority of judges.

The majority of judges in the final validation agreed that the second major skills cluster, "Locating Content/Data in Materials : Books - Standard Fiction/Non-Fiction" (LCIM) should not be regarded as library-based. This set of skills was rejected as not necessarily library-based as it had been in the pilot validation.



Figure 6.2

Model of Basic Library Locational Skills and Subskills Obtained in the Final Validation, Levels One\* and Two - Basic Items : Agreement Shown by 51 to 100 Percent of the Total Group

\*ARRANGEMENT OF THE LIBRARY

simple library floor plan

\*ARRANGEMENT OF MATERIALS IN THE LIBRARY

By Sections

- \* picture books
- \* easy books
- \* fiction books
- \* non-fiction books
- \* reference books
- \* magazines/periodicals

Within Sections:

Books:

- \* fiction, alphabetical by author
- \* non-fiction, alphabetical by author
- \* non-fiction by subject - D.D.C.
- \* biography by 921
- \* alphabetical by biographee
- \* call number - recognition
- (parts of call number)
- (letter identifiers)
- E - content
- R - purpose
- author's surname - initial
- \* shelf labels
- for section identification
- for shelf identification

Magazines:

alphabetical by title

\*CARD CATALOGUE

- \*outside labels
- \*guide cards
- \*author cards
- author - top line
- surname first
- title of book
- date of publication - non-fiction
- call number (recognition)
- subject identifiers - D.D.C.
- \*title card
- title on first line
- \*subject card
- subject on first line
- heading capitalized
- cross reference cards
- "see"
- \*filing rules
- \*alphabetical order
- numbers as if spelled out
- abbreviations as if spelled out
- 'an' 'a' 'the' rule

VERTICAL FILE

- \*drawer labels
- \*envelope/folder labels
- \*alphabetical by subject headings by D.D.C.
- main divisions only

CLASSIFICATION BY SUBJECT/D.D.C.

- \* ten general divisions
- some subdivisions in relation to a subject area, say social studies

\*Level One - Basic : 75 to 100 percent agreement

## CONCLUSIONS

Conclusions were drawn within the limitations of the study about both the product obtained and the processes followed in obtaining that product.

### The Product

There were two major conclusions drawn about the product attained.

1. The model in its final form can be considered a valid model of basic library locational skills for print sources as they are perceived by groups of Canadian school library education specialists in provincial, university and school district supervisory positions.
2. The data obtained in the final validation show that there is a difference in the reactions of school library specialists to the teaching of library skills according to the role of the specialist. If the model were differentiated in terms of occupation of library educators the model produced by university library educators would differ somewhat from the model accepted by the majority of judges in the study. The university teacher of school library education appears to choose fewer skills and subskills to be taught at beginning levels (in this case 4 LMIL skills and 37 subskills) than does the provincial library supervisor (in this case 5 skills and 45 subskills) or the school district library supervisor (in this case 5 skills and 44 subskills). The reasons for this difference are not clear in either literature examined for the study or subjective data provided by respondents.

## The Processes

A number of conclusions were also drawn about processes used in the study.

1. Given the "state of the art" in library, reading and social studies education the processes followed in developing and validating the skills model were considered to be appropriate.
2. The quality of the search validation was both necessary and productive. There seems to have been a tendency in educational circles to take on faith the source from which taxonomic skills models are developed. With recent new emphasis on objective-based instruction and measurement, the quality of the sources for models becomes critical.
3. The pilot validation supplied important information and yielded clear benefits that improved the quality of the final validation.
4. The final validation could have suffered from lack of information about potential judges, since printed sources of such information are lacking in Canada. The information communication systems that were made available generously through personal contacts with interested school library educators throughout the country and energetic follow-up procedures made it possible to bring the final validation to a successful conclusion.

## IMPLICATIONS

There are certain implications of the study for classroom teachers and for writers of both theoretical literature and practical guidance on school library skills instruction.

1. Since librarians classified skills of locating content in books as not necessarily library-based, classroom teachers should not assume that librarians will take full responsibility for the teaching of the skills of locating information in books. This set of skills may be taught as a library skill for standard materials found in libraries but should be also taught as part of a classroom programme.
2. The existing library literature may be more all-encompassing than it ought to be. It is clear, for example, that many subskills included in library skills lists are, in fact, rejected by school library specialists as being specifically library skills.
3. The dysjuncture evident between the model developed and the content of the library literature suggests the need for more explicit models of library processes as a basis for curriculum building in that instructional area.
4. Inconsistencies found within and across literature sources suggest that any proposed skills programme should be accompanied by a clear rationale for the selected skills content, and its organization, with a theoretical overview showing parts of the programme, the relationship among those parts, and definitions of terms. Essentially, library literature would profit from the injection of the curriculum literature and the literature related to objectives-based instruction.
5. Library skills models seem to be required in which learnings are not specifically assigned to grades but instead are arranged by levels of increasing difficulty. Such models would be useful in accommodating students at all ages whatever their individual level of skills mastery.

## RECOMMENDATIONS FOR FURTHER STUDIES

There are a number of recommendations that are suggested by the study.

1. The model produced in this study should be validated in the United States using comparable position groups so that comparisons can be made between the results obtained.
2. The process of producing the remaining necessary models of the subprocesses of the research and reporting process should be undertaken, with at least three models produced beyond the locating task, that is, models of collecting, synthesis and reporting tasks.
3. An attempt should be made to adapt the model produced in this study for specific application to the subject areas of social studies, science or mathematics.
4. A parallel model of basic library locational skills for audio-visual sources should be produced and validated.
5. For the locating task itself, a number of models should be produced including those at intermediate and advanced levels.
6. The model as produced should be used as an information base for the production of tests and instructional materials, and their experimental evaluation.
7. The work begun on the book locational skills should be extended to produce validated models of basic and higher levels of difficulty.
8. A study should be done to explore the differences between the responses of school librarians and university teachers of school librarians to the content of the model. The differences seem to be marked and seem to warrant further investigation.

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## APPENDICES

	Page
APPENDIX A. LIST OF JUDGES FOR THE THREE VALIDATIONS	169
APPENDIX B. QUESTIONNAIRE I : VALIDATION OF THE INFORMATION BASE	179
APPENDIX C. QUESTIONNAIRE II : THE PILOT VALIDATION OF THE SKILLS MODEL	219
APPENDIX D. QUESTIONNAIRE III : THE FINAL VALIDATION OF THE SKILLS MODEL	246
APPENDIX E. FOLLOWUP LETTER : THE FINAL VALIDATION	281



## APPENDIX A

### LIST OF JUDGES FOR THE THREE VALIDATIONS

## Librarians Who Participated as Independent Judges in the Three Validations

### Questionnaire I : Validation of the School Library Literature Base, August, 1975

COGGIN, Mary

Supervisor of Instruction (Libraries)  
School District No. 36, Surrey  
Surrey, B.C.

HURT, Howard

Head, Curriculum Laboratory  
Faculty of Education  
The University of British Columbia  
Vancouver, B.C.

McLEAN, Nancy

Assistant Professor, School Libraries Dept.  
Faculty of Education  
The University of British Columbia  
Vancouver, B.C.

RAHRICK, Donald

Head Librarian, John Oliver Secondary School  
School District No. 39, Vancouver  
Vancouver, B.C.  
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TROUNCE, Douglas

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Questionnaire II : Pilot Validation of a Model of Basic Library Locational Skills,  
January, 1976

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As in Questionnaire I:

COGGIN, Mary

HURT, Howard

RAHRICK, Donald

TROUNCE, Douglas

and:

DAVIES, Joyce

Librarian, Canyon Heights Elementary School  
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Questionnaire III : Second Validation of a Model of Basic Library Locational Skills  
May-September, 1976

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ANGLIN, Patricia

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Humber - St. Barbe Roman Catholic School Board  
Corner Brook, Newfoundland

ARMSTRONG, Catherine

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 Moose Jaw Board of Education  
 Moose Jaw, Saskatchewan
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 Saskatoon, Saskatchewan
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 High School Librarian and Acting School Librarian of the  
 Barrington Municipal Board  
 Barrington Passage, Shelborne County, Nova Scotia
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 Calgary Board of Education  
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 Kamsack, Saskatchewan
- MARSHALL, Penny  
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- MOORE, Larry A.  
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- NEILL, Samuel  
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 The University of Western Ontario  
 London, Ontario



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Peterborough, Ontario

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Fort Garry School Division  
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Media Centre  
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ROSS, Margaret

Supervisor of Library Service, Department of Libraries  
Halifax Board of School Commissioners  
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RUF, June I.

Librarian  
School Unit Library, S.U. #15  
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Eriksdale, Manitoba

SAWATZKY, Elsie

Supervisor of Libraries, Central Library  
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SHENNAN, Grace

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Yorkton, Saskatchewan

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Department of Education  
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Toronto, Ontario

WALLACE, Eileen

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The University of New Brunswick  
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WIEDRICK, Laurie (Dr.)

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Faculty of Education  
The University of Alberta  
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Kenora Board of Education  
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## APPENDIX B

### QUESTIONNAIRE I : VALIDATION OF THE INFORMATION BASE

All sections were printed on white paper.

Reading Education Department,  
University of British Columbia,  
July 30, 1975.

Dear

Earlier this month you kindly agreed to act on my study as an independent judge to assess the quality of a search for sources on library skills instruction at the elementary school level. I am grateful for your willingness to assist in this major aspect of my doctoral study. As I indicated, during our discussion, the validity of the proposed model of basic library locational skills and any future measure of those skills will, of course, depend a good deal on the quality of the sources on which both are based. Your assistance in judging that quality is, therefore, very important.

The overall plan for obtaining your reactions to the search is to request that you: 1) examine all enclosures in this envelope, 2) draw conclusions about your reactions to the quality of the search for sources and 3) to respond verbally to a questionnaire, a copy of which is enclosed and which will be presented in a personal interview. Detailed information for completing these three steps is provided in various enclosures of this package.

Within the package you will find three items. The first is an outline of general information about the study which is intended to provide a context for your judgments. It includes six sections: a) statement of the problem, b) nature and purpose of the search, c) nature and purpose of judgments, d) description of the various lists of sources, and e) description of the questionnaire including an explanation of the term quality. Specific directions for making judgments are incorporated into the questionnaire itself.

The second item is a copy of the questionnaire which has been constructed to gather your judgments about the quality of the search. This is your working copy to use, if you wish, to record your reactions as you examine the relevant enclosures.

The third item is a list of sources, both, the locational sources and the sources located in the search. These enclosures, provide, I think, much of the general and specific information for making the necessary judgments.

You are asked to take a two-week period to examine the enclosed materials and draw your conclusions. Towards the end of the second week I will contact you about making an interview appointment. During the interview I will follow the response pattern of "Questionnaire I" in directing questions and recording your judgments on my copy of the questionnaire.

If you have any queries at all about procedures, please contact me at home in the evenings or through the Reading Education secretary, Hut 03, during the day

Thank you again for your willingness to participate in the study. I hope that you will find the time spent on judgments worthwhile and of interest in relation to your work.

Yours sincerely,

Shirley Henslowe

SH/jdj  
Enclosures (3)

## Enclosure #1

GENERAL INFORMATION ABOUT  
THE STUDY

a. Statement of the Problem	p. 1
b. Nature and Purpose of the Search	p. 2
c. Nature and Purpose of Judgments	p. 3
d. Description of the "Lists of Sources"	p. 4
e. Description of "Questionnaire I"	p. 6

(Questionnaire I)  
S. Henslowe  
July, 1975

Henslowe/75

1.

a. Statement of the Problem

The purpose of the study is to develop a model of basic library locational skills for print sources at the elementary school level. A skills model will be produced through analysis of library literature, curricula, published instructional materials and tests. The model that emerges from this process will be submitted to a number of school librarians for validation through independent judgments.

It is hoped that the study will make a contribution to research in the area of library skills instruction as it is carried on through elementary school library and reading curricula. A practical application of the model is seen to be its incorporation into an initial unit on research and reporting activities for intermediate grade level in a subject area such as social studies.

In order to react to the appropriateness of sources located, judges should, I feel, be aware that the skills which seem to be emerging from literature sources as the basic library locational skills are those concerned with the arrangement of the library, the card catalogue and the Dewey Decimal Classification.

b. Nature and Purpose of the Search

The search was undertaken to locate information on library skills instruction from three curricular areas -- library, reading and social studies education. Attention was especially focussed on the basic library locational skills and their various prerequisite skills.

The search was considered necessary to provide a valid information base for constructing a model of basic library locational skills.



Henslowe/75  
3.

c. Nature and Purpose of Judgments

You are one of five educators, trained in school librarianship, who has been asked to form a panel of independent judges. As implied by the term "independent", it is asked that reactions be made without consultation among judges either during or following judging procedures.

Judges are being asked to react to the quality of the search for sources on library skills instruction at the elementary school level. The referent quality, as described fully in Section 5 below, is considered to be directly related to the content validity or representativeness of basic library locational skills in the proposed model.

Henslowe/75  
4.

d. List of Sources

The "List of Sources" is divided into five main categories and two sub-categories. Within these categories items are arranged alphabetically and numbered for easy reference during your examination and the interview.

The five main categories are according to types of materials: 1) articles, 2) books and instructional materials, 3) curriculum guides, 4) tests and 5) theses and dissertations. Originally, the intention was to list books and instructional materials separately but it was found that a clear distinction could not always be made between these materials in relation to the study.

Under each of the five broad categories are two sub-categories. They are: 1) locational sources and 2) sources located. For each category of material the locational sources which are listed include some general sources, but mainly such specific references as certain indexes or bibliographies. In this category only titles, and not full bibliographic data, are given for standard locational references such as Education Index.

For each category of material the sources located are listed item by item in fairly full bibliographic form. All

Henslowe/75

5.

items which are listed have been ordered, received, will be ordered or are accessible in various U.B.C. resource centres.

Of the two sub-categories the listings of sources located are generally the more extensive and detailed in content. Reactions to this second group of sources will, therefore, probably be the more demanding in terms of judgments.

Henslowe/75  
6.

e. General Information About Questionnaire I,  
including the term Quality

Quality. In the context of the questionnaire quality is defined as having two dimensions or bases for making judgments, specifically, the appropriateness and the comprehensiveness of sources.

The first dimension, appropriateness, refers to the suitability of sources in relation to available literature and to the stated problem. The second dimension comprehensiveness, refers to the adequacy of coverage or scope of sources in relation to existing literature and the stated problems.

Other Information. The overall format of the questionnaire is designed to correspond with that of the "List of Sources". Therefore, for each of the five types of materials there is a separate section on the questionnaire. And within each of the five sections separate reactions are requested for both "Locational Sources" and for "Sources Located".

The required response under "Locational Sources" is a "Yes" or "No" with a request that additional titles be identified if judges feel that relevant sources have been omitted.

"Yes" is to be checked if judges consider the search to

Henslowe/75  
7.

have been of adequate quality --, i.e. locational sources were both appropriate and comprehensive in relation to the type of material sought and the stated problem.

For "Sources Located" the required response is to be made on a three-point Likert-type scale. A separate rating scale is provided for each of the two dimensions of quality. For the first dimension, appropriateness, 1 means "not appropriate" (NA), 2 means "Undecided" (U), and 3 means "appropriate" (A). For the second dimension, comprehensiveness, 1 means "not comprehensive" (NC), 2 means "undecided" (U), and 3 means "comprehensive" (C). In this sub-section judges are also asked to identify any additional titles that they consider to be useful sources for the study, and to offer critical comments about any aspect of the search under each type of material.

If the sources are judged to be both appropriate and comprehensive it will mean that the quality of the search has been satisfactory. On this basis it will be assumed that an adequate pool of information has been located and that I, therefore, may proceed with: 1) collecting specific data from the sources located and 2) constructing the proposed model.

To avoid any confusion in judges' minds about the section on identification of additional titles I should explain, that even though judges may rate a particular category as being

Henslowe/75

8.

appropriate and comprehensive, i.e. a rating of 3, they may still wish to suggest some supplementary titles of sources. Any such suggestions, will of course, be most welcome.

In summary, the reactions to the appropriateness and comprehensiveness, will indicate the extent to which the quality of the search as reflected in the "List of Sources" and relation to the stated problem is acceptable to each of the five judges.

## Enclosure #2

## QUESTIONNAIRE I

ARTICLES	p. 1
BOOKS AND INSTRUCTIONAL MATERIALS	p. 2
CURRICULUM GUIDES	p. 3
TESTS	p. 4
THESES AND DISSERTATIONS	p. 5

(Questionnaire I)  
S. Henslowe  
July, 1975

Directions: On the basis of your library training, experience and knowledge of library literature you are asked to express your reactions to statements about the quality of the search (appropriateness and comprehensiveness). As described in materials accompanying the questionnaire you are asked to react to locational sources and sources located under five categories of materials.

Under "Locational Sources" for each type of material you are asked to react by checking a "yes" or "no" response. The information desired here is whether or not all important sources were covered in the search. If, in your opinion, some sources were missed, you are asked to identify those locational sources under the "Additional Titles" section.

Under "Sources Located" you are asked to express on a three-point Likert-type scale the extent of your agreement with statements on the appropriateness (suitability) and comprehensiveness (adequate coverage or range of the sources).

The rating scales are set up as follows:

- |    |                        |               |                   |
|----|------------------------|---------------|-------------------|
| 1. | (NA) Not appropriate   | (U) Undecided | (A) Appropriate   |
|    | 1                      | 2             | 3                 |
| 2. | (NC) Not comprehensive | (U) Undecided | (C) Comprehensive |

Indicate by circling the number from 1 to 3 that best ex-



Henslowe/75

presses your judgments. If you feel that further sources should be located you are asked to identify those sources under the "Additional Titles" section.

Under the "Remarks" section you are asked to offer any critical comments that you wish about the search for either locational sources or sources located.

Henslowe/75

1.

## ARTICLES

## Locational Sources

In relation to the type of source, the essential locational sources were used: Yes ☒ No ☐

Additional Titles:

## Sources Located

In relation to information  
provided about the study  
the sources located are:

	(NA)	(U)	(A)
1. Appropriate	1	2	3
2. Comprehensive	(NC)	(U)	(C)
	1	2	3

Additional Titles:

Remarks: (Locational Sources or Sources Located)

Henslowe/75  
2.

# BOOKS AND INSTRUCTIONAL MATERIALS

## Locational Sources

In relation to the type of  
source, the essential  
locational sources were used:

Yes         
No       

Additional Titles:

## Sources Located

In relation to information  
provided about the study  
the sources located are:

1. Appropriate	(NA) 1	(U) 2	(A) 3
2. Comprehensive	(NC) 1	(U) 2	(C) 3

Additional Titles:

---

Remarks: (Locational Sources or Sources Located)

Henslowe/75  
3.

# CURRICULUM GUIDES

## Locational Sources

In relation to the type of source, the essential locational sources were used:      Yes         
No       

Additional Titles:

## Sources Located

In relation to information provided about the study the sources located are:

1. Appropriate	(NA) 1	(U) 2	(A) 3
2. Comprehensive	(NC) 1	(U) 2	(C) 3

Additional Titles:

---

Remarks: (Locational Sources or Sources Located)

Henslowe/75  
4.

# TESTS

## Locational Sources

In relation to the type of  
source, the essential  
locational sources were used:

Yes         
No       

Additional Titles:

## Sources Located

In relation to information  
provided about the study  
the sources located are:

1. Appropriate	(NA) 1	(U) 2	(A) 3
2. Comprehensive	(NC) 1	(U) 2	(C) 3

Additional Titles:

---

Remarks: (Locational Sources or Sources Located)

Henslowe/75  
5.

# THESES AND DISSERTATIONS

## Locational Sources

In relation to the type of  
source, the essential  
locational sources were used:

Yes         
No       

Additional Titles:

## Sources Located

In relation to information  
provided about the study  
the sources located are:

1. Appropriate	(NA) 1	(U) 2	(A) 3
2. Comprehensive	(NC) 1	(U) 2	(C) 3

Additional Titles:

---

Remarks: (Locational Sources or Sources Located)

## Enclosure #3

## LIST OF SOURCES

		Locational Sources	Sources Located
Articles	Page	1	2
Books, Instructional Materials		5	7
Curriculum Guides		10	11
Tests		14	16
Theses, Dissertations		17	18

(Questionnaire I)  
S. Henslowe  
July, 1975

## ARTICLES

Locational Sources

1. Bibliographies from books and articles.
2. Canadian Education Index
3. Education Index
4. a) Hand search of ERIC/Current Index to Journals in Education (CIJE)  
b) Two ERIC/CIJE computer searches, one on study skills, one of study and library skills in relation to certain subject areas. Both searches ranged from elementary to college level. (EJ numbers)
5. Library Literature



Henslowe/75  
2.

# ARTICLES

## Sources Located

1. Ahlers, E.E., Instruction in Library Skills. School Libraries, 21:23-5, Spring '72.
2. Ayres, L.B., Learning the Library in Grades K-6. School Library Journal, 8:28-29, Jan. '62.
3. Barthelmess, H.M., Testing the Ability to Use the Index and Dictionary. National Education Association Proceedings, 380-82, '34.
4. Baugh, K.E., Teaching the Use of the Library. Social Studies. 35:15-16, Jan. '44.
5. Bond, G.W., Developing Study Skills in the Intermediate Grades. Elementary English, 29:397-401, N. '52.
6. Chan, L.M., The Tenth Abridged Dewey Decimal Classification... and Children's Room/School Library Collections. School Library Journal, 98:38-43, S. '73.
7. Cole, T.J., Ladder of Library Skills. Elementary School J1., 61: 427-30, My. '61.
8. Dallman, M., Development of Locational Skills. Grade Teacher, 75:56-57, Ja. '58.
9. Davidson, L.M., Library Lessons Can Be Fun. Wilson Library Bulletin, 23:695-96, My. '49. (Gr. 7 up)
10. Ellis, O., Vitalizing the School Library Program. Wilson Library Bulletin, 16:49-53, S. '41. (jh. up)
11. Ericson, L.S., and J. Carmody, Integrating Library Skills With Instruction. Wisconsin Library Bulletin, 67:23-26, Ja.-F. '71.
12. Estvan, F.J., Teaching the Very Young Procedures for Developing Inquiry Skills, Phi Delta Kappan, 50:389-93, Mr. '69.
13. Gengler, C.R., Developing Skills for Problem-Solving: A Study. School Libraries, 15:31-35, My. '66.
14. Gorden, S., It's Fun to Learn Library Skills. Wisconsin Library Bulletin, 62:102-3, M. '66.

Henslowe/75  
3.

15. Gray, B., Teaching Library Skills in Elementary School. Library Journal, 83:2457-9, S. '58.
16. Heitert, S., Card Catalog Teaching Aid. School Library Journal, 20:44, S. '73.
17. Henne, F., Learning to Learn in School Libraries. School Libraries, 15:15-23, My. '66.
18. Hermann, B., and A. Shaffner, Effective Library Instruction in the Creative Elementary School Library. Wilson Library Bulletin, 37:65-67, S. '62.
19. Jones, V., Teaching Library Skills to Elementary Students. Texas Outlook, 50:16-17, Ap. '66. (also in Trinker, 1970, pp. 15-19).
20. Krohn, M.L., Study in Self Reliance. Shaker Heights Learning Experiment. School Library Journal, 12: 134-36, O. '65.
21. Library Skills: What Pupils Need Grade by Grade. Grade Teacher, 84:126-284, N. '66.
22. Ligda, D., Do-it-yourself Tape for Library Instruction. School Library Journal, 8:23-24, N. '61. (Gr. 7-8).
23. McGuire, A.B., Library and the Social Studies. Theory Into Practice, 6:13, F. '67.
24. McGuire, A.B., Research Among the Very Young. RQ, 7:68-71, Winter '67.
25. Mahoney, S., Basic Study Skills and Tools. Elementary English, 42:905-15, D. '65.
26. Miller, M.J., Connecticut School Librarian's Resources for Teaching Library Skills, Wilson Library Bulletin, 46:539, F. '72.
27. Monroe, B.A., They Compete to Learn the Catalog. Library Journal, 81:990-91, Ap. '56.
28. Nelson, V., Teaching of Library Skills. Wisconsin Library Bulletin, 63:171-72, My. '67.
29. Oak Park (Illinois) School System, Oak Park Skills Chart. Instructor, 76:63-74, Ap. '67.
30. Pinch, E., Wauwatosa Elementary Schools Teach Good Library Habits. Library Journal, 75:253-254, F. '50.

Henslowe/75  
4.

31. Sayles, L.A., Teaching Library Skills Through Subject Matter. Education, 86:412-16, Mr. '66.
32. Serck, L.M., We Learn About the Library. Grade Teacher, 78:102-4, N. '60.
33. Shankman, F.V., Introducing the Study Skills. Education, 86:230-34, D. '65.
34. Shufro, H., A Workshop Project in Using the Elementary School Library. Instructor, 74:98, F.'65.
35. Smith, B.F., Ability to Locate and Use Reading Materials. Wilson Library Bulletin, 22:452-53, F. '48. (High-school)
36. Stacy, G., The Fourth Grade and the Card Catalog. Wilson Library Bulletin, 29:643-644, Ap. '55.
37. Swenson, S., Flow Chart on Library Searching Techniques. Special Libraries. 56:239-42, Ap. '65. (Adult)
38. Tillin, A., Elementary School Children Learn to Use the Library, Library Journal, 69:38, Ja. '44.

## BOOKS AND INSTRUCTIONAL MATERIALS

Locational Sources

1. B.C.T.F. Lesson Aids Catalogue (for instructional materials only).
2. Bibliographies of books and articles.
3. Bowker publications:
  - a) Books in Print (BIP)
  - b) Supplement
  - c) Children's Guide to BIP
  - d) El-Hi Textbooks in Print
  - e) Paperbound BIP
  - f) Subject Guide to BIP
  - g) Subject Guide to Children's BIP
4. Canadian Books in Print and Subject Guide to CBIP.
5. Canadian Education Index.
6. Card Catalogue/Collections of the U.B.C.:
  - a) Main Library
  - b) Curriculum Laboratory
  - c) Reading Resource Centre
  - d) School of Librarianship
7. Cumulative Book Index.
8. Education Index.
9. ERIC/
  - a) Educational Documents Index
  - b) Educational Documents Abstracts
  - c) reference as needed to issues of Research in Education (RIE).
10. Hopkinson, Shirley, L., Instructional Materials for Teaching the Use of Library. 4th ed. San Jose, California, Claremont House, 1971 (includes books, tests, print and audio-visual instructional materials).
11. Gqver, M.V., ed. The Elementary School Library Collection: A Guide to Books and Other Media, Phase 1-2-3, 8th ed. Newark, N.J. :Bro-dart, 1973.
12. Library Literature

Henslowe/75  
6.

13. Publisher's Catalogues, Canadian and American and related correspondence requesting catalogues.
14. Wynar, Christine L., Guide to Reference Books for School Media Centers, Littleton, Colorado: Libraries Unlimited, 1973.

Henslowe/75  
7.

## BOOKS AND INSTRUCTIONAL MATERIALS

### Sources Located

1. a) B.C.T.F. Lesson Aids Service. Treasure Hunt,  
Vancouver, B.C. B.C.T.F., n.d. (Gr. 3-6).  
b) Card Catalog,  
Vancouver, B.C. B.C.T.F., 1972. (Gr. 4-7).
2. Barnes, D.L. and A.B. Burgdorf, Study Skills for  
Information Retrieval. Boston, Allyn and Bacon, 1970  
and 1974, (Bks. 1,2,3,4, elem. up).
3. Barr, J., Miss Terry At the Library. Ardmore, Pennsylvania,  
Whitman, 1962. (K-Gr. 2)
4. Berner, E., Integrating Library Instruction with Classroom  
Teaching at Plainview Junior Highschool. Chicago:  
A.L.A. 1958. (Gr. 7 up)
5. Bowers, M.K., Library Instruction in the Elementary School.  
Metuchen, N.J.: Scarecrow Press, 1971.
6. Brewer, M.L. and S.O. Willis, The Elementary School  
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Children's Press, 1963. (el.)
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13. Cleary, F.D., Blueprints for Better Reading: School  
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New York: H.W. Wilson, 1972.

Henslowe/75  
8.

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15. Colonius, L. and G.W. Schroeder, At The Library, Rev. ed., Chicago: Melmont, 1967. (Gr. 2)
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17. Daly, M., Patrick Visits the Library. New York: Dodd Mead, 1963. (el. pub. lib.)
18. Douglas, M.P., The Teacher's Librarian's Handbook. 2d.ed. Chicago A.L.A., 1949.
19. Freund, R.B., Open the Book. 2d.ed. Scarecrow, 1966. (el.-sh.)
20. Guide to the Library Wall Chart: Part 1, 2. Logan, Iowa: Perfection Form Co., 1973. (el.)
21. IOX. Language Arts: Study and Reference Skills, Grades K-12. Los Angeles: Instructional Objectives Exchange, 1972. (ED 066 745).
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23. Landman, J.M., A Teacher's Guide to the Elementary School Library. Minneapolis: Denison, 1969.
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25. MLI Associates, How to Use the Library. Boston: Allyn and Bacon, 1966. (Gr. 4 up, programmed text)
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27. Mott, C., Children's Library Lesson Book. rev.ed. New York: Scribner, 1964. (el.)
28. Mott, C. and L. Baisden, The Children's Book on How to Use Books and Libraries. New York: Scribner, 1968. (el.)
29. Palovic, L. and E. Goodman, The Elementary School Library in Action. W. Nyack, New York: Parker Publishing Co., 1968.

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30. Polette, Nancy, Developing Methods of Inquiry: A Source Book for Elementary Media Personnel. Metuchen, N.J.: Scarecrow, 1973. (el.)
31. Practice in Library Skills and Practice in Research and Study Skills. Duluth, Minn.: Instructor Publishing, 1973. (duplicating masters) (el.)
32. Santa, B.M. and L.L. Hardy, How to Use the Library. 2d.ed. Palo Alto: Pacific Books, 1966. (jh./sh.)
33. School Library Association of California, North Section, Library Skills; Teaching Use Through Games and Devices. Palo Alto: Fearon, 1958. (el./jh.)
34. Scripture, E., Find It Yourself. New York: H.W. Wilson, 1955. (Gr. 5 up)
35. Shankman, F.V., How to Teach Reference and Research Skills. Englewood Cliffs, New Jersey: Prentice-Hall, 1964. (el.)
36. Shor, P., Libraries and You. Englewood Cliffs, N.J.: Prentice-Hall, 1964. (el./jh.)
37. Study Skills Library: Reference Skills Kit. Huntingdon, N.Y.: (EDL) Educational Developmental Laboratories, 1965. (gr. 4-9)
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39. Trinker, C.L., ed., Teaching for Better Use of Libraries. (Readings) Hamden, Conn.: Shoe String Press, 1970.
40. Taylor, M. and K. Liebold, Libraries Are for Children: A Teaching Guide and Mannual for Library Skills. New York: Fordham Pub., 1965. (Gr. 4-6)
41. Toser, M.A., Library Manual; A Study-Work Manual of Lessons on the Use of Books and Libraries. 6th ed. New York: H.W. Wilson, 1964. (jh./sh.)
42. Vreeken, E., Ramon's Adventures in the Library. Oceana, 1967. (el.)
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Henslowe/75  
10.

## CURRICULUM GUIDES

### Locational Sources

1. A.L.A. School Library Guides and Staff Manuals in A.L.A. Headquarters.
2. Bibliographies in books and articles.
3. CEA Handbook, Toronto, Ontario, Canadian Education Association, 1972. (Used for Canadian school board addresses)
4. Card Catalogue/Collections of the:
  - a) U.B.C. Curriculum Laboratory
  - b) U.B.C. Reading Resource Centre
  - c) Vancouver Teacher's Professional Library
  - d) B.C.T.F. Teacher's Library
5. Correspondence to various Canadian and American educational centres requesting lists or copies of guides.  
Responses were obtained from 79% of the centres.
6.
  - a) ERIC/Educational Documents Index, including the "Institution Index"
  - b) Educational Documents Abstracts
  - c) Issues of Research in Education (RIE)

Henslowe/75  
11.

## CURRICULUM GUIDES

### Sources Located

At this stage, that is, the location of information, it was decided to include all technical manuals obtained and examine them more closely during the collection stage. Note starred items.\*

1. Andrews Independent School District, Language Arts Curriculum Guide: A Planned Program for Grades 1-12, Andrews, Texas, 1964. (Intermediate ed., 4 guides, emphasis on library skills)
2. Baltimore County, A Manual of Procedures for School Media Specialists. 3d.rev.ed., Towson, Maryland, 1970.\*
3. a) Bellevue Public Schools, Bellevue, Washington, Getting it All Together: Library-Classroom Reference Skills Guide for Kindergarten-Twelve, 1973.  
b) Kindergarten-Sixth, 1973, rev. 1974.
4. Birmingham Public Schools, Library Skills and Attitudes Curriculum Guide for the Library Program, Grades K-6, Birmingham, Michigan, 1963. (ED 001 740)
5. Bloomington Public Schools, Handbook for Resource Center Personnel, Elementary-Secondary. Bloomington, Minnesota, Sept., 1974.
6. British Columbia, Dept. of Education, Division of Curriculum, Library Manual for The Public Schools of British Columbia. Victoria, B.C., 1948, 1955 and 1968.
7. Calgary School Board, Teacher-Librarian Handbook. Calgary, Alberta, 1970.\*
8. Central Okanagan, Library Committee, Library Manual. School District No. 23, B.C., April, 1972.
9. Contra Costa County, California School Library Directors, Guide to Elementary Library Instruction. Pleasant Hill, California: C.C.C., Dept. of Education, 1968.
10. Idaho State Dept. of Education, Bureau of Educational Services, Your Media Program, K-12. Boise, Idaho, 1972.

Henslowe/75  
12.

11. Chicago, Board of Education, City of Chicago, Illinois:
  - a) Curriculum Guide for Library Science, Grades 1-8, 1968.
  - b) Curriculum Guide for the Reading Guidance Program of the Elementary School Library, 1971.
  - c) Handbook for the Elementary School Librarian, 1972.
  - d) Overview of Developmental Concepts for Instruction in the Use of the Library and Its Resources, 1965.
12. Dallas Independent School District, Curriculum Bulletin Series, The Library in the School. Dallas, Texas, 1965.
13. Fulton County School System, Elementary School Librarians, A Guide for Teaching the Appreciation of Good Books and the Use of the School Library. 2d.ed., Atlanta, Georgia, Fulton County, 1960.
14. Los Angeles City Schools, Division of Instructional Services, Los Angeles, California.
  - a) Library Manual. Rev., 1957.
  - b) Library Lessons, Sept., 1966. (Tentative ed.)
  - c) Library Skills, Teacher's Guide, K-6, 1966.
  - d) Research Skills and Library Resources: Part Three, 1966. (Highschool level)
15. Montana, Montana Teachers and Librarians, A Guide for Montana School Libraries: A Manual of Basic Library Procedures for Montana Schools, Helena: State Dept. of Public Instructions, Jan., 1971.  
(ED 042 483)
16. New England School Development Council and the N.E. School Library Association, Your Goals for a School Library Program. Cambridge, Mass., 1961.
17. North Carolina, State Dept. of Public Instruction, Library Services Section, Developing a Good School Library Program. Raleigh, North Carolina, 1961
18. Oklahoma City, A Guide for the Teaching of Library Skills, Grades K-12. Oklahoma Curriculum Improvement Committee, Oklahoma City, Oklahoma, 1969.  
(ED 045 158)
19. Pennsylvania Dept. of Public Instruction, Harrisburg, Pennsylvania.
  - a) A Guide for School Librarians, 1969.
  - b) The School Instructional Materials Center and the Curriculum: The Library Audio-Visual Center, 1962.
20. Prince George, Hints for New Librarians: A Handbook for School Librarians New to District 57. Prepared by Mrs. F.L. Wilson, Prince George, British Columbia, Sept., 1974.\*

Henslowe/75  
13.

21. Richland Public Schools, The Teaching of Library Skills, Grades K-6. rev.ed., 1965, Richland, Washington, 1965.
22. Seattle Public Schools, Curriculum Development Division, Dept. of Instructional Materials and Media, Library Experiences for Elementary School Children, Seattle, Washington, 1966.
23. Sulphur Springs, Texas, Guide for the Development of Library Skills and Services in the Sulphur Springs Independent School District, K-12, 1972.  
(ED 066 176)
24. Vancouver, Dept. of Elementary Education, The School Librarian. Prepared by the School Librarian's Committee, Vancouver, B.C., 1st edition undated, rev. 1964.

Mimeographed excerpts received

1. Detroit Public Schools, "Coordinating the Teaching of the Research Skills". Detroit, Michigan, n.d. 3p.
2. Quebec, Dept. of Education, School Library Bulletins. Quebec, Quebec. 1965-66.\*
3. Sudbury Board of Education, Library Dept., "Library Resource Centre Guidelines, K-6", and "Checklist for Library Resource Centre Guidelines, K-6", Sudbury, Ontario n.d.
4. Winnipeg, Manitoba, Library Service Centre, "Teaching the Use of the Library", School Division No. 1, Winnipeg, Manitoba. n.d.

Henslowe/75  
14.

## TESTS

### Locational Sources

1. B.C.T.F. Lesson Aids Catalogue.
2. Bibliographies from articles, books and instructional materials.
3. a) Buros, O.K., Reading Tests and Reviews. Highland Park, New Jersey: Gryphon Press, 1968.  
 b) Tests in Print, 1961.  
 c) Tests in Print II, 1974.  
 d) reference as needed to copies of the seven editions of Buros Mental Measurements Yearbooks.
4. ~~Card Catalogue/Collections of the U.B.C.:~~  
 a) Curriculum Laboratory  
 b) Educational Clinic  
 c) Reading Resource Centre
5. Education Index (informal tests)
6. a) ERIC/Educational Documents Index.  
 b) Abstracts.  
 c) reference as needed to issues of ERIC/Research in Education (RIE).
7. Hopkinson, Shirley L., Instructional Materials for Teaching the Use of the Library. 4th ed. San Jose, California: Claremont House, 1971.
8. Individuals (contacts in person or through correspondence):  
 (\*for Out-of-Print Tests)
 

a) U.B.C. Faculty of Education	...1
b) U.B.C. School of Librarianship	...2
c) Boston University	...1*
d) U. of Colorado (Boulder)	...1*
e) ETS (Educational Testing Service)	...1*
f) U. of Illinois at Urbana	...1
g) U. of Illinois, Instructional R.C.	...1*
h) U. of Minnesota	...1*
i) NWRL. (Northwest Regional Lab)	...1*
j) School district personnel	...2

Henslowe/75  
15.

9. Library Literature (informal tests).
10. Locational sources for theses and dissertations were also checked for studies involving library test development.
11. Publisher's Catalogues were checked, including a number of specialized test catalogues such as those from the California Test Bureau and American Testing Co.

Henslowe/75  
16.

## TESTS

### Sources Located

#### Commercial Tests:

1. Comprehensive Test of Basic Skills: Study Skills.  
(Grades 2-12; 2 forms; 4 levels), Monterey,  
California: CTE/ McGraw-Hill, 1968-1971.
2. Canadian Test of Basic Skills (Work-Study section,  
Gr. 3-8; Canadian adaptation of Iowa Tests of  
Basic Skills), Toronto: T. Nelson, 1955-70.
3. Diagnostic Reading Test, Pupil Progress Series, Ele-  
mentary Level (Grades 4-6), Benesville, Illinois:  
Scholastic Testing Service, 1956, rev. 1957.
4. IOX, Language Arts Library and Literary Skills (K-6  
Form A; 10 "library" subtests), Los Angeles:  
Instructional Objectives Exchange, 1973.
5. Library Skills Test - Parts I and II.  
(ED 001589 - on order from ERIC/EDRS).
6. Library Survey, Test 1. (Gr. 7-8), rev. Logan, Iowa:  
Perfection Form Co., 1973.
7. National Test of Library Skills. (Gr. 4-12), Fort  
Lauderdale, Florida: American Testing Co., 1967.
8. SRA Achievement Series: Work Study Skills. (Gr. 4-6,  
6-9; 2 forms), Chicago: Science Research Associates,  
1954-57.
9. Wisconsin Tests of Reading Skill Development: Study  
Skills. (Levels A-G for K, Gr. 1-7), Minneapolis:  
NCS Interpretive Scoring Systems, 1970-73.  
(Specimen set on order).
10. One test in experimental form: Shores, J.H., Development  
of Diagnostic Instruments for Research Study Skills  
in Grade 4, 5 and 6. Urbana, Illinois: Final  
Report to U.S./DHEW, 1970. (ED 053 224)

Informal Tests: (excerpts from books, articles or instructional materials or tests from individuals): not listed.

Henslowe/75  
17.

## THESES AND DISSERTATIONS

### Locational Sources

#### Theses and Dissertations (minor sources):

1. Bibliographies of articles and books.
2. Library Literature
3. Phi Delta Kappan: Research Studies in Education.
4. U.B.C. file of theses, Special Collections Dept. (Theses).

#### Theses (major sources):

1. Black, Dorothy M., comp., Guide to Lists of Master's Theses. A.L.A., 1965.
2. Canada, National Library, Canadian Theses. Theses Canadiennes. 1952-.
3. Master's Theses in Education, 1951/52- Cedar Falls, U. of North Iowa.

#### Dissertations:

1. Comprehensive Dissertation Index, 1861-1972. Ann Arbor, Michigan: Zerox/University Microfilms, 1973.
2. Dissertation Abstracts International, Ann Arbor, Michigan: Zerox/University Microfilms, 1952-.



Henslowe/75  
18.

## THESES AND DISSERTATIONS

### Sources Located

Studies which are listed either have been ordered or are to be ordered through U.B.C.'s inter-library loan service.

#### Theses:

1. Dugas, Sister Mary R., The Measurement of Library Skills Among Pupils of Upper Elementary Grades. Catholic University of America, Washington, D.C., 1966-67.
2. Kron, Mary E., A Developmental Sequential Method of Teaching Library Skills. Central Washington State College, Ellensburg, Washington, 1968-69.
3. Mains, Clarence, Techniques in Training Intermediate Pupils in Library Skills. Drake University, Des Moines, 1968-69.
4. Ruel, Joseph A., The Use of the Library In Teaching Sixth Grade Social Studies. Central Connecticut State College, New Britain, Conn., 1962-63.
5. White, Gloria B., Teaching of the Use of Library From Elementary School Through Senior Highschool. East Texas State College, Commerce, Texas, 1962-63.

#### Dissertations:

1. Nold, Jack T., Teaching Research Study Skills in the Fifth Grade. U. of Illinois at Urbana, 1971.
2. Rogers, Frederick A., Basic Study Skills as Related to Each Other and to General Achievement, Mental Ability and Reading Abilities in Grade Six. U. of Illinois at Urbana, 1966.
3. Snoddy, James C., Teaching Research Study Skills in Grade Six. U. of Illinois at Urbana, 1967.
4. Stinson, Lillian P., Teaching a Reading-Study Skills Program at the Sixth Grade Level. U. of Illinois at Urbana, 1970.

Henslowe/75  
19.

5. Yarling, James, R., Children's Understanding and Use of Selected Library-Related Skills in Two Elementary Schools, One With and One Without a Centralized Library, 1968, Ball State U.

## APPENDIX C

### QUESTIONNAIRE II : THE PILOT VALIDATION OF THE SKILLS MODEL

LMIL Skills/Subskills items were printed on pink paper  
LCIM Skills /Subskills items were printed on yellow paper  
Other parts were printed on white paper

Reading Education Department,  
University of British Columbia,

December , 1975.

Earlier this year you generously agreed to act as a judge on my doctoral study to help shape and validate a model of basic library locational skills. I am grateful for your willingness to participate in this important phase of my study. As I mentioned in the first questionnaire package, information gathered from the literature search and the expression of professional judgments are considered to be essential in establishing the content validity of the proposed model (and any future measure of basic library locational skills). Your judgments will, therefore, contribute significantly to the overall quality of the study.

The plan for eliciting your judgments is to request that you: 1) examine the enclosures in this envelope, 2) draw conclusions about your reactions to the model based on the criteria for making judgments, and 3) respond to the questionnaire about locational skills and subskills.

Within the package you will find two enclosures. The first provides certain background information on the study that will, I believe, be needed in making your judgments. The second is the questionnaire itself.

The background information includes four sections: 1) statement of the problem, 2) plan of the study and status to date, 3) construction of the model, and 4) nature and purpose of the judgments.

There are two sections in the questionnaire: 1) Section A, "Locational Skills" , consisting of definitions of criteria, directions and response forms, and 2) Section B, "Locational Subskills", consisting of directions and response forms.

Would you please, within the next week or so, examine the enclosed materials and make your judgments. Any time that you are ready we can arrange an interview appointment. During

the interview we will discuss your responses, including any suggestions and remarks that you may wish to make about any aspect of the questionnaire.

If you have any questions on receiving this information, or during judgments, please contact me at home in the evenings or at the Reading Education Department, by leaving a message with our secretary .

Once again, I wish to express my gratitude for your participation. I hope that you will find the experience interesting and professionally rewarding.

Yours sincerely,

Shirley Henslowe

SH:egm  
Enclosures.

## Enclosure #1

## BACKGROUND INFORMATION

	Page
1. Statement of the Problem	1
2. Plan of the Study and Status to Date	1
3. Construction of the Model	2
4. Nature and Purpose of the Judgments	2

S. Henslowe  
December, 1975  
(Questionnaire II)

## 1. Statement of the Problem

The purpose of the study is to develop a model of basic library locational skills for print sources at the elementary school level. A skills model will be produced through analysis of library literature, curricula, published instructional materials and tests. The model that emerges from this process will be submitted to a number of school librarians for validation through independent judgments.

It is hoped that the study will make a contribution to research in the area of library skills instruction as it is carried on through elementary school library and reading curricula. A practical application of the model is seen to be its incorporation into an initial unit on research and reporting activities for intermediate grade level in a subject area such as social studies.

## 2. Plan of the Study and Status to Date

### Stage One: Construction of the Model

- a. Location of literature base in library, social studies and reading education - completed July, 1975.
- b. Critical reaction to literature base by librarians - completed August, 1975.
- c. Review of literature - completed October, 1975.
- d. Construction of model - completed November, 1975.
- e. Critical reactions to model - the attached questionnaire (December, 1975)

## Stage Two : Revision and Final Validation of The Model (projected)

- a. Revision of the skills model based on the pilot validation - winter, 1976.
- b. Validation of the skills model by selected judges across Canada - spring/summer, 1976.

### 3. Construction of the Model

In the review of literature from library, reading and social studies education the term "basic library locational skills" was sought first. It was not found although the terms "basic tools", "basic skills", "library skills" and "locational skills" were found frequently.

It was decided by the researcher that it would be most efficient to develop first a model of locational skills and then to refine that model through validation of the terms basic and library applied to the model. It was concluded that the product would be a model that could be considered a model of basic library locational skills.

### 4. Nature and Purpose of Judgments

You are one of five librarians/educators, trained in school librarianship, who has been asked to form a panel of independent judges. As implied by the term "independent", it is asked that reactions be made without consultation among judges



Henslowe/75

3

either during or following judging procedures.

You are being asked to react to listings of various locational skills in relation to two aspects of skills instruction: 1) level in the skills hierarchy, that is, whether the skills and their subskills are basic (B) or non-basic (NB), and 2) whether the skills are library-based (LB) or not necessarily library-based (NNLB). These referents, along with four other items, are defined within the questionnaire itself.

The referents mentioned above are considered to be essential in refining a general model of locational skills into a more specific model, i.e., a model of basic library locational skills. As indicated previously, construction of such a model is a major purpose of the study. Your judgments, therefore, are intended to contribute to the content validity or representativeness of the proposed model. The specific focus is the validation of the terms basic and library applied to a model of locational skills.

## Enclosure #2

## QUESTIONNAIRE II

	Pages
SECTION A:  LOCATIONAL SKILLS CLUSTERS	1-4
SECTION B:  LOCATIONAL SUBSKILLS	5-19

S. Henslowe  
December, 1975

Henslowe/75  
1

## SECTION A:                      LOCATIONAL SKILLS CLUSTERS

The purpose of Section A is to obtain your reactions to two locational "skills clusters" in terms of appropriate level and locale for skills instruction. The two skills clusters developed by the researcher are: 1) locating materials in a library, and 2) locating content/data in materials. Level, as proposed for your consideration, refers to basic or non-basic level while locale indicates library-based or not necessarily library-based skills instruction.

### Definitions

#### 1. Locating Materials in a Library:

These are the skills used in actually finding the materials themselves, but not the skills used in locating data or content within the material. This cluster is comprised of a) arrangement of the library, b) arrangement of materials in the library, c) card catalogue, d) vertical file and, e) Dewey Decimal Classification. For example, use of the card catalogue to locate a specific science book in the library would be such a skill but not use of the book's index to locate information within the material.

Henslowe/75

2

## 2. Locating Content/Data in Materials:

These are the skills used in actually finding content/data but not the skills used in collecting data from the materials. For various materials this skills cluster is comprised of: a) format and, b) bibliographic data (frequently referred to as book parts in the literature). For example, use of certain bibliographic data to locate information within a text would be such a skill, but not the use of such skills as outlining or notetaking to collect information from the text book.

"Materials" would include standard fiction/non-fiction books, standard and specialized reference books and magazines/periodicals. It is felt by the researcher that locational aids of the standard fiction/non-fiction books would logically receive first consideration in skills instruction.

## 3. Basic/Non Basic (Skills or Subskills):

Basic skills are those locational skills and subskills that, for purposes of instruction, would logically be placed at the lower levels of a skills continuum. For users unfamiliar with the library, whatever their age level, these skills would be considered to be basic or fundamental skills. (B)

Henslowe/75

3

Non-basic skills are those locational skills that would logically be postponed until first-level or foundation skills instruction had taken place. Non-basic skills would, therefore, be more appropriately placed in second or higher levels of a skills continuum. (NB)

4. Library-Based/Not Necessarily Library-Based Skills:

Library-based skills are those locational skills that would be most appropriately taught and utilized in the library. (LB)

Not necessarily library-based skills are those locational skills that would not necessarily be taught and utilized in the library. (NNLB)

Directions

Please react to each locational skills cluster by first classifying its component skills as being basic (B) or non-basic (NB) according to the definitions given above.

Then react to each skills cluster by indicating the appropriate locale as being library-based (LB) or not necessarily library-based (NNLB) according to the definitions given above.

Henslowe/75

4

The rating scales are set up as follows:

- |                       |   |
|-----------------------|---|
| 1. B (Basic)          | NB (Non-Basic)                          |
| 2. LB (Library-Based) | NNLB (Not Necessarily<br>Library-Based) |

For each statement given, indicate your reaction by checking (✓) the one category that best expresses your judgment. If you feel that other skills should be included please identify those skills under "Suggestions for Additional Locational Skills".

## RESPONSE FORMS: SECTION A

LOCATIONAL SKILLS: (LEVEL AND LOCALE  
FOR INSTRUCTION)Skills Cluster #1: Locating Materials in a Librarya. Level in Skills Hierarchy

To locate materials in the library,  
the ability to use the \_\_\_\_\_ is:

B (Basic)

NB (Non-Basic)

1. arrangement of the library
2. arrangement of materials in  
the library
3. card catalogue
4. vertical file
5. Dewey Decimal Classification

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. Locale for Instruction

Skills instruction for locating  
materials in a library should be:

LB  
(Library-  
Based)

NNLB  
(Not Necessarily  
Library-Based)

\_\_\_\_\_

\_\_\_\_\_

Suggestions for Additional Locational Skills: Locating  
Materials in a Library:

A cont'd.

Henslowe/75

6

LOCATIONAL SKILLS: (LEVEL AND LOCALE  
FOR INSTRUCTION)

Skills Cluster #2: Locating Content/Data in Materials

BOOKS (Standard Fiction/Non-Fiction)

Level in Skills Hierarchy

To locate data in books the ability  
to use the \_\_\_\_\_ of a book is:

B (Basic)      NB (Non-Basic)

1. format

\_\_\_\_\_

2. bibliographic data

\_\_\_\_\_

Locale for Instruction

Skills instruction for locating  
data in books should be

LB                     >NNLB  
(Library-      (Not Necessarily  
Based)      Library-Based)

\_\_\_\_\_

Suggestions for Additional Locational Skills:

Locating Content/Data in BOOKS. (Standard Fiction/Non-Fiction)



Henslowe/75

7

If, in Section A, Skills Cluster #1: Locating Materials in a Library, you checked LB (Library-Based) please turn to Page 8, (Section B).

If you checked NNLB (Not Necessarily Library-Based) please turn to Page 15, (Section B).

Henslowe/75

8

## SECTION B                      LOCATIONAL SUBSKILLS

The purpose of Section B is to obtain your reactions to locational subskills in terms of their appropriate level; that is, whether each subskill is judged to be basic or non-basic according to definitions given in Section A.

Subskills are those skills underlying each skill cluster. For example, under "Locating Materials in a Library" a subskill would be using the author card of a card catalogue while under "Locating Content/Data in Materials" a subskill would be using the index of a book (part of the bibliographic data).

Directions

You are asked to react to subskills listed on pages 10 to 13 by classifying each as being basic or non-basic.

The rating scale is set up as follows:

B (Basic)

NB (Non-Basic)

For each statement given, indicate your reaction by checking the category that best expresses your judgments. If you feel that other subskills should be included, you are asked to identify these subskills under "Suggestions for Additional Locational Subskills"

Henslowe/75

9

Under the "Remarks" section, you are asked to offer any critical comments that you wish about the sections on either clusters or subskills.

Henslowe/75

10

## RESPONSE FORMS: SECTION B

LOCATIONAL SUBSKILLS: 'LEVEL FOR INSTRUCTION'  
 Skills Cluster #1 - Locating Materials in a Library.

Subskills: Level in Skills Hierarchy

## 1. ARRANGEMENT OF THE LIBRARY

In relation to placement on a  
 library locational skills con-  
 tinuum, ability to comprehend  
 and use a \_\_\_\_\_ is:

B (Basic)

NB (Non-Basic)

simple library floor plan

\_\_\_\_\_

\_\_\_\_\_

## 2. ARRANGEMENT OF MATERIALS IN A LIBRARY

In relation to placement on a  
 library locational skills con-  
 tinuum, ability to find materials  
 \_\_\_\_\_ is:

by sections:

picture books

\_\_\_\_\_

\_\_\_\_\_

easy books

\_\_\_\_\_

\_\_\_\_\_

fiction books

\_\_\_\_\_

\_\_\_\_\_

non-fiction books

\_\_\_\_\_

\_\_\_\_\_

reference materials

\_\_\_\_\_

\_\_\_\_\_

magazines/periodicals

\_\_\_\_\_

\_\_\_\_\_

within sections: books:

fiction, alphabetical by author

\_\_\_\_\_

\_\_\_\_\_

non-fiction, by subject (DDC),

\_\_\_\_\_

\_\_\_\_\_

then alphabetical by author

\_\_\_\_\_

\_\_\_\_\_

biography by B

\_\_\_\_\_

\_\_\_\_\_

or 92,

\_\_\_\_\_

\_\_\_\_\_

then alphabetical by biographee

\_\_\_\_\_

\_\_\_\_\_

Henslowe/75

11

within sections: books: cont'd.

	B (Basic)	NB (Non-Basic)
call number	_____	_____
parts of call number:		
letter identifiers		
PB (form)	_____	_____
E (content)	_____	_____
R (purpose)	_____	_____
author's surname (initial)	_____	_____
number identifiers		
author's surname (number)	_____	_____
shelf labels:	_____	_____
for section identification	_____	_____
for subject identification	_____	_____
<u>within sections:</u> <u>magazines:</u>		
alphabetical, by title		
(ignoring articles a, an, the)	_____	_____

## 3. CARD CATALOGUE\*

In relation to placement on a  
library locational skills con-  
tinuum, ability to use the  
\_\_\_\_\_ is:

outside labels	_____	_____
guide cards (inside trays)	_____	_____
author card (see also: filing rules)	_____	_____
author - top line	_____	_____
surname first	_____	_____
title of book	_____	_____
date of publication	_____	_____
call number (recognition)	_____	_____
subject identifiers (DDC)	_____	_____
letter identifiers	_____	_____
number identifiers: author's		
surname: number	_____	_____

## CARD CATALOG, cont'd.

Henslowe/75

12

	B (Basic)	NB (Non-Basic)
title card (see also: filing rules)	_____	_____
title on first line	_____	_____
subject card (see also: filing rules)	_____	_____
subject on first line	_____	_____
heading capitalized	_____	_____
cross reference cards	_____	_____
"see"	_____	_____
"see also"	_____	_____
filing rules	_____	_____
alphabetical order	_____	_____
word-by-word arrangement	_____	_____
'Mac'/'Mc' as if spelled 'Mac'	_____	_____
numbers as if spelled out	_____	_____
abbreviations as if spelled out	_____	_____
books by an author before books about an author	_____	_____
'an', 'a', 'the' in titles dis- regarded (at beginning of title)	_____	_____

\* not included: sub-title; publisher; tracings; only first letter of title capitalized; articles counted if within titles; cross-reference cards capitalized; and analytic cards.

## 4. VERTICAL FILE

	B (Basic)	NB (Non-Basic)
drawer labels	_____	_____
envelope/folder labels	_____	_____
alphabetical by subject headings	_____	_____

Henslowe/75

13

5. CLASSIFICATION BY SUBJECT/D.D.C.

a. In relation to placement on a library locational skills continuum, ability to use _____ is:	B (Basic)	NB (Non-Basic)
the ten general divisions of the D.D.C.	_____	_____
some subdivisions in relation to a subject area, say, social studies.	_____	_____
to first decimal	_____	_____
b. In relation to placement on a skills continuum of library continuum of library locational skills, ability to use classification by _____ is:		
fairy tales	_____	_____
biography	_____	_____

Suggestions for Additional Locational Subskills:  
Locating Materials in a Library

Henslowe/75

14

If, in Section A, Skills Cluster #2: Locating Content/Data in Materials you checked LB (Library-Based) please turn to Page 18, (Section B). Complete Pages 18 and 19, using the same directions you followed for the first subskills section.

If you checked NNLB (Not Necessarily Library-Based) please turn to Page 19, (Section B).



Henslowe/75

15

If, in Section A, Skills Cluster #2: Locating  
Content/Data in Materials you checked LB (Library-  
Based), please turn to Page 16, (Section B).

If you checked NNLB (Not Necessarily Library-Based)  
please turn to Page 19, (Section B).

Henslowe/75

16

## SECTION B

## LOCATIONAL SUBSKILLS

The purpose of Section B is to obtain your reactions to locational subskills in terms of their appropriate level; that is, whether each subskill is judged to be basic or non-basic according to definitions given in Section A.

Subskills are those skills underlying each skill cluster. For example, under "Locating Materials in a Library" a subskill would be using the author card of a card catalogue while under "Locating Content/Data in Materials" a subskill would be using the index of a book (part of the bibliographic data).

Directions

You are asked to react to subskills listed on pages 18 and 19 by classifying each as being basic or non-basic.

The rating scale is set up as follows:

B (Basic)

NB (Non-Basic)

For each statement given, indicate your reaction by checking the category that best expresses your judgments. If you feel that other subskills should be included, you are asked to identify these subskills under "Suggestions for Additional Locational Subskills".

Henslowe/75  
17

Under the "Remarks" section, you are asked to offer any critical comments that you wish about the sections on either clusters or subskills.

Henslowe/75

18

## LOCATIONAL SUBSKILLS: LEVEL FOR INSTRUCTION:

Skills Cluster #2: Locating Content/Data in Materials  
 BOOKS (Standard Fiction/Non-Fiction)

Subskills: Level in Skills Hierarchy

## 1. FORMAT\*

In relation to placement on a "book"  
 locational skills continuum, ability  
 to use such locational aids as the

_____ is:	B (Basic)	NB (Non-Basic)
cover	_____	_____
spine	_____	_____
collation:		
title page	_____	_____
text/body matter	_____	_____
graphic material (illustrations, charts, etc.)	_____	_____

\* not included: end papers, size, type face.

## 2. BIBLIOGRAPHIC DATA\*

appendix	_____	_____
author (name)	_____	_____
bibliography	_____	_____
charts (listing)	_____	_____
copyright date/or	_____	_____
date of publication	_____	_____
edition	_____	_____
foreword/preface	_____	_____
glossary	_____	_____
illustrations	_____	_____

Henslowe/75

19

## BIBLIOGRAPHIC DATA - cont'd

	B (Basic)	NB (Non-Basic)
index	_____	_____
cross-references	_____	_____
introduction	_____	_____
key, guides (e.g., for symbols)	_____	_____
maps	_____	_____
series	_____	_____
tables	_____	_____
title	_____	_____
table of contents	_____	_____
volume number	_____	_____

\*not included: compiler, dedication, editor, epilogue, footnotes, half-title, number of pages, place of publication, plates, prologue, publisher, revision, subtitle and translator. Chapter and section headings are implied under table of contents.

Suggested Additional Locational Subskills:  
Locating Content/Data in BOOKS

REMARKS:

NNLB: Page 19: The questionnaire is completed. Thank you.

## APPENDIX D

### QUESTIONNAIRE III : THE FINAL VALIDATION OF THE SKILLS MODEL

LMIL Skills/Subskills items were printed on goldenrod paper (p. 6, pp. 10-13)

LCIM Skills/Subskills items were printed on green paper (p. 15, pp. 14-17)

Other parts were printed on white paper

Reading Education Department  
University of British Columbia

May - June, 1976

I am presently working on the final stages of a doctoral dissertation in Reading Education at the University of British Columbia. The study will, I believe, be of interest to you. It is concerned with the development and validation of a model of basic library locational skills for print sources, a facet of research and reporting skills for elementary school level. As a former librarian I feel that the study will make a contribution to both library and reading education since it should provide a basis for integrating library skills with various subject areas.

In its present form the skills model is based on (1) an extensive validated search of educational literature, particularly library literature including articles, tests, instructional materials and theses and, (2) a pilot validation of the model by a number of British Columbia school librarians. That is, two validations have been done - one concerned with the quality of the literature search and the other with the tentative skills model.

The pilot validation of the model was done through independent judgments by a panel of British Columbia librarians, some university and some school system personnel. Through analysis of these judgments a refined model was derived and that model is now ready for final validation by library specialists outside British Columbia. Judgments by experts in school librarianship, both in British Columbia and elsewhere in Canada, are considered to be essential in ensuring content validity of the skills model.

Through various avenues, including correspondence with provincial school library supervisors and reference to library directories, it has been possible to identify certain public school system and university librarians who are qualified to react to the model. From that roster of librarian/educators you have been selected to act as an independent judge in the final validation of the basic library locational skills model. I hope that you will find it possible to participate and that you find your participation both interesting and worthwhile. All previous judges have

indicated that they have found their involvement professionally rewarding.

About a week after you receive this advance letter a questionnaire package will arrive, containing all pertinent information including background on the study, directions and definitions.

Essentially, the tasks for judges involve reactions to (1) selected skills as being Library-Based or Not Necessarily Library-Based and (2) selected skills and subskills as being Basic or Non-Basic (definitions provided). A checklist format is used and the B.C. judges indicated that both questionnaire and instructions were appropriately concise and explicit. An average of three to five hours has been involved in completing the questionnaire including reading of the background information, frames of reference and responding to items.

In reporting questionnaire data from the second validation, individual judges' opinions will, of course, not be identified specifically. However, your participation will be credited in two ways: (1) in a listing of judges within the study and, (2) by a follow-up letter for your vitae files acknowledging your participation as an independent judge for my doctoral study.

Since I have been involved for many years in various teaching positions and have been a librarian, I am well aware of the demands a response to the questionnaire makes on your time. I can assure you, therefore, that any time and thought devoted to my study will be much appreciated. You will, I hope, feel some satisfaction in contributing to a dissertation concerned with the long-standing issue of an integrated approach to library skills teaching. We believe that the study is unique in North America and hope that its product will have long range value.

Yours sincerely,

(Mrs.) Shirley Henslowe  
B.A., B.L.S., M.Ed.  
Ed.D. candidate

Adviser: Dr. Jane H. Catterson,  
Professor,  
Reading Education.



Reading Education Department  
University of British Columbia,

May - June, 1976.

As you will recall, I very recently contacted you by letter about participating as an independent judge on my doctoral study. In the advance letter it was explained that you were one of the Canadian librarians chosen to help in the final validation of a model of library locational skills.

I am grateful for your participation in this important phase of my study. Information gathered from the literature search and expressions of professional judgments are considered to be essential in establishing the content validity of the proposed model. Your judgments will, therefore, contribute significantly to the overall quality of the study.

As I also explained in my preliminary letter, a tentative form of the model was recently submitted to a group of school librarians for their independent judgments. Through analysis of data gathered in this pilot study a more refined version of the model was derived. It is the refined form of the skills model to which you are being asked to react.

The plan for eliciting your judgments is to request that you: 1) examine the enclosures in this envelope, 2) draw conclusions about your reactions to the model based on criteria given for making judgments and, 3) respond to the questionnaire about locational skills and subskills.

Within the package you will find four enclosures. The first outlines certain background information on the study that will, I believe, be needed in making your judgments. The second is the questionnaire itself. The third, a locational subskills appendix, is a particular section of skills in the model which were eliminated by judges in the pilot study. Your answers on the questionnaire will determine whether or not you will respond to items in the appendix. The fourth enclosure is a single sheet designed to gather certain data about participants.

The background information includes five sections:

- (1) rationale for the study;
- (2) statement of the problem;
- (3) plan of the study and status to date;
- (4) construction of the model; and
- (5) nature and purpose of the judgments.

There are two sections in the questionnaire: 1) "Locating Materials in a Library : Skills Clusters and Subskills", and (2) "Locating Content/Data in Materials : Skills Clusters", each consisting of essential definitions, directions and response forms.

In the subskills appendix there is a listing of subskills for "Locating Content/Data in Materials" consisting of directions and response forms.

Would you please, within the next two or three weeks, examine the enclosed materials and make your judgments. When you are finished would you kindly return the entire questionnaire package (five enclosures) in the envelope provided for that purpose.

You will, I hope, find that the contents of the package provide appropriate and explicit guidance for making your judgments. Thank you again for your participation as an independent judge in the study. I trust you will find the experience interesting and worthwhile in relation to your work.

Yours sincerely,

Shirley Henslowe

Adviser:

Dr. Jane H. Catterson  
Professor,  
Reading Education

SH:egm  
Encls.

## BACKGROUND ON JUDGES: III

To ensure accuracy and consistency of information about judges in the study you are asked to complete the following checklist and add, as indicated, certain data about your professional position and experience (name omitted).

I Place of Employment: \_\_\_\_\_  
\_\_\_\_\_

II Position:

Please check (✓) according to your present status.

1. School System \_\_\_\_\_ a) Supervisory \_\_\_\_\_ b) Other \_\_\_\_\_
2. Dept. of Education \_\_\_\_\_ a) Supervisory \_\_\_\_\_ b) Other \_\_\_\_\_
3. University\* \_\_\_\_\_ a) Faculty of Education \_\_\_\_\_  
School Libraries Dept. \_\_\_\_\_  
Other \_\_\_\_\_  
b) School of Librarianship \_\_\_\_\_

\*Course taught on elementary school library (pre-service)  
Yes \_\_\_\_\_ No \_\_\_\_\_

Present Position (title): \_\_\_\_\_  
\_\_\_\_\_

III Experience:

Elementary School Library Experience Yes \_\_\_\_\_ No \_\_\_\_\_

Elementary Teaching Experience Yes \_\_\_\_\_ No \_\_\_\_\_

Experience in Library Work < 5 yr. \_\_\_\_\_ 5 yr. \_\_\_\_\_ > 5 Yr. \_\_\_\_\_

IV Training:

School Library Major \_\_\_\_\_ BLS \_\_\_\_\_ MLS \_\_\_\_\_

Enclosure #1

BACKGROUND INFORMATION

	Page
1. Rationale for the Study.....	1
2. Statement of the Problem.....	1
3. Plan of the Study and Status to Date.....	2
4. Construction of the Tentative and Refined Models.....	2
5. Nature and Purpose of the Judgments.....	3

## 1. Rationale for the Study

School instruction in library research and reporting is frequently considered by both librarians and teachers to lack adequate point and direction. It is proposed that at least part of any problem that exists lies in the lack of validated models for the a) location, b) collection, and c) synthesis skills that are demanded in the library research and reporting tasks.

## 2. Statement of the Problem

The purpose of the study is to develop a model of basic library locational skills for print sources at the elementary school level. A skills model will be produced through analysis of library literature, curricula, published instructional materials and tests. The model that emerges from this process will be submitted to a number of school librarians for validation through independent judgments.

It is hoped that the study will make a contribution to research in the area of library skills instruction as it is carried on through elementary school library and reading curricula. A practical application of the model is seen to be its incorporation into an initial unit on research and reporting activities for intermediate grade level in a subject area such as social studies.

### 3. Plan of the Study and Status to Date

a. The stages that have been completed are:

- (1) Location of the information base for developing the model - July, 1975.
- (2) Critical reaction to the information base by a group of independent judges, all librarians - Questionnaire I, "Quality of the Search", August, 1975.
- (3) Data collection from the literature base to produce a tentative skills model - October, 1975.
- (4) Tentative model ready for judgments - November, 1975.
- (5) Critical reactions to the tentative model by a group of independent judges, all librarians - Questionnaire II, the pilot study or first validation, January, 1976.
- (6) Summary of data from Questionnaire II and derivation of the refined skills model, January, 1976.

b. The stage to be completed is a second validation, that is, critical reactions to the refined model by independent library judges outside British Columbia - Questionnaire III, April-May, 1976. (See attached)

### 4. Construction of the Tentative and Refined Models

In the review of library literature, related sources, and a previous review of reading education literature, the term "basic library locational skills" was sought first. It was not found, although the terms "basic tools", "basic skills", "library skills" and "locational skills" were found frequently.

It was decided by the researcher that it would be most efficient to develop first a model of locational skills and then

to refine that model through a pilot study validation of the terms basic and library applied to the model. It was also decided that for each skill and subskill to be retained in the model at least 60% agreement would have to be expressed by participating judges. The product of these judgments, it was concluded, would be considered to be a refined model of basic library locational skills.

##### 5. Nature and Purpose of the Judgments

You are one of a number of library educators, trained and experienced in school librarianship, who has been asked to participate as an independent judge in a second validation of the model. As implied by the term "independent" it is asked that your reactions be made without consultation with other judges or library associates.

On the questionnaire you are asked to react to listings of various locational skills in relation to two aspects of skills instruction: 1) level in the skills hierarchy, that is, whether the skills and their subskills are basic (B) or non-basic (NB) and 2) whether the skills are library-based (LB) or not necessarily library-based (NNLB). These referents along with several other terms are defined within the questionnaire itself.

Depending on your answers in the questionnaire you may be asked to proceed to the subskills appendix. If so, you will then be requested to react as to whether or not these subskills

Henslowe/76

4

are considered to be basic (B).

Within both the questionnaire and appendix, checklists of supplementary subskills are provided for your reference about additional skills.

You will, I hope, find that the format of the questionnaire facilitates your judgments. Branching directions have been used within response forms so that you may proceed systematically and without necessarily referring to every page.



## Enclosure #2

## QUESTIONNAIRE III

	Pages
SECTION A: LOCATING MATERIALS IN A LIBRARY: SKILLS CLUSTERS AND SUBSKILLS	1-13
SECTION B: LOCATING CONTENT/DATA IN MATERIALS: SKILLS CLUSTERS	14-17

Henslowe/76

1

## SECTION A: LOCATIONAL SKILLS CLUSTERS

Two skills clusters developed by the researcher are:

- 1) locating materials in a library, and
- 2) locating content/data in materials.

The purpose of Sections A and B is to obtain your reactions about the two locational "skills clusters" in terms of appropriate level and locale for instruction.

Level, as proposed for your consideration, refers to basic or non-basic level while locale indicates library-based or not necessarily library-based skills instruction.

Henslowe/76

2

### Definitions

In the order presented in the questionnaire the definitions for Section A are as follows:

1. Locating Materials in a Library
2. Locating Content/Data in Materials
3. Basic/Non-Basic Skills and Subskills
4. Library-Based/Not Necessarily Library-Based

Within these definitions reference is also made to the meaning of some related terms such as "arrangement of the library" and "materials".

#### 1. Locating Materials in a Library

These are the skills used in actually finding materials, but not the skills used in locating data or content within such material. This cluster is comprised of a) arrangement of the library, b) arrangement of materials in the library, c) card catalogue, d) vertical file, and e) Dewey Decimal Classification. For example, use of the card catalogue to locate a specific science book in the library would be a skill for locating material, but use of the book's index to locate information within the material would not be such a skill.

To avoid any confusion about the term "arrangement" it should be noted that "arrangement of the library" refers to general layout of the library, including various work areas and furnishings

while "arrangement of materials in the library" refers to the organization of the book collection by sections and within sections.

## 2. Locating Content/Data in Materials

These are the skills used in actually finding content/data but not the skills used in collecting data from the materials. For various materials this skills cluster is comprised of:

a) format and, b) bibliographic data (frequently referred to as book parts in the literature). For example, use of certain bibliographic data to locate information within a text would be a "locating information" skill, but not such skills as outlining or notetaking to collect information from the text book.

As used in the questionnaire it should be noted that "format" refers to the make-up/general layout of the book, while "bibliographic data" refers to information about the book which could be included on the catalogue card. Although these two terms are not regarded by the researcher as being entirely precise and discrete they are considered to be far less ambiguous than the term "book parts".

"Materials" includes standard fiction/non-fiction books, standard and specialized reference books and magazines/periodicals. It is felt by the researcher that locational aids for the standard fiction/non-fiction books would logically receive first consideration in skills instruction.

### 3. Basic/Non-Basic (Skills or Subskills)

Basic skills are those locational skills and subskills that, for purposes of instruction, would logically be placed at the lower levels of a skills continuum. For users unfamiliar with the library, these skills would be considered to be basic or fundamental skills to be taught (B).

Non-basic skills are those locational skills that would logically be postponed until first-level or basic skills instruction had taken place. Non-basic skills would, therefore, be more appropriately placed in second or higher levels of a skills continuum. (NB).

### 4. Library-Based/Not Necessarily Library-Based Skills

Library-based skills are those locational skills that would be most appropriately taught and utilized in the library. (LB).

Not necessarily library-based skills are those locational skills that would not necessarily be taught and utilized in the library. (NNLB)

## SECTION A                      LOCATIONAL SKILLS CLUSTER I

Directions

Please react to the locational skills cluster by first classifying its component skills as being basic (B) or non-basic (NB) according to the definitions given above.

Then react to the skills cluster by indicating the appropriate locale as being library-based (LB) or not necessarily library-based (NNLB) according to the definitions given above.

The rating scales are set up as follows:

- |    |                    |   |
|----|--------------------|---|
| 1. | B (Basic)          | NB (Non-Basic)                          |
| 2. | LB (Library-Based) | NNLB (Not Necessarily<br>Library-Based) |

For each statement given, indicate your reaction by checking (✓) the one category that best expresses your judgment. If you feel that other skills should be included please identify those skills under "Suggestions for Additional Locational Skills".

If, in Section A, Skills Cluster #1: Locating Materials in a Library, you checked LB (Library-Based) please turn to Page 8, (Section A).

If you checked NNLB (Not Necessarily Library-Based) please turn to page 14 (Section B).

## RESPONSE FORMS: SECTION A

LOCATIONAL SKILLS: (LEVEL AND LOCALE  
FOR INSTRUCTION)Skills Cluster #1: Locating Materials in a Librarya. Level in Skills Hierarchy

To locate materials in the library,  
the ability to use the \_\_\_\_\_ is:

B (Basic)      NB (Non-Basic)

1. arrangement of the library
2. arrangement of materials in  
the library
3. card catalogue
4. vertical file
5. Dewey Decimal Classification

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

B. Locale for Instruction

Skills instruction for locating  
materials in a library should be:

LB                     >NNLB  
(Library-      (Not Necessarily  
Based)      Library-Based)

_____	_____
-------	-------

Suggestions for Additional Locational Skills: Locating  
Materials in a Library:



## SECTION A

## LOCATIONAL SUBSKILLS 1

The purpose of this part of Section A is to obtain your reactions to locational subskills in terms of their appropriate level; that is, whether each subskill is judged to be basic or non-basic according to definitions given on page 2.

Subskills are those skills underlying each skill cluster. For example, under "Locating Materials in a Library" a subskill would be using an author card in a card catalogue while under "Locating Content/Data in Materials" a subskill would be using the index of a book (part of the bibliographic data).

Directions

You are asked to react to subskills listed on pages 10 to 13 by classifying each as being basic or non-basic.

The rating scale is set up as follows:

B (Basic)

NB (Non-Basic)

For each statement given, indicate your reactions by checking (✓) the category that best expresses your judgments.

At the bottom of each page some space is left for any pertinent remarks that you might wish to add about particular subskills. You are asked to refer to subskills by either number or name.

If you wish to consider adding some subskills you have been provided with a supplementary checklist for that purpose (page 13). You are asked to indicate any skills that you regard as also being basic by checking the B (Basic) column beside those items.

Also, you are welcome to add any skills to the checklist which you feel are relevant to the model, i.e., basic.

## RESPONSE FORMS: SECTION A

LOCATIONAL SUBSKILLS: LEVEL FOR INSTRUCTION:

Skills Cluster #1 - Locating Materials in a LibrarySubskills: Level in Skills Hierarchy

## ARRANGEMENT OF THE LIBRARY (A/L)

In relation to placement on a  
library locational skills con-  
tinuum, ability to comprehend  
and use a \_\_\_\_\_ is:

B (Basic) NB (Non-Basic)

1. simple library floor plan

\_\_\_\_\_

## ARRANGEMENT OF MATERIALS IN A LIBRARY (AM/L)

In relation to placement on a library  
locational skills continuum, ability  
to find materials \_\_\_\_\_ is:

by sections:

2. picture books

\_\_\_\_\_

3. easy books

\_\_\_\_\_

4. fiction books

\_\_\_\_\_

5. non-fiction books

\_\_\_\_\_

6. reference materials

\_\_\_\_\_

7. magazines/periodicals

\_\_\_\_\_

within sections: books:

8. fiction, alphabetical by author

\_\_\_\_\_

9. non-fiction, by subject (DDC)

\_\_\_\_\_

10. biography by 921

\_\_\_\_\_

11. alphabetical by biographee

\_\_\_\_\_

within sections: books: cont'd

B (Basic)    NB (Non-Basic)

12. call number (recognition)

parts of call number:

letter identifiers

13.            E (content)

14.            R (purpose)

15.            author's surname (initial)

number identifiers

16            author's surname (number)

17. shelf labels:

18.    for section identification

19.    for subject identification

within sections: magazines:

20. alphabetical, by title  
(ignoring articles a, an, the)

#### CARD CATALOGUE (CC)

In relation to placement on a library  
locational skills continuum, ability  
to use the \_\_\_\_\_ is:

21. outside labels

22. guide cards (inside trays)

23. author card (see also: filing rules)

24.            author - top line

25.            surname first

26.            title of book

27.            date of publication

non-fiction

28.            call number (recognition)

## CARD CATALOGUE - continued

B(Basic)      NB (Non-Basic)

29.	title card (see also: filing rules)	_____	_____
30.	title on first line	_____	_____
31.	subject card (see also: filing rules)	_____	_____
32.	subject on first line	_____	_____
33.	heading capitalized	_____	_____
34.	cross reference cards (recognition)	_____	_____
35.	"see"	_____	_____
36.	filing rules	_____	_____
37.	alphabetical order	_____	_____
38.	numbers as if spelled out	_____	_____
39.	abbreviations as if spelled out	_____	_____
40.	'an', 'a', 'the' in titles disregarded (at beginning of title)	_____	_____

## VERTICAL FILE (VF)

41.	drawer labels	_____	_____
42.	envelope/folder labels	_____	_____
43.	alphabetical by subject headings	_____	_____
	<u>or</u> by DDC	_____	_____
44.	main divisions only	_____	_____

## CLASSIFICATION BY SUBJECT/D.D.C. (DDC)

In relation to placement on a library  
locational skills continuum ability  
to use \_\_\_\_\_ is:

45.	the ten general divisions of the DDC	_____	_____
-----	--------------------------------------	-------	-------

SECTION A: CHECKLIST OF SUPPLEMENTARY SUBSKILLS:  
LEVEL FOR INSTRUCTION

Skills Cluster #1: Locating Materials in a Library

B (Basic)

ARRANGEMENT OF MATERIALS IN A LIBRARY

within sections: books

1. non-fiction, alphabetical by author \_\_\_\_\_
2. letter identifiers - PB \_\_\_\_\_

✓ CARD CATALOGUE

3. date of publication - fiction \_\_\_\_\_  
call number - parts \_\_\_\_\_
4. subject identifiers (DDC) \_\_\_\_\_
5. letter identifiers - R, E etc. \_\_\_\_\_  
number identifiers \_\_\_\_\_
6. author's surname/number \_\_\_\_\_
7. cross-reference cards - "see also" \_\_\_\_\_  
filing rules \_\_\_\_\_
8. word-by-word arrangement \_\_\_\_\_
9. Mac/Mc as if spelled 'Mac' \_\_\_\_\_
10. books by an author before books \_\_\_\_\_  
about an author \_\_\_\_\_

CLASSIFICATION BY SUBJECT (DDC)

11. some subdivisions in relation to a subject \_\_\_\_\_  
area, say social studies \_\_\_\_\_
12. to first decimal \_\_\_\_\_
13. ability to use classification by particular \_\_\_\_\_  
categories such as fairy tales, biography, etc. \_\_\_\_\_

ADDITIONAL SUBSKILLS:

SECTION BLOCATIONAL SKILLS CLUSTER 2Directions

Please react to the locational skills cluster by first classifying its component skills as being basic (B) or non-basic (NB) according to the definitions given above.

Then react to the skills cluster by indicating the appropriate locale as being library-based (LB) or not necessarily library-based (NNLB) according to the definitions given above.

The rating scales are set up as follows:

- |    |                    |   |
|----|--------------------|---|
| 1. | B (Basic)          | NB (Non-Basic)                          |
| 2. | LB (Library-Based) | NNLB (Not Necessarily<br>Library-Based) |

For each statement given, indicate your reaction by checking (✓) the one category that best expresses your judgment. If you feel that other skills should be included please identify those skills under "Suggestions for Additional Locational Skills".

## RESPONSE FORMS: SECTION B

LOCATIONAL SKILLS: (LEVEL AND LOCALE  
FOR INSTRUCTION)Skills Cluster #2: Locating Content/Data in MaterialsBOOKS (Standard Fiction/Non-Fiction)Level in Skills HierarchyTo locate data in books the ability  
to use the \_\_\_\_\_ of a book is:

B (Basic) NB (Non-Basic)

1. format

\_\_\_\_\_

2. bibliographic data

\_\_\_\_\_

Locale for InstructionSkills instruction for locating  
data in books should beLB  
(Library-  
Based)NNLB  
(Not Necessarily  
Library-Based)

\_\_\_\_\_

Suggestions for Additional Locational Skills:Locating Content/Data in BOOKS. (Standard Fiction/Non-Fiction)



If, in Section B, Skills Cluster #2: Locating Content/Data in Materials you checked LB (Library-Based) please proceed to Enclosure #3, Appendix, Section B.

If you checked NNLB (Not Necessarily Library-Based) please turn to Page 17, (Section B).

Henslowe/76

17

SECTION B: Subskills Cluster #2

NNLB

✓

Thank you. You have completed the questionnaire unless you wish to add any critical comments about the questionnaire overall.

REMARKS:

SECTION BLOCATIONAL SUBSKILLS 2

The purpose of this part of Section B is to obtain your reactions to locational subskills in terms of their appropriate level; that is, whether each subskill is judged to be basic or non-basic according to definitions given on page 4. (Section A)

Subskills are those skills underlying each skill cluster. For example, under "Locating Materials in a Library" a subskill would be using the author card of a card catalog while under "Locating Content/Data in Materials" a subskill would be using the index of a book (part of the bibliographic data).

Directions

You are asked to react to subskills listed on pages 20 and 21 by classifying each as being basic or non-basic.

The rating scale is set up as follows:

B (Basic)

NB (Non-Basic)

For each statement given, indicate your reactions by checking (✓) the category that best expresses your judgments.

At the bottom of each page some space is left for any pertinent remarks that you might wish to add about particular subskills. You are asked to refer to subskills by either number or name.

If you wish to consider adding some subskills you have been provided with a supplementary checklist for that purpose (page 22). You are asked to indicate any skills that you regard as also being basic by checking the B (Basic) column beside those items.

Also, you are welcome to add any skills to the checklist which you feel are relevant to the model, i.e., basic.

## APPENDIX

	Pages
SECTION B: LOCATIONAL SUBSKILLS -	14-17

NOTE: Since, in the pilot study, these skills were judged to be NNLB (Not Necessarily Library-Based) they were detached from the questionnaire for this judgment. If you think that they should be LB (Library-Based) you are asked to react to the items presented on pages 20 and 21 according to the directions given.

LOCATIONAL SUBSKILLS: LEVEL FOR INSTRUCTION:

Skills Cluster #2: Locating Content/Data in Materials

BOOKS (Standard Fiction/Non-Fiction)

Subskills: Level in Skills Hierarchy

1. FORMAT\*

In relation to placement on a "book" locational skills continuum, ability to use such locational aids as the \_\_\_\_\_ is:

B (Basic)    NB (Non-Basic)

cover

\_\_\_\_\_

spine

\_\_\_\_\_

collation:

title page

\_\_\_\_\_

text/body matter

\_\_\_\_\_

graphic material (illustrations, charts, etc.)

\_\_\_\_\_

2. BIBLIOGRAPHIC DATA\*

appendix

\_\_\_\_\_

author (name)

\_\_\_\_\_

bibliography

\_\_\_\_\_

charts (listing)

\_\_\_\_\_

copyright date/or

\_\_\_\_\_

date of publication

\_\_\_\_\_

edition

\_\_\_\_\_

foreword/preface

\_\_\_\_\_

glossary

\_\_\_\_\_

illustrations

\_\_\_\_\_

## BIBLIOGRAPHIC DATA - dont'd

	B (Basic)	NB (Non-Basic)
index	_____	_____
cross-references	_____	_____
introduction	_____	_____
key, guides (e.g., for symbols)	_____	_____
maps	_____	_____
series	_____	_____
tables	_____	_____
title	_____	_____
table of contents	_____	_____
volume number	_____	_____

---

\*OPTIONAL:     Suggestions are welcomed for possible alternate terms to "book parts" or "format/bibliographic data". You will, of course, be credited for suggested terms which are considered by the researcher to be more appropriate than those used in the study.

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SECTION B: CHECKLIST OF SUPPLEMENTARY SUBSKILLS: LEVEL  
FOR INSTRUCTION

Skills Cluster #1: Locating Content/Data in Materials

B (Basic)

Format

end papers

\_\_\_\_\_

size

\_\_\_\_\_

type face

\_\_\_\_\_

Bibliographic Data

compiler

\_\_\_\_\_

dedication

\_\_\_\_\_

editor

\_\_\_\_\_

epilogue

\_\_\_\_\_

foot-notes

\_\_\_\_\_

half-title

\_\_\_\_\_

number of pages

\_\_\_\_\_

place of publication

\_\_\_\_\_

plates

\_\_\_\_\_

prologue

\_\_\_\_\_

publisher

\_\_\_\_\_

revision

\_\_\_\_\_

subtitle

\_\_\_\_\_

translator

\_\_\_\_\_

Additional Subskills:



## APPENDIX E

### FOLLOWUP LETTER : THE FINAL VALIDATION

Content of Hand-written Followup Letter : Summer, 1976.

I hope that you do not mind me writing to you informally to inquire whether or not you have had an opportunity yet to complete the questionnaire on library locational skills (sent to you about           ). It may be that you have completed and mailed it recently. If so, I thank you for your cooperation and will look forward to receiving your reactions.

If you have not as yet made your judgments would you kindly respond to one of the two questions on the attached sheet? Whatever your response will you please return the form in the self-addressed stamped envelope provided for your use. The information will be very helpful to me in planning the remainder of the study.

I hope that you can find time to respond to the questionnaire so that your province and your opinions will be represented in the study.

Yours sincerely,

(Mrs.) Shirley Henslowe

(Summer, 1976)

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HENSLOWE QUESTIONNAIRE : Basic Library Locational Skills

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1. I will be completing the questionnaire

during \_\_\_\_\_ (✓)

July.....

early August.....

mid-August.....

late August.....

by September 5 (deadline).....

2. I will not be participating in the study.....

and will be returning the unused question-

naire package.....

N.B. When returning the questionnaire please enclose the covering letter or add your name to the survey sheet. A return address will also suffice. Names are not needed for reporting the data but are essential for producing an accurate list of participating judges.