THE UNIVERSITY OF ALBERTA

TASKS PERFORMED BY PERSONS IN PREPRIMARY OCCUPATIONS

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

DEPARTMENT OF ELEMENTARY EDUCATION

EDMONTON, ALBERTA

FALL, 1972

ABSTRACT

This study applied current techniques popularized by the military and industry to study task performance in six preprimary occupations in an attempt to develop curriculum data based on factual knowledge of what is done, rather than on what is conceptualized as being done.

A child care task list of 137 items was used to interview fifty-two care and teaching personnel in preprimary programs to provide data to answer questions about task performance and relationships between performance and such characteristics as occupational title, type of program, and specific training.

In addition, a card sort of the task list was distributed to administrators and educators to determine training levels perceived by them as necessary for effective performance of each task.

Tasks were divided into two main categories. The first, Program tasks, included the planning and preparation tasks directly related to program, and the care and teaching tasks involving interaction with children or parents. These proved to be the tasks most frequently performed by the highest number of care and teaching persons. The second main category, Facilitating tasks, included those tasks supportive to the Program tasks, housekeeping, food preparation, clerical, administrative, and professional development tasks. These were performed to a lesser degree, but sufficiently

frequently by certain occupational groups and in certain programs, and by all the subjects, to lead to the conclusion that care and teaching persons spend a considerable amount of time on tasks which might well be carried out by auxiliary personnel.

Educators and administrators clearly perceived the Program tasks as the function of the care and teaching persons, but exhibited a bias towards administrative and planning tasks as requiring higher levels of training than interaction tasks.

Of some cause for concern was the finding that many persons are performing tasks for which they do not have a level of training perceived as necessary for effective performance.

The study has implications for curriculum development, differentiated staffing procedures, studies on task significance, higher training levels for preprimary care and teaching personnel, and standardization of training units.

ACKNOWLEDGEMENTS

The writer wishes to acknowledge the guidance and assistance provided by her supervisor, Dr. M. Horowitz in the carrying out of this study. Acknowledgement is made also of the contribution by Dr. M. Affleck, Dr. A. MacKay, and Dr. D. Tichenor.

This study could not have been carried out without the cooperation of a great many persons, the judges, the educators, the administrators, and the care and teaching personnel, and their assistance is gratefully acknowledged.

The writer would also like to express gratitude to her husband, Hugh, and her children, Howard, Duncan, Michael and Anne for their patience, encouragement and assistance which made this study possible.

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INTRODUCTION AND PROBLEM

1. INTRODUCTION

Contemporary curriculum making demands that the designer have more exact data on which to base decisions about objectives and content. This is particularly true for curriculum in vocational education for which the primary goal is entry skills for employment in an occupation or vocation. In fact it could be argued that the vocational portion of teacher education has as its primary goal entry skills for the profession of teaching. In these days of increasing public awareness of the virtues and deficiencies of quality teaching, it would seem important that career course curriculum is based on a secure knowledge of what the graduate must be able to do in order to perform effectively on the job.

However, a developing body of research on teacher performance has made apparent the practice-theory gap which frequently occurs in other types of vocational programs. The first steps in bridging this gap have been taken in the United States by industry and the armed forces in the form of task and job studies designed to elicit information on competencies needed and the knowledges on which these are based (Sjogren and Sahl, 1966). These are just beginning to be used in education where it appears they may have a good deal to offer.

II. THE PROBLEM

Background to the Problem

In the spring of 1970, the researcher was involved in the preparation of a proposal for a training program for early childhood personnel at a local community college. A review of the literature revealed the almost total use of conceptualization by so-called experts as a process for creating curriculum for this type of program (Midjass, 1966; Milliken, 1967; U.S. Dept. of HEW, 1966-67). In addition, the curriculum descriptions for training programs for several kinds of early childhood personnel appeared to be remarkably similar, particularly in the career content. This was so despite a prevailing attitude that certain occupations require more training than others and are of a higher status. This study was conducted in an attempt to clarify curriculum needs.

Statement of the Problem

The problem was to obtain and compare data from several types of early childhood occupations within Edmonton and vicinity with respect to the following research questions:

1. What tasks are performed by workers in six preprimary occupations in Edmonton and vicinity?

2. What is the relationship, if any, between the tasks performed and the occupational title?

3. What is the relationship, if any between the tasks performed and the type of program in which the subject is employed?

4. What is the relationship, if any, between the job title and the type of program?

5. What is the relationship, if any, between the tasks performed and the amount of specific training for the occupation?

6. What is the relationship, if any, between the amount of training conceptualized as being necessary to perform a task effectively, and the amount of training actually held by those performing the task?

Need for the Study

The demand for adequately trained preschool care and teaching personnel has continued to increase rapidly in Edmonton and throughout Canada and North America. The Superintendent of the Social Service Department of the City of Edmonton was quoted in the Edmonton Journal of February 20, 1971 as saying that Edmonton needed ten more day care centers. This statement was based on a study which indicated that in 1964 there were 7,110 children aged five or under whose mothers worked (Edmonton Welfare Council, 1966). However, at the time of the research there were only thirty-eight licensed centers providing 1,312 spaces for day care in the City.

The Royal Commission on the Status of Women found a "nation-wide" demand for child care services, and estimated that day care spaces were required for one-quarter of the child population aged three to six years. However, they report that only three per cent of these children were in day nurseries (Royal Commission Report, 1970).

The Ad Hoc Committee on the Preparation of Nursery and Kindergarten Teachers of the National Education Association of the United States reported trends that indicate an increase of five million children in preschool programs by 1975 and point out that there are not enough early childhood teachers for today's needs (Haberman and Persky, n.d.).

UNESCO estimated that for forty-seven countries including Canada, the annual increase for preschool establishments between 1960 and 1970 would amount to six per cent based on the average annual increase from 1950 to 1960 (UNESCO, 1963, p. 18).

In response to the growing demand, training programs have increased continuously.

The *Day Care Report* of the Canadian Council on Social Development discusses the rapid expansion of training programs for early childhood personnel during the 1960's in community colleges and other institutions providing training. The *Report* discusses the inconsistency of training standards and certification and concludes that:

> There is an urgent need for systematic assessment of the variety of training programs and practice teaching requirements. A first priority is the development of a comprehensive and coherent approach to the training of teachers working in the field of early childhood education, whether it be in family day care for infants, nursery day care, kindergartens or programs for children with special needs (CCSD, 1972, p. xvii).

The NEA Report reveals a similar situation in the United States where training programs are limited and certification for preschool personnel existed in only six of the states in 1967. The Report emphasizes that:

> *But before curriculums and certification and licensing regulations can be established the competencies required by teachers and others who work with the very young must be determined and stated.* (Italics are from the report.) (Haberman and Persky, n.d.).

The concern for consistent training and certification for early childhood personnel arises from the expansion of knowledge about development which has led to the belief that the preschool years are of the utmost importance in determining the potential of a child (Bloom, 1964; Mindness and Keliher, 1966-67; CCSD, 1972). The study of the agents which affect development has placed an emphasis on the quality of experiences provided by the adult and the contribution of training for the adult to the quality of experiences provided (ACEI, 1965-66; Beadle, 1971; Boguslawski, 1966; NAEYC, n.d.; UNESCO, 1963).

The Canadian Council of Social Development *Day Care Report* devotes a whole section to the review of the importance of good early experiences for young children, and the importance of the teacher role: "The most elaborate and expensively equipped setting cannot be fully used by inexperienced or ill-trained teachers (CCSD Report, 1972, p. 45)." Gardner and Cass quote from *Education and Experience in the Infant School* by Mellor: "The teacher has the most fundamental, far-reaching and direct influence on the children (Gardner and Cass, 1965, p. 13)."

Writing in Alberta in 1966, Worth states that:

> The teacher is the single most important factor in the child's early school experience. For it is the nursery school and kindergarten teacher who must guide his educational development during its period of most rapid and influential growth (Worth, Fagan, and King, 1966, p. 68).

He went on to reveal that unfortunately: "Large numbers of children between the ages of four and six are already being educated during the day by individuals and agencies outside the family, most of whom lack any formal qualifications whatsoever for the task" (Worth, et al, 1966, p. 63).

This problem is not a new one in the field. A 1931 study on Nursery Education in the United States found a problem with inadequately trained staff in day nurseries and preschool relief institutions (White House Conference, 1931). Salley, in 1943, reported a need for improvement in the general competency of beginning teachers and teachers in service in New York City preschool programs (Salley, 1943). Hromadka concluded from a study of staff in residential institutions for children that: "The most discouraging aspect was that in no institutions were the workers trained sufficiently for what was expected of them (1966, p. 181)." Shanahan's study at the University of Alberta in 1970, in which she evaluated the core course in the early childhood curriculum, found that the curriculum of this course was judged by the teachers after a year in the field ". . . to be highly 'ineffective' which tended to make the teachers feel that they were inadequately prepared to perform classroom curriculum tasks." She claims that:

> Areas of teaching difficulty as perceived by the teachers and areas of teaching difficulty as seen by the instructors of the course are not substantially the same. This finding gives support to the necessity for an improved analysis of the needs of the schools (Shanahan, 1970, p. 85).

The majority of the present training programs have been based on a conceptualization of the requirements for the vocation. There

have been only limited attempts to apply an approach to curriculum design based on a precise definition of tasks involved in the performance of the job to vocational curriculums in child care and teaching (Beaver and Ruehr, 1970; Midjass, 1966; Rahmlow and Kiehn, 1967b).

Writers in vocational and teacher education increasingly recommend additional research based on task and job analysis to provide for more relevant training programs which will train teachers and personnel who will be better equipped to meet the needs of the children (Larson, 1969; LeBaron, 1969; Rahmlow and Kiehn, 1967b).

An improved definition of just what is involved in the care and teaching role may also contribute to a clearer concept of role for personnel in preschool programs.

The need for a clear definition of role performance in preschool programs is increasingly recognized (Chambers and Foster, 1966; Clark, 1958; Hromadka, 1964; Prescott and Jones, 1967). In the many kinds of preschool programs, public and private day care, nursery schools, headstart and readiness, and residential treatment and care, the personnel in charge of the children possess a wide range of titles including nursery school teacher, kindergarten teacher, child care supervisor, child care attendant, child care aide, and teacher aide. However, they are most frequently called "teacher" by children, parents, and administrators (CCSD, 1972, p. 100). Although some of these persons possess specific training for teaching preschool children, many do not. Job and task analysis may make a contribution to the definition and clarification of role.

The need for distinctive teacher training programs for preprimary personnel has already been expressed by several writers (Brottman, 1969; Education Commission of the States, 1971; Estvan, 1969; NEA, 1968).

Finally, there are continuous attempts in the literature and research studies to discover characteristics of good teachers (Getzels & Jackson, 1963). Although these attempts have proved unsuccessful in the past, it is possible that job and task analysis will uncover other factors which influence the job performance. Consequently, an understanding of the relationship of training and experience to task performance may be of use in hiring practices.

III. METHODOLOGY

Instrumentation

A checklist questionnaire of one hundred and forty-one items, developed by Rahmlow and Kiehn (1967a) and used for their study, was submitted to a group of knowledgeable persons for opinions on its effectiveness in covering completely the tasks of the population to be surveyed. On the basis of the recommendations of the panel, the questionnaire was modified.

The modified questionnaire was tried with a pilot group of respondents to verify its relevance for and urban Alberta population. Categories were added and procedures modified.

The Population

The population for the study consisted of the care and teaching personnel in all preschool group programs in Edmonton and vicinity.

The Sample

A group of knowledgeable persons was asked to select from these programs three "leading edge" institutions in each of seven categories. The care and teaching personnel in these centers constituted the subjects for the study. The size of the sample was fifty-two.

Data Collection

Head administrators in each of the institutions chosen were contacted by telephone, acquainted with the purpose of the study, and requested to cooperate. The institutions were visited by the interviewer who conducted an interview with each care and teaching person. The checklist questionnaire was used to structure the interview.

Data Analysis

Data from the checklist and interviews were tabulated, classified and analysed.

Educator-Administrator Opinion

In addition to the above, a group of educators and a group of program administrators completed card sorts of the tasks from

the checklists. Data from these sorts were tabulated, classified and analysed.

Definition of Terms

The following definitions were adopted for the purpose of this study:

1. PREPRIMARY PROGRAM: This is an organized program for children before their entry into Grade One.

2. CARE AND TEACHING PERSONNEL: These are persons employed in a program for the main purpose of supervising and assisting directly with the children.

3. EARLY CHILDHOOD EDUCATOR: This is a person involved in teaching a curriculum and instruction course in early childhood in a university or college.

4. ADMINISTRATOR: This is a person mainly involved in carrying out administrative duties in an early childhood program, and not involved except incidentally in the care and/or teaching of the children.

5. TASK: This is a group or series of activities related to a specific function or goal such that they can be adequately described so as to be easily comprehended as a single unit by a respondent.

6. LEADING-EDGE PROGRAM: This is a program which is highly successful in achieving the goals generally set for that type of program.

Assumptions

The following assumptions were made:

1. That the subject's perception of tasks performed is a basis for determining task performance.

2. That the checklist represents an accurate and complete description of the tasks.

3. That the tasks as described would be perceived similarly by all the subjects involved in the study.

4. That task performance is a useful basis for determining curriculum development in training for vocations.

5. That the judges accurately perceived and identified leading-edge programs.

6. That leading-edge programs do not contain certain factors which might adversely influence performance or non-performance of tasks.

7. That educator and administrator perception of training required is accurate.

8. That the study would provide sufficiently accurate information to be of value to the University, the vocations and the researcher.

Limitations of the Study

This study appears to have the following limitations:

1. The study represents the opinions of only fifty-two subjects in Edmonton and vicinity. Selection procedures resulted in over one-third of these being in one type of program. The educator and administrator samples have only nine subjects in each, and the

administrator sample does not represent every type of program. Nevertheless, the technique developed here might be utilized effectively in determining curriculum needs with other populations.

2. The selection of the program was subject to bias on the part of the judges.

3. There are only three programs in each type of program included in the study.

4. The description of the task might be interpreted in different ways.

5. Factors such as position, training, and experience may influence perception of the task.

6. There may be other tasks in addition to those on the checklist.

IV. OUTLINE OF THE TEXT

This chapter has introduced the study, has presented the problem to be investigated, the research questions, the need for the study and the outline of the methodology, and has discussed the assumptions and limitations of the study.

Chapter II presents a review of the literature related to the study. This includes literature on the place of task analysis in curriculum research, terminology in job and task analysis, procedures for job and task analysis, task studies in care and teaching occupations, and literature on research techniques.

The research design is presented in Chapter III which includes sections on the population and sample, the sources of data, the survey

instruments, the pilot study, data collection, and the categorization of data.

The fourth chapter presents the findings from the personal and program data sheets, the task checklist, and the card sort of tasks by administrators and educators.

The final chapter includes a summary and discussion of the findings, presents some tentative conclusions, and offers suggestions and recommendations for further study.

Chapter 2

REVIEW OF RELATED LITERATURE

In this chapter, literature related to the place of task analysis in curriculum research is considered first. This is followed by a discussion of the terminology in job analysis. Procedures for job and task analysis are discussed next, followed by a description of several task studies carried out in care and teaching occupations. Finally the literature is reviewed as it related to research techniques.

I. THE PLACE OF TASK ANALYSIS IN CURRICULUM RESEARCH

Job and task analysis is a comparatively recent phenomenon in research. Larson (1969) cites Morsh's 1963 statement:

> The extensive use of job analysis for developing or revising training curriculums, establishing training standards, or validating training course content is really just beginning (Larson, 1969, p. 21).

In the decade of the sixties, an increasing number of writers advocate the use of task analysis as an approach to curriculum building (Dubois & May, 1970; Glaser, 1964; LeBaron, 1969; Macdonald, 1970; Shartle, 1959). This advocacy is based upon their opinion that there is a lack of adequate information available with which to construct appropriate models for training programs. These writers suggest that by a careful study of what the teacher does, curriculum can be designed to produce more effective teaching and teachers.

Shartle (1959) pointed out that schools are frequently criticized by industry and business, and by their own graduates because training programs are not related to job requirements. He feels that schools and colleges "have a great need for occupational information" for curriculum development (p. 8).

Glaser (1964), discussing the "Implications of Training Research for Education," points out the failure of education to apply research aimed at discovering specific tasks:

> Such procedures should provide information to assist the designer of a course of instruction in making decisions. Furthermore, factual data of this kind can combat prejudices and ritualistic practices about what is relevant or non-relevant to criterion performance (p. 155).

Macdonald (1970), following a discussion of why present teacher education does not influence teacher behavior, sets out some principles for the improvement of training programs the first of which states that there should be no new programs without a thorough analysis of the teaching task.

Dubois and Mayo (1970), in a discussion of validated instruction, advocate task analysis as a primary element (p. 3). Later in the same volume, Webb adds support by stating, "The problem of what to measure boils down to the necessity of developing for each program a clear-cut, unequivocal description of the tasks that the trainee is supposed to perform more efficiently as a result of his training (1970, p. 57)."

II. TERMINOLOGY

Larson (1969) has performed a very useful and extensive review and synthesis of the research and literature on systems, job and task analysis with respect to vocational education. Systems, job, and task analysis were developed originally by the military forces of the United States and have been successfully applied by them and American business for improving training programs (Glaser, 1964; Larson, 1969). However, the terms are not interchangeable and whereas systems analysis appears to have been more widely used, job and task analysis has been applied only in a limited way to curriculum development, primarily in vocational education where the job orientation is evident (Larson, 1969; Rahmlow and Kiehn, 1967).

Systems Approach

Larson (1969) discusses the current overlapping use of the terms in the field and concludes that the difference in the use of the terms lies in the size of the basic unit being considered (p. 21). He reviews the definitions of the terms used throughout the literature. In general, systems analysis appears to encompass the broadest scope and can best be described as a cyclical approach to training programs. It contains three major phrases: determination of system requirements, system development, and system validation, i.e., evaluating the graduate. It appears that systems analysis is an approach which may employ several methods other than task and job analysis (p. 6).

Occupational Analysis

Occupational analysis, while similar to job analysis and employing similar techniques, has a broader scope. Larson cites Borow (1964) as describing occupational analysis as ". . . the application of a systematic method of obtaining information focused on occupations and industries as well as on jobs, tasks, and positions (p. 20)." This approach was used in developing *The Dictionary of Occupational Titles* (U.S. Dept. of Labor, 1965).

Job and Job Analysis

The job is defined as the sum total of requirements, responsibilities, and tasks assigned to a given position in a work structure (Miller, 1953, p. 7). Although some writers consider the "job" as the basic unit for analysis for curriculum development, others consider the "task" or "operation" as the basic unit (Larson, 1969, p. 21). It would appear from Larson's review that job analysis is the compilation of data on all tasks for operations relating to a job. He defines "operation" as ". .. a basic element of a job or an action (p. 21)."

Shartle (1959) provided the following useful list of brief definitions:

> POSITION: a group of tasks performed by one person. There are always as many positions as there are workers in a plant or office.
> JOB: a group of similar positions in a single plant business establishment, educational institution, or other organization.
> OCCUPATION: a group of similar jobs found in several establishments.
> CAREER: this covers a sequence of positions, jobs or occupations that one person engages in during his working life.

ROLE: in this text, perceived duties one has in an organization.
VOCATION: synonymous with 'occupation'. "Vocation" is more likely to be used by the worker than his employer (pp. 23-24).

Task and Task Analysis

Larson quotes Chenzoff (1964) for a definition of task:

> A task has been defined as the collection of activities that are: performed by one person, bounded by two events, directed toward achieving a single objective or output, and describable by means of the method set forth so that the resulting task description conveys enough information about the task to permit the necessary training decision to be made (Larson, 1969, p. 22).

The U.S. Department of Labor *Training Manual for Job Analysis* uses the definition:

> Task or Duty,...one of the distinct major activities that constitute logical and necessary steps in the work performed by the worker...
>
> A task or duty is created whenever human effort is expended for a specific purpose (1965, p. 6).

The *NOBELS Taxonomy* defines activity as follows:

> Activity: An activity is a group of tasks occuring in close temporal proximity that have a common purpose (Huffman, et al, 1968, p. 145).

Miller's definition:

> Task: A group of discriminations, decisions and effector activities related to each other by temporal proximity, immediate purpose and a common man-machine output. Note that a task has a goal (1953, p. 8).

Thus, we have "activities" defined in terms of "tasks" and "tasks" defined in terms of "activities". "Goal" or "purpose" appears frequently in relation to definition of "task".

The *Dictionary of Canadian English* (Avis, 1967) does little to clear the confusion:

task - work to be done, a piece of work, a duty

activity - an action, a thing to do

duty - the thing that a person has to do in his work, action required by one's occupation or position.

The *Dictionary of Occupational Titles* (U.S. Dept. of Labor, 1965) uses the term "job function" which it defines as "what gets done".

Larson cites several writers on task analysis:

From Chenzoff (1965): task analysis is a method or a process by which a task is examined and its characteristics in terms of certain attributes, are identified;

From Folley (1964): task analysis has the objective of identifying the tasks involved in the system being studies, and of obtaining whatever information is required about those tasks for completion of the training situation analysis;

Larson interprets the *Instructional Systems Development Manual* (U.S. Dept. of HEW, 1968) as differentiating between a "task description" as "a list of job activities", and "task analysis" as "the determination of the knowledge and skill requirements of the job" (p. 23).

Rahmlow and Kiehn (1967b) add another term "task categories" which they define as "combinations of commonly interrelated tasks (p. 6)."

The problem of terms is further compounded by the use of the work "task" as synonymous with "goal" throughout educational literature as in "teaching task" (Horowitz and Silas, 1970; LeBaron, 1969; Macdonald, 1970).

From this consideration of the literature, it appears that the words "operation" and "activity" can be used synonymously for the primary units of work which when added together constitute a task;

that a group of tasks constitutes a job; and that a group of jobs containing similar tasks constitutes an occupation or vocation.

III. PROCEDURES FOR JOB AND TASK ANALYSIS

There are several steps involved in carrying out an analysis, whatever the size of the unit involved. Larson (1969) defines job analysis as "the collection and interpretation of information about the work performed" (p. 20).

Research Design

In surveying the approaches to training research Glaser (1964) provides the sequence of principal activities required in the development of a training program as proposed by Crawford of the U.S. Army (1962).

Paraphrased briefly these are:

(1) analysis of the operational subsystems i.e. the hardware and human components
(2) analysis of the particular job which is then subjected to detailed task analysis in terms of inputs the human must learn to handle and outputs that he must make.
(3) specification of knowledges and skills
(4) determination of training objectives
(5) construction of the training program
(6) development of measures of job proficiency
(7) evaluation of the training program (Glaser, 1964, p. 160).

There is an obvious resemblance of this to the elements proposed by Dubois and Mayo (1970). The essential elements of validated instruction are:

> analysis of the tasks the student is expected to perform following training, statement of the terminal behaviours that jointly make up the tasks, measurement of these terminal behaviours, and revision of the resulting instructional material until performance specification are met (p. 3).

Macdonald (1970) proposes the following research strategy in developing a teacher education program:

> (1) the close and prolonged observation of a large sample of teachers in action, and the ordered categorization of their activities;
> (2) the evaluation of these activities with reference both to learning principles and to student achievement;
> (3) the construction of a set of preliminary models, and their experimental testing;
> (4) the selection of the most promising models, with whatever modifications have become necessary as the basis for a teacher education program (p. 14).

LeBaron (1969) lists the information needs for a proposed system analysis to produce a model for teacher education;

> 1. What are the functions and tasks of teachers in the context of the school environment?
> 2. What do we want the teacher to do in the learning environment?
> 3. What knowledges and skills are required in order to perform these functions and tasks?
> 4. What experiences would reinforce that knowledge and give the prospective teacher the chance to practice the tasks?
> 5. How can this analysis of functions and concomitant knowledge and experiences be states in terms of program goals (p. 24)?

In general, there appear to be two main steps in job and task analysis: the first involves collecting data on what the worker does, the second in analyzing this information to determine the skills and knowledge, or competencies, needed to carry out the tasks. Collection of data appears to begin generally at the task level. Analysis may then proceed in the direction of breaking the task into smaller units such as operations or sub-tasks and sub-sub tasks, or towards grouping tasks into categories according to common characteristics such as basic skills, function, or knowledges required.

Other steps may be suggested in addition, and other information gathered.

The use of job analysis as a device for developing curriculum is not without its critics. Ellis (1969) doubts that there is a readily analysable teaching task (job) citing the Charters and Waples (1929) incomplete analysis which ran to 666 pages. He also expresses his doubts that the tasks done are necessarily those that should be done stating that, "Teachers spend a majority of their time in tasks that an untrained person could perform (p. 58)." Reiterating this opinion, Belth (1969) contends that teachers do many more things in their classes than educate adding: "But it is not all they do that should concern us here. Only the actual teaching should (p. 13)."

A method of solving this dilemma is suggested by Webb (1970) who proposes as a first step defining the skills, knowledges, and attitudes expected to result from a training program (p. 57). That is, we decide what the tasks are to be rather than what they are. Then we attempt to measure the standard of performance. He points out the difficulty of determining what we wish to measure in training programs for complex and prolonged jobs, or when the tasks verge on the intangible (pp. 56-57).

The problem of dealing with such a complex and extensive job as teaching is mentioned by Ellena, et al, (1961) who concluded: "In fact, research indicates that teacher performance is one of the most complex human phenomenon that we are privileged to study (p. 2)

A two-pronged approach to task analysis is recommended by the *Guide for Differential Use of Subfessional Staff in Family and Child Welfare Services*, (U.S. Department of Health, Education and Welfare, 1970). They propose systems analysis as the method for determining

the goals, purposes and objectives followed by statements on tasks which must be performed to achieve these. At the same time, functional job analysis is carried out on existing jobs to analyze and organize the task content (p. 5). They sum up: "Systems analysis focuses on the work that has to get done to accomplish an agency's objective; functional job analysis focuses on what the workers do (p. 5)."

This suggests that it is possible to carry on both kinds of training research simultaneously to the probable advantage of both approaches. Added support for the "functional analysis" approach comes from Lorimer (1969) who believes that:

> By whatever method, in whatever way, and for whatever type of instructional situation they are prepared, school systems must have teachers who are ready, able and willing to cope with a task that is not at all difficult or complicated but which does require skill and proper techniques. There may be as much that is simple and routine to learn about teaching as about law, but the fact is one cannot be successful in these occupations without knowing these things (p. 9).

He says that the purpose of practice-teaching is to ". . . provide student teachers with opportunities to learn about the multitude of tasks which are the daily responsibility of a teacher, to learn how to teach . . . (p. 8)." Conant (1963) found that practice teaching was one of the two consistent elements in every teacher training program, the other being educational psychology (Chapter 6). In making recommendations as an outcome of his findings, he states that "The one indisputably essential element in professional education is practice teaching (p. 142)." It is possible to speculate that this is because practice teaching provides the only real understanding of the tasks of teaching.

In summary, the literature seems to suggest that a thorough description and categorization of tasks actually performed is an important first step in an analysis of the job or occupation.

IV. STUDIES IN CARE AND TEACHING OCCUPATIONS

The lack of data for developing training programs and the limited applications of this process to vocational education in general have been referred to previously (Larson, 1969; Rahmlow & Kiehn, 1967b). However some studies have been carried out which contribute to our knowledge of tasks in these occupations.

Openshaw and Cyphert

Openshaw and Cyphert (1967) conducted a study in which they sought to develop a taxonomy for classification of teacher classroom behaviors. They reviewed the research on teacher behavior which attempts to describe what actually happens in classrooms, ". . . what a teacher does and how he behaves while teaching (p. 7)."

They report that several experimental studies resulting from this interest in descriptive research have resulted in the development of a variety of instruments for analysis of teacher behavior. Unfortunately, according to their report, the instruments all reflect the bias of the researcher: "Teaching behaviors are categorized in different ways depending upon what the individual researcher holds to be important about teaching (p. 7)." They continued their study by synthesizing the research to date to produce an instrument by which to measure and categorize all observable teacher classroom behavior. In so doing they imposed their own biases by adopting a

definition of teaching as ". . . interaction between teacher and student or students within a superior-subordinate relationship (p. 79)," and describing only those observable behaviors related to this definition. They determined the teaching functions related to encounter, i.e. interacting, and developed an instrument based on these. It contains twenty-three categories. This instrument was tested as a device for recording teacher classroom behavior and the researchers report the difficulty for observers in distinguishing sub-categories such as explain-inform, elicit-inform. Obviously it is difficult to delineate specific tasks accurately. However this study provided useful information on categorizing and describing tasks, especially interaction tasks. They conclude that their endeavors have resulted in a classification and description of middle-range behaviors not specific or discrete in nature, and suggest the need for ". . . an extension of the system to encompass more discrete behaviors and a body of descriptive data that will provide knowledge of the relationship between a specific teacher behavior and the response . . . of learners . . .(p. 152)."

Gardner and Cass

Gardner and Cass (1965) conducted a study following these steps:

1. The actions of a group of infant and nursery school teachers in England were observed and recorded on a time-sampling basis.

2. The data were categorized according to what appeared to be the most important motive behind the actions of the teacher.

Although their goal was not a task description, a list of tasks, albeit incomplete, resulted from the study.

They report that the original list of items was "long" and not based on any order since they did not wish to make judgements at the time of recording, but that classification was adopted afterwards for the purpose of coherent recording (p. 32). Some categories applied only to nursery schools (p. 33), but in general there was considerable similarity in the categories.

Although they limited the time-sample to 180 minutes per teacher, and focused their attention especially on the activities of the teacher while the children were engaged in self-selected activities, their list of categories which includes only interaction behaviors reached seventy-nine.

Rahmlow and Kiehn

Rahmlow and Kiehn carried out a study in two stages. In the preliminary stage (1967a) they developed a task inventory by asking a team of knowledgeable persons to conceptualize items which were then arranged in functional categories under continuous review by the advisors. This was tested in the field by personal interviews and revised for the final study.

The resulting instrument contained 141 tasks listed under the following nine categories:

Housekeeping	17 tasks
Food Preparation	16 tasks
Assisting Children with Routines	10 tasks
Preparation of Materials	5 tasks

Secretarial, Clerical, etc.	7 tasks
Directing or Assisting with Activities	25 tasks
Planning Activities and Programs	20 tasks
Working with Parents	16 tasks
Administration	25 tasks
Total	141 tasks

(Rahmlow and Kiehn, 1967b, Appendix D).

In the final study (1967b), the inventory was mailed to a sample of 499 persons employed in four types of preschool programs. Fifty-eight per cent were in public and private day care centers, ten per cent were in migrant worker centers, and thirty-two per cent were in head start programs. Usable data were received from 255 of these and were analyzed for frequency of task performances, for relationship of task performed to education and training level, and for similarities and differences in task performance of workers in differing programs. All tasks not performed by fifty per cent or more of the workers were eliminated from the list, and the categories and tasks were re-arranged in order of frequency:

I. Prepare and Care for Materials	5
II. Assist Children with Routines	7
III. Direct or Assist with Activities	22
IV. Prepare and Serve Food	12
V. Perform Housekeeping Tasks	8
VI. Perform Secretarial and Clerical Tasks	4
VII. Work with Parents	5
VIII. Purchase Supplies and Equipment	2
IX. Plan Activities	2
X. Perform Administrative Tasks	7
Total	74

(Rahmlow and Kiehn, 1967b, Appendix A).

In addition, they attempted the initial steps in a tentative knowledge and skills taxonomy for training, but they recommended the need for further research to complete this.

They reported that, in general, over fifty per cent of workers in all types of institutions performed almost all the tasks listed. Exceptions were the preparation of meals (excluding snacks), preparation of art and creative materials by workers in migrant centers, some tasks of a supervisory nature, tasks involving policy and overall plans of the center, records of supplies for workers in community cooperatives, planning of programs and activities for workers in head start programs, and keeping records for workers in community cooperatives, all of which were below the fifty per cent level of performance (pp. 11-12).

In addition to these differences in tasks performed by workers in different types of programs, this study revealed one difference for age, workers over fifty performed a larger percentage of clerical tasks. They report that there was no significant relationship between level of education and task performance except for one task, less than half the workers with fewer than eight years of education were involved in tasks with parents (pp. 11-12).

They report that over sixty per cent of the workers carry out the "difficult tasks of meeting a child's needs" (p. 11) adding that:

> . . . while it is usually assumed that this type of task requires professional or near-professional training and emphasizes the need for professionals in this type work, it is evident that non-professional workers are performing these tasks (p. 11).

In deriving knowledge levels, they suggest that their study indicates that workers at all levels of education are performing tasks, which if done effectively, would require high level knowledge yet less than one per cent of their subjects had any specific training.

They report difficulty in obtaining consistent job titles and consequently there is no comparison of tasks for this criterion.

V. RESEARCH TECHNIQUES

As these studies indicate, several techniques have been used to obtain information on tasks performed by workers in a job or occupation. They include interviewing the worker and recording his responses (Shartle, 1959), observing the worker and recording all his actions (Gardner and Cass, 1965; Prescott and Jones, 1972), preparation of a recording form by a process of conceptualization and validation, and using this to record either worker responses or observation of worker actions (Openshaw and Cypbert, 1967; Rahmlow and Kiehn, 1967), and interviewing or requesting information from supervisory or training personnel (Beavers and Ruehr, 1970); or a combination of methods (U.S. Dept. of Labor, 1965).

Larson recommends that the vocational educator will secure more assistance from the primary sources of information such as surveys, interviews, and the involvement of advisory committees (1969, p. 12). He urges that the vocational educator make every effort to validate the information gained.

He refers to the use of the mail survey by a large number of studies, and describes a position analysis questionnaire for the one study consisting of 178 elements. He reports the steps indentified

in a Job Corps Report (A and R Report Number 12, 1968): location of source materials, draft of job inventory; review of draft by advisors; revision; field review; construction of operational job inventory; selection of survey sample; mailing; administration of job inventory; responding to inventory; scanning, coding and collating; key punching and verifying; computer analysis; and distribution of results (Larson, 1969, pp. 48-49). These are almost exactly the steps followed by Rahmlow and Kiehn (1967a; 1967b).

Instrumentation

Although there may be value in interviewing or observing the worker without the bias which might result from the use of a recording instrument, these methods present their own problems, such as the need for non-judgemental, unbiased, precise description, and recording time (Gardner and Cass, 1965; Openshaw and Cyphert, 1967). All methods present the problems of numbers of tasks and categorization of tasks.

Task Inventory

Larson includes the task inventory as a method of data collection, and cites a study by Madden and others (1964) which revealed a ninety per cent agreement on performance of all tasks in an inventory as evidence that incumbents do not tend to exaggerate the nature of their jobs. Pura (1970) found a significant correlation between employer and employee responses.

Rahmlow and Kiehn describe the considerable effort to develop and validate their task checklist (1967a). In doing so they followed

a similar procedure to that outline in the Job Corps Report as outlined on page 30 of this chapter.

Commonality of Tasks

In developing their task list, Rahmlow and Kiehn hypothesized that "various segments of the child care services share many elements in common (1967a, p. 3)," and that ". . . certain clusters of knowledges and competencies are common to performance of several categories of child care work and that some are more specialized tasks (1967a, p. 3)." As reported previously they found a great deal of commonality among workers in the four types of programs they studied.

In a study of the areas of knowledge common to mothers and employees in three occupations related to child care, day care foster mothers, day care center directors, and child care assistants, Midjaas found only one item unique to one particular job (1966, p. 39).

Discussing a home economics occupational training program, Macdonald states it will prepare students for jobs as child care aides or assistants in nursery schools, child day care centers, hospital and therapy centers, recreational facilities, day camps and kindergarten programs (1970, p. 31).

The *Dictionary of Occupational Titles* (U.S. Dept. of Labor, 1965) includes the titles "teacher, nursery school," "child-care leader," "child-day-care center worker," "nursery-school attendant," "playroom attendant" under the single description for "teacher nursery school" (Vol. I, p. 727). Although there are separate

descriptions for each occupation, several identical tasks are described for "teacher, kindergarten," "teacher, nursery school," and "teacher, mentally retarded (education)" (Vol. I, p. 727).

The *Dictionary of Occupational Titles* lists all teachers of exceptional children, "teacher, blind," "teacher deaf," "teacher, handicapped children," and "teacher, mentally retarded," in the same occupational category (U.S. Dept. of Labor, Vol. II, p. 41). The Occupational Brief based on this category includes all these occupations under the heading "Teacher, Exceptional Children" and discusses the similarities as well as the differences in the occupations (Chronicle Guidance Publications, 1971). An Occupational Brief "Teacher, Kindergarten and Nursery," based on the D.O.T. categories, describes these two almost as a single occupation, the main difference being in the age range of children, three to five for nursery school and four to six for kindergarten (Chronicle Guidance Publications, 1968).

General descriptions for the "teacher of young children" or the "preschool teacher" are frequently used (Bacmeister, 1968, Katz, 1970; Science Research Associates, 1966).

Hess and Croft (1972), in a discussion of different programs in which the teacher of young children may be employed, list thirty-six types of programs ranging from nursery home through day nursery, kindergarten, preschool to day home (p. 45).

A comparison of job descriptions and occupational briefs for nursery school teachers; day care supervisors; day care aides, child care assistants, child care attendants child care worker; teacher

of exceptional children, teachers of handicapped children, kindergarten teachers, and teacher aides reveals a great number of similarities in duties, working conditions, personal qualifications, and education and training. Several such descriptions used the combined heading teacher, nursery school and kindergarten. In general the duties include supervision, instruction and training, providing materials, experiences and guidance; personal care, administrative duties such as budgeting, purchasing equipment and supplies and planning, observation and testing, maintaining records, professional development, parent activities, and housekeeping duties. (Can. Dept. of Manpower, 1967; Careers, Inc., 1967, 1969, 1970, 1971; Chronicle Guidance Pub., 1968, 1969, 1971; Science Research Associates, 1966).

Descriptions of the tasks of teaching are legion, and growing emphasis is being placed on the significance of the educational component in all types of primary programs. Hill presented as an acceptable assumption in 1961 ". . . the teaching profession includes anyone who holds professional responsibility for the teaching process at any level. . . (p. 119)", and at this same conference most discussion groups accepted as one of the major segments of the teaching profession: "Those who teach or carry out other professional activities in preschool programs and in elementary and secondary schools (NEA, 1962, p. 28)."

Kindergarten and nursery school have always been recognized as having an educational basis and now other types of preschool programs, such as day care, are increasingly recognized as containing

a significant educational component (Boguslawski, 1966; Caldwell, 1971; Hymes, 1968; UNESCO, 1963).

From this review of the literature describing teaching and child care jobs and tasks, it appears that a general task list for several occupations is feasible and that all literature referring to learning and teaching tasks in general and preprimary teaching in particular is a useful resource in conceptualizing additional and more satisfactory items for a task list.

Categorization of Tasks

However, it appears to be difficult, if not impossible, to develop a comprehensive, valid survey instrument of reasonable length. Although their sample would appear to have carried out similar duties to that of Gardner and Cass, Rahmlow and Kiehn have not included some of the tasks identified by Gardner and Cass. On the other hand, the instrument produced by Openshaw and Cyphert is self-admittedly limited as is the list resulting from the study by Gardner and Cass.

Categorization of tasks appears to be necessary to organize and discuss lengthy task lists, but is subject to the biases resulting from the theoretical basis used to determine categories. All of the above studies utilized categorization, and this is suggested as a necessary part of task analysis in the literature where, however, it is generally thought of as coming after task description. *The U.S. Department of HEW Guide* (1970) recommends clustering tasks according to worker function as one way to make the information manageable (p. 9).

LeBaron (1969) proposed two main groupings: tasks based on teacher-learner interaction, and tasks concomitant with the teaching task. The latter he divides into concomitant activities coterminous with the teaching tasks, and independant activities in support of the teaching task. Other writers (Cox, 1969; Gage, 1964; Hromadka, 1966; Raths, 1964) have presented lists of teacher functions and types of teaching activities. Openshaw and Cyphert listed five encounter functions (pp. 196-97). Gardner and Cass categorized their data according to the apparent motive behind the teacher's actions (p. 965, p. 32). The categories used by Rahmlow and Kiehn in their study have been discussed on page 27 of this study. The general approach appears to be a functional one, i.e. the task is related to a general function or purpose. Categories frequently included relate to activities with children, activities with materials, activities with parents, activities related to planning and preparation such as diagnosing, assessing, arranging, professional development activities, clerical activities such as recording and reporting, housekeeping activities, and activities related to administration such as organizing and initiating.

Population

The similarities appearing in the job descriptions and tasks enumerated for various occupations plus the congruence of performance found in the Gardner and Cass and Rahmlow and Kiehn studies indicates that all types of preschool occupations might serve as a population source.

The Sample

Gardner and Cass, and Rahmlow and Kiehn selected deliberately in an attempt to eliminate certain factors from their studies. Gardner and Cass chose teachers from schools recommended to them as very good ones from the educational point of view on the grounds that they were concerned with showing ". . . what constitutes good successful teaching in informal education (1965, p. 23)." These schools were recommended by educational authorities, training colleges and training college lecturers.

Rahmlow and Kiehn used a list of ninety-six "leading-edge" child care institutions prepared by three judges, one each from the state child care agency, state board of vocational education and the state university department of child development. These are described as "high quality," "pace-setting" (1967, p. 6) and " . . . reflecting the best in current child care practices (1967, p. 6)."

Prescott and Jones (1972) used a random sample of centres in their study of the quality of day care centres. They reported differences in program quality between centers and found several factors which had an impact on teacher actions. Their study may be interpreted as indicating that there are considerable differences between high and low quality programs and that selection for high quality might eliminate the impact of some factors, such as poor quality of space, on the task performance.

VI. SUMMARY

The review of the literature has established the relationship of occupational analysis to curriculum research. The confusion in the use of the terminology in the field of occupational analysis is obvious, but it is possible to arrive at general concurrence on the use of basic terms. Collection of data on tasks performed is the beginning step proposed by most writers. Openshaw and Cyphert have reviewed the literature on the functions of teachers in general and developed an instrument based on this review. Studies on tasks performed by persons employed in preprimary programs have been carried out by Gardner and Cass, and Rahmlow and Kiehm. These studies along with the literature describing the preprimary care and teaching occupations indicate a high degree of similarity among tasks performed, and an extensive range of tasks. Categorization of tasks is used as a method of developing a task list and reporting data.

Several methods of data collection have been used including the checklist questionnaire. The high degree of similarity among job descriptions for preprimary programs indicates the possibility of a universal checklist of tasks for these occupations.

The study carried out by Prescott and Jones indicates that there might be value in selecting the sample from high quality programs.

Chapter 3

RESEARCH DESIGN

This chapter contains six sections. The first covers the population and sample for the study. Next the sources of data are given, followed by a description of the survey instruments. The fourth section is given over to the pilot study, the fifth section is on data collection, and the chapter concludes with a discussion on the categorization of the data.

I. POPULATION AND SAMPLE

Care and Teaching Personnel

For the purposes of this study, it was necessary to obtain subjects from a variety of preschool programs. It was originally intended to use only the programs within the boundaries of the City of Edmonton. However, the judges selecting the programs experienced difficulty in finding three programs in the head start and readiness group and so the area was expanded to include all preschool programs within twenty miles of the City. Current lists of kindergarten programs were obtained from the Department of Education, Government of Alberta, which licenses these programs and current lists of other types of programs were obtained from the Department of Health and Social Development, Government of Alberta which licenses all other types of preschool programs.

Seven judges were selected. Each was required to choose programs from one of seven categories of programs on the basis that he or she would have the most familiarity with the greatest number of programs in this area, and was qualified by reason of experience and training to judge programs. This judge was asked to select three leading edge programs within this area: that is those programs which in his or her opinion were most successful in achieving the goals generally expressed for such a program.

The phone number of each program was obtained from the Edmonton telephone directory or from the Alberta Government Telephones Directory Assistance. Names of subjects were obtained from the head administrator of each program.

There was a wide variation of number of staff in various programs, but the total of twenty-one programs yielded a total of fifty-eight subjects. Of these, four were unavailable for interview or refused to be interviewed, and it was found necessary to eliminate two subjects because of their failure to comprehend English sufficiently well to understand the checklist questionnaire. The final number of subjects providing useful data was fifty-two.

Difficulty was experienced in determining the total population in the programs as this information was not given in the lists from the government. However, the lists for day nurseries, nursery schools and play schools gave the licensed capacity in terms of numbers of children for each program. Using the staff to children ratios required by the Government of Alberta, Department of Education, (Alberta Government, n.d.) Department of Health and Social Development,

(Alberta Government, 1964) the estimated number of staff was arrived at. For the six day nurseries subsidized by the City of Edmonton the ratio was computed using the lower ratios required by City standards (City of Edmonton, n.d.). In the opinion of the researcher, this method should result in a reasonably accurate estimate, erring if anything in the direction of an overestimate.

Because neither number of children per program nor number of staff was given for kindergarten programs, the ratio of two staff to one program appearing in this study was used for estimation. Since the majority of kindergartens are one teacher enterprises, it is the opinion of the researcher that this will provide an overestimate.

A list of special programs was not available from any one source, and so the judge for these programs was questioned about the total number of programs. Once again, the ratio of staff to program obtained in the study was utilized to estimate the number of subjects.

The derived total population figure of 399 subjects can be said to be a safely high overestimate of the total population.

It was felt that for a study of this kind ten per cent of the possible population would provide an adequate sample for a personal interview questionnaire survey. Table 3.1 summarized the above information, and shows that the twenty-one programs represent nine per cent of the estimated total of 232 programs, and the fifty-two subjects represent thirteen per cent of the estimated total of 399 subjects.

Table 3.1

EARLY CHILDHOOD PROGRAMS IN EDMONTON AND VICINITY
1970-71 FIGURES

Type of Program	Number of Programs in Study	Number of Subjects in Study	Number of Programs in 20 Mile Radius of Edmonton	Average Number of Adults per Group of Children (a)	Estimated Number of Subjects
Day Care	3	18 2 elim. (b)	6 33	2/20 (d) 1/20 (c)	101
Headstart & Readiness	3	9 1 n/a (e)	Included in N.S.P.S. or K. lists		
Kindergarten	3 private 3 public	4 2 n/a (e) 6	67	Average found in this study 2/program (f)	134
Nursery Schools	3	5	47	1/20 (g)	74
Play Schools	3	3	73	1/20 (g)	74
Special Programs	3	7 1 n/a (e)	6 (h)	Average for this study 2.67 per program	16
Totals	21	52	232		399 estimated
%	9.05% of estimated programs	13% of estimated population			

KEY:
a) Program lists gave total number of children in program
b) Subject's English too inadequate to understand questionnaire
c) Provincial government regulations stipulate one adult to twenty children
d) City of Edmonton regulations for subsidized centers stipulate two adults to twenty children
e) Not available for interview, had moved away, was ill or refused to be interviewed
f) Regulations for Kindergarten stipulate one teacher to twenty-five children. Higher ratio found in this study was used instead
g) Regulations for part-time programs stipulate one staff to twenty children
h) No list available from official sources. Figure provided by judge for program category

Administrator Population and Sample

It is impossible to ascertain accurately the number of possible administrators for all the early childhood programs. The twenty-one programs used in this survey yielded only nine administrators distinct from the care and teaching role. Day nursery, nursery school and kindergarten programs are mainly independently owned as small businesses by owner-operators who also function as care or teaching persons, often the only one in the operation. This is born out by the large number of these programs shown on the lists as licensed for twenty-five or fewer children, i.e. one group.

On the other hand all except two of the seventy-three play schools, operate under the supervision of the Department of Parks and Recreation, City of Edmonton which has one overall administrator and five area supervisors. Similarly with kindergartens in school systems, each is located in a school with a principal-administrator, but there is a supervisor for all the kindergartens within the system.

The sample of administrators was distributed as follows:

Day Care	3
Headstart	2
Kindergarten	1
Kindergarten and Nursery School	1
Playschool	1
Special	1
Total	9

Educator Population and Sample

Eleven early childhood educators in the four Western provinces were requested to participate. This represented the total number known to the researcher as persons specializing in teaching of

curriculum and instruction for early childhood personnel in universities and colleges. Nine of these participated.

Educator Sample

College	0
University	9
Total	9

II. SOURCES OF DATA

The sources of data for this study were:

1. Books and periodicals with reference to descriptive research, vocational training and training for preschool personnel, job and task studies.

2. Related studies and theses.

3. Knowledgeable persons in Edmonton and vicintiy.

4. Information obtained by interview and card sort from care and teaching personnel, administrators of early childhood programs and early childhood educators.

5. Lists and information provided by the Department of Education and the Department of Social Development of the Government of Alberta.

III. SURVEY INSTRUMENTS

Three main instruments were used in the collection of the data. The principal one was the Child Care Tasks Checklist.

The checklist was developed from the one used by Rahmlow and Kiehn in their study (Rahmlow and Kiehn, 1967b, Appendix D). This checklist was considered by the researcher to have the following failings: it was developed in a non-Canadian setting and might

therefore be unsuitable in a Canadian setting; it was intended for use only to survey "non-professional" staff although the description of those included as subjects, and the levels of education given seemed to indicate the inclusion of professional staff as well; the individual items did not seem to follow a consistent pattern, e.g., some were specific activities, others were groups of activities; similarily, the task categories did not seem consistent; some tasks were duplicated; and important tasks, mainly interactional tasks, were not included.

Following the same procedure utilized by Rahmlow and Kiehn (1967b, p. 4), the checklist was submitted to a group of Edmonton judges, professionals with backgrounds in early childhood programs from each of the disiplines of medicine, education, social work, child psychology and household economics. They were requested to evaluate the checklist for its suitability and comprehensiveness, and to suggest revisions and additions.

The literature on task list and task descriptions was researched for assistance in redeveloping the checklist. The most useful approach appeared to be the functional approach reported in the Review of the Literature. Utilizing this approach, tasks were considered for their functions and assigned to categories. In order to avoid a very lengthy checklist, the following working definitions were adopted.

Superordinate Categories. All tasks seemed to fall into two main functional categories, facilitating tasks and program tasks.

Facilitating tasks have the enabling function, and the program tasks have the implementation function.

Task Category. This consisted of a collection of smaller task groups related to a common general function.

Task Group. This consisted of a collection of specific tasks or a series of tasks, related to a more specific function or goal.

FACILITATING TASKS -- ENABLING FUNCTION

1. Housekeeping Category - Function to create and maintain a safe, clean utilizable physical environment.

2. Food Provision Category - Function to provide for the nutritional needs of the children.

3. Clerical Category - Function to expedite and maintain functioning of agency and program.

4. Administrative Category - Function to oversee, institute and co-ordinate the functioning of the agency and program.

5. Staff and Professional Development Category - Function to permit and foster professional relationships and growth.

PROGRAM TASKS -- IMPLEMENTATION FUNCTION

1. Planning and Preparation Category - Function to diagnose, prescribe, structure, evaluate.

2. Care and Teaching Category - Function to supervise, regulate initiate, and interact -- protecting, eliciting, stimulating, responding, mediating, communicating, encouraging, developing, acculturating, restricting and accommodating.

3. Parent Interaction Category - Function to interact, initiate, elicit, stimulate, respond.

Difficulties were experienced in establishing discrete functions and some arbitrary decisions on task placement were made. The Redevelopment Chart, Table 3.2, shows the changes made. Three categories, Housekeeping, Food Provision, and Parent Interaction, are essentially the same, Administrative was broadened and expanded, Clerical, Planning and Preparation, and Care and Teaching were each formed by combining two former categories, and a new category, Staff and Professional Development, was added.

The redeveloped checklist has four fewer items, 137, than the Rahmlow and Kiehn list. These four tasks and those replaced by the new tasks are accounted for by the fact that some tasks were duplicated exactly in one or more categories, some specific tasks were contained in other tasks which were really task groupings and should not have been stated separately, some are combined under the new tasks, but not closely enough related to any of them to count as retained. Some of the new task groups might have been inferred in previous tasks, but were not identified sufficiently well to determine if they were performed. In the main, the new tasks were the result of distinguishing the initiating and finalizing function from the participating and implementing function, and of adding task groups related to the care and teaching functions. All tasks in the Rahmlow and Kiehn task list are believed to be included in the new task list.

The redeveloped checklist questionnaire was then utilized in a pilot study with personnel from each of the program categories

Table 3.2

REDEVELOPMENT CHART FOR TASK CHECKLIST

	Housekeeping (Housekeeping)	Food Provision (Food Preparation)	Clerical (Secretarial Clerical, etc. and Purchasing)	Administrative (Administration)	Planning and Preparation (Preparation of Materials & Planning Activities & Programs)	Care & Teaching (Assisting with Routines and directing or assisting with activities)	Parent Interaction (Working with Parents)	Staff and Professional Development (New Category)	TOTALS
Tasks retained with no change or to clarify or slightly change meaning	9	13	7	8	3	8	3	-	51
Tasks retained and expanded considerably	-	-	-	2	-	2	-	-	4
Tasks transferred with slight or no changes from other categories	2	-	3	5	8	1	-	1	20
Tasks developed by splitting former tasks	4	2	4	2	6	7	2	-	27
Tasks developed by combining former tasks	-	-	1	-	-	1	1	-	3
New Tasks	2	2	3	6	5	11	-	3	32
Totals	17	17	18	23	22	30	6	4	137

used in this study. These subjects were interviewed using the checklist questionnaire, and were asked to indicate if they did not understand the task description or if they performed any tasks not mentioned. As a result, the checklist was revised once more to make the descriptions intelligible, and to add the one task group found to be absent, "Maintain grounds".

The final version of the Child Care Tasks Checklist was reproduced on white paper by the Gestetner process. A copy is found in Appendix A.

During the survey, each subject was asked if any tasks which she performed were not included, and with the exception of those in the special programs, all subjects agreed that the list had covered all tasks performed by them. The nature of the tasks missing for the special programs was extremely specialized at an advanced professional level.

To obtain card sets for the card sort by the educators and administrators, the items on the checklist were typed in upper case letters on three by five white index cards. No categories or numbers appeared on the cards.

In addition to the task list, a Personal Data Sheet, and a Program Information Sheet were used to gather data. The Personal Data Sheet was a modification of the one used by Rahmlow and Kiehn (1967b, Appendix D). The revised form was also tested during the pilot study and subsequently revised to yield accurate data. A copy is found in Appendix B.

The Program Information Sheet was devised to obtain information on variables relevant to the program. It was tested at the pilot study stage and also revised to yield accurate information. A copy is found in Appendix C.

IV. PILOT STUDY

To validate the instrument and to standardize procedures, a pilot study was carried out in Calgary. It was necessary to conduct the pilot study outside Edmonton to avoid contaminating the Edmonton sample, and because of the relatively small number of programs in certain categories. Calgary was selected as being the most comparative from the aspect of size and Alberta location.

Seven programs, one from each category, were contacted by telephone for permission to conduct the survey. The interviewer and researcher spent two days in April, 1971 in Calgary. The interviewer visited the agencies, and interviewed all the care and teaching staff using the Child Care Tasks Checklist, and the Personal Data Sheet. Where there was an administrator distinct from the care and teaching staff, she was asked to fill out and then comment on the Program Information Sheet. In addition, the interviewer used the Child Care Tasks Checklist with the administrator for the task sort. It was discovered that these subjects were being required to remember too many criteria simutaneously and so had difficulty in categorizing. Therefore, this idea was abandoned, and in the final study the card set was utilized instead.

The tapes from the pilot interviews were reviewed by the interviewer and the researcher as the interviews progressed to standardize procedures, and to discover inadequacies in the instruments. These were then revised for the main study.

In addition to the pilot study in Calgary, a trial sort of the card sets of the tasks was carried out with graduate students in Early Childhood at the University of Alberta. As a result, instruction sheets were revised to ensure standarized procedures.

V. COLLECTION OF DATA

Selection of Leading-Edge Programs

In an attempt to eliminate the influence of such variables as quality of space, equipment and staffing on the kinds of tasks performed, the study followed the example of Rahmlow and Kiehn, and Gardner and Cass in selecting the best available programs.

Rahmlow and Kiehn define these as follows: "Leading-edge Child Care Institutions are those which are licensed in the State of Washington or recommended by supervising officers as reflecting the best in current child care practices (Rahmlow and Kiehn, 1967b, p. 6)."

The researcher consulted knowledgeable persons to select a judge for each type of program based on the following criteria: a reasonable degree of familiarity with programs in the area to be judged; a background of training and experience which suggests that this person would make a valid choice.

Each judge was contacted initially by phone and asked to participate, and then he was sent a letter outlining the task, and providing the criteria for the decision: ". . . a program which in your opinion is achieving the most success in meeting the goals generally expressed for such a program." Each judge was asked to give three first-choices and two alternates.

Interviewing

The interviews were carried out by a professional interviewer who was unknown to the subjects. She was coached on interview techniques, and checked for consistency and lack of bias on the pilot study. In addition, every fifth interview was taped, and checked by a judge for interviewer bias. Because of the utilization of carefully standardized procedures, and the interview checklist, the interviewer technique was a highly consistent one.

The programs on the lists provided by the judges were contacted by telephone in the order given and they were requested to cooperate. Appointments were made by the interviewer and the agencies were visited in turn by the interviewer who carried out a personal interview with each member of the care and teaching staff. If there was an administrator in addition to the care and teaching staff, that person was requested to carry out the card sort while the interviewer was at the agency. A Program Information Sheet was completed by the interviewer for each agency visited. The interviews were carried out in May and June of 1971.

Those educators who agreed to cooperate were mailed a set of cards and instructions on how to carry out the sort. These instructions are included in Appendix D. The instructions were typed on five by seven inch cards. The Information Card was separate, but the cards containing the instructions were stapled together and the subject was asked to complete Step One before unstapling them. A self-addressed padded envelope was enclosed for the return of the card sets. Card sets were mailed in June with return requested by July 15. Follow-up letters were sent to those who had not returned the sets by that date, and all the sets were returned by July 30, 1971.

VI. DATA ANALYSIS

The data from the Personal Interview Sheets, the Program Information Sheets and Child Care Tasks Checklist of the care and teaching subjects were codified and punched on computer cards, verified, and put on a computer program to yield two-way tables.

The data from the educator and administrator samples were analyzed by hand.

Categorization of the Data

Although there were only two responses for each task, the number of items, 137, made it difficult to deal with all the items simultaneously, and so in general these were put into tables by category. All tasks were arranged in rank order according to the number of positive responses for the whole checklist, and by category.

Data on programs and persons are difficult to categorize, a problem shared by other researchers in the field of Early Childhood. There are many confusing variables in programs and training. The Canadian Council on Social Development expressed the problem in their *Day Care Report*:

> It was decided to include all group care programs in the universe for three reasons. First, it was impossible to determine a priori which programs were nursery schools and which were day care centers. . .
>
> The findings confirmed these presuppositions. It would have been impossible to categorize programs accurately on the basis of the names of centers, or even of the director's designation. . .
>
> Consequently, alternative operational definitions were formulated and applied after the data were gathered (CCSD Monograph, 1972, p. 70).
>
> Unfortunately, the information provided by respondents on the specific content and levels of such courses, and on credentials obtained, was too limited to allow for any precise estimate of the level of professional or vocational preschool qualifications of staff members (CCSD Monograph, 1972, p. 82).

Fortunately, in this study the utilization of the interview technique and careful exploration of the responses by the interviewer provided comparative data most of which were usable. Nevertheless, some changes were made from the original categories and some data were found to be impossible to categorize.

Occupational Groups

Some of the difficulties in obtaining distinctive job titles have already been mentioned. These were compounded by the differences in descriptions used by subjects in the study itself.

Two categories were obtained from the *Dictionary of Occupational Titles*: Teacher, Nursery School and Teacher, Kindergarten. Since the *Dictionary* classifies Child Care Leader, and Child-Day-Care Center Worker under Teacher, Nursery School, describes Child Care Attendant in terms of residential treatment care or care of handicapped children, and does not have a category for Teacher Aide, vocational job descriptions were used to obtain the titles: Day Care Supervisor, Day Care Assistant and Teacher Aide, Preprimary. The *Dictionary of Occupational Titles* includes under one category, Education of the Handicapped, the titles: Teacher, Blind; Teacher, Deaf; Teacher, Handicapped Children; and Teacher, Mentally Retarded. Consequently, these were categorized together under the heading Teacher of the Handicapped.

This method yielded six categories defined as follows:

1. Kindergarten Teacher: A person teaching a part-day group of children in the year before entry to Grade One and employed in a kindergarten program.

2. Nursery School Teacher: A person teaching a part-day group of children in the second year before entry to Grade One who is employed in a Nursery school type of program.

3. Teacher Aide: A person assisting with a part-day group of children in the one, two or three years before Grade One.

4. Teacher of the Handicapped: A person teaching a group of children in a preprimary program for children with specific handicaps.

5. Day Care Supervisor: A person employed in a full-day program as a supervisor of a group of children.

6. Day Care Assistant: A person employed in a full-day program as an assistant with a group of children.

Type of Program

Five categories were used. Rahmlow and Kiehn used four categories in reporting program data: Head Start, Migrant Worker Day camps, Private Day Care and Cooperative Community Day Care (Rahmlow and Kiehn, 1957b, p. 7). The Canadian Council on Social Development *Report* used four categories: programs were classified as day care if seventy per cent or more of the children attended full day and if seventy per cent of the children were from families where the mother worked regularly outside the home; programs were classified as nursery school if less than fifty per cent of the children attended full day and if less than fifty per cent of the children were from families where the mother was regularly outside the home; programs were classified as special need if seventy-five per cent of the children were children with special needs such as blindness, deafness, mental retardation; and all other programs were classified as other (1972, pp. 70-71).

Because the scope of the present study was broadened to include personnel in all types of preschool programs, the category of Kindergarten was added. All programs licensed as kindergartens by the Alberta Department of Education were included in this category. The day care category included all programs listed as such by the Alberta Department of Health and Social Development,

and similarly, the nursery school-play school category included all programs listed as such by the same Department. Nursery schools and playschools were combined in one category because of the similarity of program length, age of children, and reasons for use by clients. In general, they would fit the definition used in the CCSD *Report* for nursery school. The Headstart and Readiness category included all programs designated as such by the program judges, and possessing one of these terms in the title of the program which was assumed to indicate a differentiation of goals from other programs. They were included on the Government lists under either Nursery School or Play School. The final category, Special Programs, included programs generally fitting the definition of special programs found in the CCSD study.

Specific Training

The subjects proved to be cosmopolitan, having obtained their training from many countries throughout the world. Consequently, it was necessary to compare as closely as possible, the length and content of the training. Until such time as all training programs are stated in similar units, this will be impossible to perform with complete accuracy. Nevertheless, the Personal Data Sheet yielded sufficient data to enable the formation of five categories: no training, less than one year of training, one year certificate, two year certificate, three or more years.

Total Education

Four categories used by Rahmlow and Kiehn were utilized for

this study: less than twelve years, completed secondary, post-secondary, thirteen to fifteen years, and post-secondary, sixteen or more years. In order to make a comparison with the CCSD *Report* data, these four categories were sub-divided as follows:

1. Less than twelve years
2. Twelve years
3. Thirteen to fifteen years
   - 3.1 post-secondary non-university
   - 3.2 some university
4. Sixteen or more years
   - 4.1 baccalaureate degree
   - 4.2 post-graduate study

Specific Experience

The data were categorized under the following headings:

first: less than one year, one to two years, two to three years, three to four years, four to five years, five to eight years, eight to sixteen years, over sixteen years.

second: less than two years, two to five years, over five years.

VII. SUMMARY

The population of this study is estimated at 399 persons from which fifty-two subjects yielded usable data. The sources of data included literary and human resources, and information obtained by interview from the subjects. The principal survey instrument was the Child Care Tasks Checklist which was redeveloped from one used

in a study by Rahmlow and Kiehn. This instrument and procedures were validated in a pilot study following which the data were collected by interview, analyzed, and categorized and put into tables which are presented and discussed in the following chapter.

Chapter 4

THE FINDINGS

This chapter reports the findings in three sections. The first section presents the personal and program chacteristics in Tables 4.1 to 4.7 with a short discussion regarding each table. Section II presents the data from the Task Checklist and a discussion of these data. The third section deals with the responses from the card sort of tasks by administrators and educators.

I. PERSONAL AND PROGRAM DATA

This section presents and discusses data on occupational categories, types of programs, specific training, and other subject characteristics.

Occupational Category

The respondents were fairly evenly distributed among the six categories as shown in Table 4.1. There were eight persons in the nursery school teacher category which included nursery school teachers, and playschool and preschool leaders. Nine persons were kindergarten teachers. Teacher aides included ten persons who were aides or assistants in nursery school or kindergarten. Seven persons were in the teacher of the handicapped category, which included two speech therapists, two teachers of the deaf, and three teachers of the mentally retarded all at the preprimary level. The day care supervisor

category contained ten persons, and the day care assistant category, eight persons.

Table 4.1

DISTRIBUTION OF SUBJECTS BY OCCUPATIONAL CATEGORY

Category	Nursery School Teacher	Kinder-garten Teacher	Teacher Aide-Preprimary	Teacher of the Handi-capped	Day Care Supervisor	Day Care Assistant	Total
Number	8	9	10	7	10	8	52
Percentage	15.4	17.3	19.2	13.5	19.2	15.4	100.0

Type of Program

Judges were originally asked to select three programs from each of seven categories. These were reduced to five categories, shown in Table 4.2, by combining kindergartens, public and private, into one category, and by combining nursery schools and playschools into one category for reasons described in Chapter 3, page 55. Because all the day care centers selected were large centers, over one-third of the respondents, eighteen persons, were employed in a day care program. The remainder were fairly evenly distributed among four categories: ten subjects worked in a kindergarten, eight in a nursery or playschool, nine in a headstart or readiness program, and seven in a special program.

Table 4.2

DISTRIBUTION OF PROGRAMS AND SUBJECTS

Category	Kindergarten Private	Kindergarten Public	Day Care	Nursery School	Play School	Headstart and Readiness	Special	Total
Number of Programs	3	3	3	3	3	3	3	21
Number of Subjects	10		18	8		9	7	52
Percentage of Subjects	19.2		34.6	15.4		17.3	13.5	100.0

Specific Training

The numbers of respondents having specific training in early childhood care and education is reported in Table 4.3.

Fourteen persons had no specific training at all in early childhood. Of these only two persons had no training of any kind; the remaining twelve had related training in special education, elementary education, pediatric nursing, psychology, or household economics faily studies. An additional twenty-one persons had less than one year of training which consisted mainly of non-credit short courses and in-service training. These two categories included approximately two-thirds of the sample.

Table 4.3

SPECIFIC TRAINING OF SUBJECTS

Category	No Training	Less Than One Year	One Year	Two Years	Three or More Years	Total
Number	14	21	0	9	8	52
Percentage	26.9	40.4	0	17.3	15.4	100.0

There were no persons having credit for one-year of training. The nine persons having credit for two years of training were mainly nursery nurses from Great Britian. Eight persons had credit for three or more years of training including four with a baccalaureate degree, one post-graduate diploma, and one master's degree. Seven of the subjects with specific training had additional related training which was not included here.

Program and Training

A review of subjects within programs, reported in Table 4.4, shows that seven of the ten persons employed in kindgergartens had less than one year of specific training. All eight of those employed in nursery school and playschool had less than one year of training. Thirteen of the eighteen persons in day care had two or more years of training, and only one had no training whatsoever. Eight of the nine persons in headstart had less than one year of specific training.

Although none of those employed in special programs had specific training for early childhood, each had training for the particular handicap with which she was working.

Title and Training

The data provided the following information with respect to job title and training as shown in Table 4.4. Five of the nine persons in the kindergarten teacher category had less than one year of specific training. Eight or all of those persons in the nursery school teacher group had less than one year of specific training. Similarly, all of the persons, ten, in the teacher aide category had less than one year of specific training.

For the day care supervisor category, eight of the ten had two or more years, and for the day care assistant category, five of the eight had two or more years.

Because the subjects in the teacher of the handicapped are identical to the program category, special programs, the same results apply as reported in the previous section.

Table 4.4

DISTRIBUTION OF SPECIFIC TRAINING BY PROGRAM AND OCCUPATION

Training Category	Program Category						Occupational Category						
	Kindergarten	Nursery School	Day Care	Headstart	Special	Total	Kindergarten Teacher	Nursery School Teacher	Teacher Aide	Day Care Supervisor	Day Care Assistant	Teacher of the Handicapped	Total
No Specific Training	2	2	1	2	7	14	2	2	2	1	0	7	14
Less than One Year of Credit	5	6	4	6	0	21	3	6	8	1	3	0	21
Two Year Certificate	0	0	9	0	0	9	0	0	0	5	4	0	9
Three or More Years of Credit	3	0	4	1	0	8	4	0	0	3	1	0	8
Total	10	8	18	9	7	52	9	8	10	10	8	7	52

Other Subject Characteristics

Sex. All the respondents were female.

Age. Table 4.5 shows the distribution of respondents according to age. Over one-half the subjects, or 57.7 per cent were above thirty years of age. None were under twenty. Twenty-two persons or 42.3 per cent were between twenty and thirty years of age, seventeen respondents were between thirty-one and forty years, eight were between forty-one and fifty years and five were over fifty years.

Table 4.5

DISTRIBUTION OF SUBJECTS BY AGE

Category	Under 20	20-30	31-40	41-50	Over 50	Total
Number	0	22	17	8	5	52
Percentage	0	42.3	32.7	15.4	9.6	100.0

Education. The distribution of subjects according to education is shown in Table 4.6 (a) and (b). Eight subjects had not completed high school or twelve years of schooling. Five subjects had completed high school only. Thirty subjects, or fifty-seven per cent had completed one to three years of post-secondary education, thirteen of these receiving their education at university, and seventeen at some other type of post-graduate institution. Six of the subjects had

a baccalaureate degree, and three had post-graduate certificates or degree, a total of 17.3 per cent.

Table 4.6

DISTRIBUTION OF SUBJECTS BY TOTAL YEARS OF EDUCATION

(a)

Category	Less Than 12	Completed Secondary	Post-Secondary Years						Total
			1	2	3	4	5	6	
Number	8	5	7	15	8	6	1	2	52
Percentage	15.4	9.6	13.5	28.9	15.4	11.5	1.9	3.8	100.0

(b)

Category	Less Than 12	Completed Secondary	Post-Secondary Years				Total
			13 to 15 non Univ.	Some Univ.	16 plus years Bacc.	P.G.	
Number	8	5	17	13	6	3	52
Percentage	15.4	9.6	32.7	25.0	11.5	5.8	100.0

Specific Work Experience. Data on the work experience of subjects in early childhood preprimary programs only are reported in Table 4.7. Although many subjects reported additional or some non-specific work experience, this is not included. Six subjects had less than one year of specific work experience, and eleven had less than two years. These two categories made up almost one-third or 32.7 per cent of the total sample. Seventeen persons or 32.7 per

cent of the sample had two to five years of specific work experience, and the remaining eighteen subjects, or 34.6 per cent had over five years of specific work experience. Thus approximately two-thirds or 67.3 percent had two or more years of specific experience.

Table 4.7

DISTRIBUTION OF SUBJECTS BY SPECIFIC WORK EXPERIENCE

Category	Less Than 1 year	1 to 2	2 to 3	3 to 4	4 to 5	5 to 8	8 to 16	16+	Total
Number	6	11	15	1	1	8	8	2	52
Percentage	11.5	21.2	28.9	1.9	1.9	15.4	15.4	3.8	100.0
	32.7		32.7			34.6			

These findings compare with the CCSD *Report* (1972) which found that six per cent of the subjects had less than one year of training, 55.8 per cent had one to five years, and 34.6 per cent had over five years.

II. TASK PERFORMANCE

Total Scores

The tasks were ranked in order of performance from the top to bottom by task categories. This information is provided in Appendix E. Table 4.8 shows subject performance by task categories for all of the tasks and for each of the characteristics job title, type of program and specific training.

Table 4.8

TASK PERFORMANCE BY CATEGORIES

Facilitating Tasks			Overall Average Score	Occupational Title: Teacher of the Handicapped	Occupational Title: Kindergarten Teacher	Occupational Title: Nursery School Teacher	Occupational Title: Teacher Aide	Occupational Title: Day Care Supervisor	Occupational Title: Day Care Assistant	Type of Program: Special	Type of Program: Kindergarten	Type of Program: Nursery School	Type of Program: Headstart	Type of Program: Day Care	Specific Training: No Training	Specific Training: Less Than One Year	Specific Training: Two Years	Specific Training: Three or More Years
Category	Performance Level																	
Housekeeping 17 Tasks	Above 50%	N	10	10	9	7	11	15	10	10	11	9	10	10	10	9	13	15
		%	58.8	58.8	52.9	41.2	64.7	88.2	58.8	58.8	64.7	52.9	58.8	58.8	58.8	52.9	76.5	88.2
	Below 50%	N	7	7	8	10	6	2	7	7	6	8	7	7	7	8	4	2
		%	41.2	41.2	47.1	58.8	35.3	11.8	41.2	41.2	35.3	47.1	41.2	41.2	41.2	47.1	23.5	11.8
	Above 90%	N	3	0	2	1	6	10	5	0	6	0	2	6	2	5	6	2
		%	17.6	-	11.8	5.9	35.3	58.8	29.4	-	35.3	-	11.8	35.3	11.8	29.4	35.3	11.8
Food Provision 17 Tasks	Above 50%	N	9	8	13	12	9	7	5	8	14	10	10	6	12	10	6	9
		%	52.9	47.1	76.5	70.6	52.9	41.2	29.4	47.1	82.4	58.8	58.8	35.3	70.6	58.8	35.3	52.9
	Below 50%	N	8	9	4	5	8	10	12	9	3	7	7	11	5	7	11	8
		%	47.1	52.8	23.5	29.4	47.1	58.8	70.6	52.8	17.6	41.2	41.2	64.7	29.4	41.2	64.7	47.1
	Above 90%	N	0	0	1	1	1	4	4	0	3	1	0	4	0	0	4	1
		%	-	-	5.9	5.9	5.9	23.5	23.5	-	17.6	5.9	-	23.5	-	-	23.5	5.9
Clerical 18 Tasks	Above 50%	N	11	12	15	16	12	10	4	12	15	16	14	9	14	11	10	15
		%	61.1	66.7	83.3	88.9	66.7	55.6	22.2	66.7	83.3	88.9	77.8	50.0	77.8	61.1	55.6	83.3
	Below 50%	N	7	6	3	2	6	8	14	6	3	2	4	9	4	7	8	3
		%	38.9	33.3	16.7	11.1	33.3	44.4	77.8	33.3	16.7	11.1	22.2	50.0	22.2	38.9	44.4	16.7
	Above 90%	N	1	3	5	2	2	5	0	3	7	0	2	1	4	1	0	2
		%	5.6	16.7	27.8	11.1	11.1	27.8	-	16.7	38.9	-	11.1	5.6	22.2	5.6	-	11.1

Table 4.8 (Continued)

Facilitating Tasks			Overall Average Score	Occupational Title: Teacher of the Handicapped	Occupational Title: Kindergarten Teacher	Occupational Title: Nursery School Teacher	Occupational Title: Teacher Aide	Occupational Title: Day Care Supervisor	Occupational Title: Day Care Assistant	Type of Program: Special	Type of Program: Kindergarten	Type of Program: Nursery School	Type of Program: Headstart	Type of Program: Day Care	Specific Training: No Training	Specific Training: Less Than One Year	Specific Training: Two Years	Specific Training: Three or More Years
Category	Performance Level																	
Administrative 23 Tasks	Above 50%	N	7	7	15	14	3	8	4	7	9	13	8	4	8	6	3	15
		%	30.4	30.4	65.2	60.9	13.0	34.8	17.4	30.4	39.1	56.5	34.8	17.4	34.8	26.1	13.0	65.2
	Below 50%	N	16	16	8	9	20	15	19	16	14	10	15	19	15	17	20	8
		%	69.6	69.6	34.8	39.1	87.0	65.2	82.6	69.6	60.9	43.5	65.2	82.6	65.2	73.9	87.0	34.8
	Above 90%	N	2	3	3	1	2	1	0	3	2	2	1	0	1	2	1	0
		%	8.7	13.0	13.0	4.3	8.7	4.3	-	13.0	8.7	8.7	4.3	-	4.3	8.7	4.3	-
Professional Development 4 Tasks	Above 50%	N	4	4	4	4	4	4	3	4	4	4	4	4	3	4	4	4
		%	100	100	100	100	100	100	75.0	100	100	100	100	100	75.0	100	100	100
	Below 50%	N	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
		%	-	-	-	-	-	-	25.0	-	-	-	-	-	25.0	-	-	-
	Above 90%	N	3	1	1	3	2	3	1	1	3	2	2	3	1	3	1	3
		%	75.0	25.0	25.0	75.0	50.0	75.0	25.0	25.0	75.0	50.0	50.0	75.0	25.0	75.0	25.0	75.0
Subtotals Facilitating Tasks 79 Tasks	Above 50%	N	41	41	56	53	39	44	26	41	53	52	46	33	52	40	36	58
		%	51.9	51.9	70.9	67.1	49.4	55.7	32.9	51.9	67.1	65.8	58.2	41.8	65.8	50.6	45.6	73.4
	Below 50%	N	38	38	23	26	40	35	53	38	26	27	33	46	27	39	43	21
		%	48.1	48.1	29.1	32.9	50.6	44.3	67.1	48.1	32.9	34.2	41.8	58.2	34.2	49.4	54.4	26.6
	Above 90%	N	9	7	12	9	13	23	10	7	21	5	7	14	8	11	12	8
		%	11.4	8.9	15.2	11.4	16.5	29.1	12.7	8.9	26.6	6.3	8.9	17.7	10.1	13.9	15.2	10.1

Table 4.8 (Continued)

Program Tasks			Overall Average Score	Occupational Title: Teacher of the Handicapped	Occupational Title: Kindergarten Teacher	Occupational Title: Nursery School Teacher	Occupational Title: Teacher Aide	Occupational Title: Day Care Supervisor	Occupational Title: Day Care Assistant	Type of Program: Special	Type of Program: Kindergarten	Type of Program: Nursery School	Type of Program: Head start	Type of Program: Day Care	Specific Training: No Training	Specific Training: Less Than One Year	Specific Training: Two Years	Specific Training: Three or More Years
Category	Performance Level																	
Planning and Preparation 22 Tasks	Above 50%	N	19	21	22	21	12	20	13	21	20	21	18	19	21	19	19	20
		%	86.4	95.5	100	95.5	54.4	90.9	59.1	95.5	90.9	95.5	81.8	86.4	95.5	86.4	86.4	90.9
	Below 50%	N	3	1	0	1	10	2	9	1	2	1	4	3	1	3	3	2
		%	13.6	4.5	-	4.5	45.5	9.1	40.9	4.5	9.1	4.5	18.2	13.6	4.5	13.6	13.6	9.1
	Above 90%	N	10	13	18	10	6	16	7	13	12	4	4	9	8	8	8	14
		%	45.5	59.1	36.4	45.5	27.3	72.7	31.8	59.1	54.5	18.2	18.2	40.9	36.4	36.4	36.4	63.6
Care and Teaching 39 Tasks	Above 50%	N	28	26	27	27	27	30	28	26	28	27	25	28	28	27	28	28
		%	93.3	86.6	90.0	90.0	90.0	100	93.3	86.6	93.3	90.0	83.3	93.3	93.3	90.0	93.3	93.3
	Below 50%	N	2	4	3	3	3	0	2	4	2	3	5	2	2	3	2	2
		%	6.7	13.4	10.0	10.0	10.0	-	6.7	13.4	6.7	10.0	16.6	6.7	6.7	10.0	6.7	6.7
	Above 90%	N	23	19	22	21	19	28	24	19	24	21	16	27	22	23	24	22
		%	76.6	63.3	73.3	70.0	63.3	93.3	80.0	63.3	80.0	70.0	53.3	90.0	73.3	76.6	80.0	73.3
Parent Interaction 6 Tasks	Above 50%	N	6	6	6	6	3	6	6	6	6	6	5	6	6	6	6	6
		%	100	100	100	100	50.0	100	100	100	100	100	83.3	100	100	100	100	100
	Below 50%	N	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0
		%	-	-	-	-	50.0	-	-	-	-	-	16.6	-	-	-	-	-
	Above 90%	N	2	5	5	3	1	5	1	5	2	2	2	1	4	3	1	1
		%	33.3	83.3	83.3	50.0	16.6	83.3	16.6	83.3	33.3	33.3	33.3	16.6	67.7	50.0	16.6	16.6

Table 4.8 (Continued)

Category	Performance Level		Overall Average Score	Occupational Title: Teacher of the Handicapped	Occupational Title: Kindergarten Teacher	Occupational Title: Nursery School Teacher	Occupational Title: Teacher Aide	Occupational Title: Day Care Supervisor	Occupational Title: Day Care Assistant	Type of Program: Special	Type of Program: Kindergarten	Type of Program: Nursery School	Type of Program: Head start	Type of Program: Day Care	Specific Training: No Training	Specific Training: Less Than One Year	Specific Training: Two Years	Specific Training: Three or More Years
Subtotals Program Tasks 58 Tasks	Above 50%	N	53	53	55	54	42	56	47	53	54	54	48	53	55	52	53	54
		%	91.4	91.4	94.8	93.1	72.4	96.6	81.0	91.4	93.1	93.1	82.7	91.4	94.8	89.7	91.4	93.1
	Below 50%	N	5	5	3	4	16	2	11	5	4	4	10	5	3	6	5	4
		%	8.6	8.6	5.2	6.9	27.6	36.4	19.0	8.6	6.9	6.9	17.3	8.6	5.2	10.3	8.6	6.9
	Above 90%	N	35	37	35	34	26	49	32	37	38	27	22	37	34	34	33	37
		%	60.3	63.8	60.3	58.6	44.8	84.5	55.2	63.8	65.5	46.6	37.9	63.8	58.6	58.6	56.9	63.8
Totals 137 Tasks	Above 50%	N	94	94	111	107	81	100	73	94	107	106	94	86	107	92	89	112
		%	68.6	68.6	81.0	78.1	59.1	73.0	53.3	68.6	78.1	77.4	68.6	62.8	78.1	67.1	64.0	81.9
	Below 50%	N	43	43	26	30	56	37	64	43	30	31	43	51	30	45	48	25
		%	31.4	31.4	19.0	21.9	40.9	27.0	46.7	31.4	21.9	22.6	31.4	37.2	21.9	32.9	36.0	18.1
	Above 90%	N	44	44	47	43	39	72	42	44	59	32	29	51	42	45	45	45
		%	32.1	32.1	34.3	31.4	28.5	52.6	30.7	32.1	43.0	23.4	21.2	37.2	30.7	32.9	32.9	32.9

Ninety-four or 68.6 per cent of all the tasks were performed by fifty per cent or more of the subjects. Forty-three or 31.4 per cent were performed by fewer than fifty per cent of the workers. Forty-four or 32.1 per cent of the tasks, approximately one-third, were performed by ninety per cent or more of the subjects, and fifteen tasks were performed by all the workers. All of the tasks were performed by at least one or more persons.

Kindergarten teachers had the highest level of performance, fifty per cent or more of subjects in this category carried out eighty-one per cent of the tasks. They were closely followed by nursery school teachers who had 78.1 per cent of the tasks at a fifty per cent or higher level of performance. For the day care supervisor category seventy-three per cent of the tasks were performed by fifty per cent or more of the subjects. The teacher of the handicapped category had 68.6 per cent of the tasks at a fifty per cent or higher level, the teacher aide category had 59.1 per cent and the day care assistant category was lowest with 53.3 per cent of the tasks performed by fifty per cent or more of the subjects. The day care supervisor category with 52.6 per cent of the tasks performed by ninety per cent or more subjects had a difference of 20.5 per cent above the average of 32.1 per cent. All the other groups were close to the average. The sub-categories under job title and type of program are very similar: the special program category contains the same subjects as teacher of the handicapped. The day care program category represents an average of the two categories day care supervisor and day care assistant. The headstart

category contains some subjects from each of the nursery school teacher and kindergarten teacher and teacher aide categories. The kindergarten category contains some subjects from the kindergarten teacher category and some from teacher aide. Similarly for the nursery school category. As a result, the data reveal almost the same relationship, but differences are less extreme because of the averaging effect. The kindergarten category has the highest level of performance with 78.1 per cent of the tasks performed by fifty per cent or more subjects. Nursery school has 77.4 per cent, special and headstart categories are even at 68.6 per cent, and day care is lowest with 62.8 per cent of the tasks performed by fifty or more workers.

The kindergarten category has the highest number of tasks performed by ninety per cent or more subjects, with forty-three per cent of the tasks in this category. Day care follows with 37.2 per cent, then special with 32.1 per cent. Nursery school is ten per cent lower with 23.4 per cent of tasks performed by ninety per cent or more subjects, closely followed by headstart with 21.2 per cent.

Among the specific training categories, subjects with three or more years training had the highest performance level, 81.9 per cent of the tasks being performed by fifty per cent or more. The category for no specific training had 78.1 per cent of the tasks performed by fifty or more, less than one year of training had 67.1 per cent, and two years of training had sixty-four per cent of the tasks performed by fifty or more workers. All of the categories were very close to the average 32.1 per cent for number of tasks performed by ninety per cent or more workers.

Task Category Scores

1. Facilitating Tasks

For the seventy-nine tasks in the superordinate Facilitating category, forty-one or approximately half were performed by fifty per cent or more of the subjects.

Of the thirty-eight tasks performed by fewer than half the subjects, sixteen or 42. 1 per cent were in the administrative category, eight in the food preparation category, and seven each were in housekeeping and clerical.

Only nine of the Facilitating tasks were performed by ninety per cent or more of the workers, and no Facilitating task was performed by all of the subjects. Three of the four professional development tasks were performed by ninety per cent or more of the subjects, and the other one was performed by 65.4 per cent.

The administrative category was the only one in which over half the tasks were below the fifty per cent level of performance; sixteen of the twenty-three tasks or 69.6 per cent were performed by fewer than fifty per cent of the subjects, and twenty-one of the twenty-three were performed by fewer than sixty per cent.

Eight of the seventeen food provision tasks were performed by fewer than fifty per cent of the workers. These were mainly the tasks involving meal preparation and cleanup.

The kindergarten teacher and nursery school teacher categories had high levels of task performance and day care assistants were lowest. Although day care supervisors had only 55.7 per cent of the

tasks performed by fifty per cent or more, a high number of these, twenty-three of forty-four were performed by ninety per cent or over, the only category for which this occurred. The day care program category was the lowest performing category with 41.8 per cent of tasks performed by fifty per cent or more subjects. The next lowest was special with 51.9 per cent of tasks. Kindergarten and nursery school were highest with 67.1 per cent and 65.8 per cent, respectively.

For workers with three or more years of training, fifty per cent or more performed 73.4 per cent of the tasks. Fifty per cent or more workers with no training performed 65.8 per cent of the tasks, and with two years of training, 45.6 per cent of the tasks.

In the housekeeping category, day care supervisors performed the most tasks, 88.2 per cent were performed by fifty per cent or more. This was twenty-four per cent higher than the next category. Over half, 58.8 per cent of the tasks, were performed by more than ninety per cent of day care supervisors, the next highest category being only 29.4 per cent. Kindergarten teachers and nursery school teacher performed at the highest levels for the remaining task categories: food provision, clerical and administrative. The day care assistant category was consistently low for these three categories. All types of programs had averages close to the norm for the housekeeping category. Kindergarten had high performance levels, over eighty per cent, for both food provision and clerical. Nursery school had a high performance level for clerical and was the only type of program above fifty per cent for administrative tasks with 56.5 per cent of tasks performed by more than fifty per cent of the workers. Day care was the lowest in these last three categories.

Performance of housekeeping tasks increased as specific training increased from 58.8 per cent for no training to 88.2 per cent for three years or more of training. The three years category was also highest for clerical with 83.3 per cent and administrative where it had a performance level of 65.2 per cent, the next highest being 34.8 per cent. Those workers in the no training category had the highest level of performance, 70.6 per cent, for food provision tasks. Subjects in the two year category were low on these tasks with only 35.3 per cent of the tasks being performed by fifty per cent or more workers.

Scores in the professional development category were similar for all categories.

Considerable differences in scores are noted for task seven, "Care for pets", in the categories, occupational title, types of program and specific training. Two tasks, eleven and twelve, relating to sleeping arrangements have high performance levels for day care supervisors, day care assistants, day care programs, and workers with two years of training.

In contrast, the last seven tasks in the food provision category, all relating to meal preparations are not performed at all by day care supervisors, day care assistants, day care programs or subjects with two years of training. Task twenty-five, "Prepare food for special occasions", has a high level of performance for kindergarten and nursery school teachers and teacher aides, but is low for all other categories.

Task twenty-four, "Prepare snacks", has a high level of performance, ninety per cent by teacher aides.

For task forty-nine, "Receive fees", there is a very low performance level, 14.3 per cent, for teacher of the handicapped, special programs and headstart programs as contrasted with other categories.

Performance scores for administrative tasks were highly erratic. Several of these tasks had scores varying from zero to ninety per cent.

2. Program Tasks

Fifty-three of the fifty-eight Program tasks were performed by fifty per cent or more of the workers, thirty-five of the fifty-eight were performed by ninety per cent or more of the subjects. All fifteen of the tasks performed by all the workers were in the Program category. Only three of the planning and preparation tasks were performed by fewer than fifty per cent: "Initiate and organize formal testing", "Participate in formal testing", and "Determine if child should be in another type of program." Two of the care and teaching tasks were performed by less than half the workers: "Accompany child for care and/or treatment by other agents," and "Administer medication." All four parent interaction tasks were performed by seventy per cent or more of the subjects.

Although all occupational title categories had relatively high levels of performance, teacher aide at 72.4 per cent and day care assistant at eighty-one per cent were both ten per cent or more below the three high categories, teacher of the handicapped,

kindergarten teacher, nursery school teacher and day care supervisor with scores of 91.4 per cent, 93.1 per cent and 96.6 per cent, respectively. Day care supervisor had a high number of tasks performed by over ninety per cent of the workers with 84.5 per cent or forty-nine of the fifty-eight program tasks at this level. Teacher aide at 44.8 per cent was ten per cent below the next lowest category for tasks performed by over ninety per cent of the workers.

All types of programs had performances close to the average of 91.4 per cent except for headstart with 82.7 per cent of the tasks performed by fifty per cent or more workers. Nursery school and headstart were both below the other programs for tasks performed by ninety per cent or more workers, having scores of 46.6 per cent and 37.9 per cent respectively. Scores for other programs were 63.8 per cent to 65.5 per cent.

There was very little difference in the scores for the categories under specific training.

Greater differences appeared if the planning and preparation category only is considered. Scores ranged from 54.5 per cent for teacher aides and 59.1 per cent for day care assistants to 90.9 per cent for day care supervisors, 95.5 per cent for teacher of the handicapped and nursery school teacher, and one hundred per cent for kindergarten teacher. Over ninety per cent of the day care supervisors performed 72.7 per cent of these tasks, compared with 59.1 per cent for teacher of the handicapped, 45.5 per cent for nursery school teacher, 36.4 per cent for kindergarten teacher, 31.8 per cent for day care assistant, and 27.3 per cent for teacher aides.

Performance levels were at 86.6 per cent or higher for all occupational title categories under care and teaching tasks. Day care supervisors performed 93.3 per cent of these tasks at a ninety per cent or higher level and all of the tasks at a fifty per cent or higher level, the only group to do so. The six parent interaction tasks were all performed by all workers with the exception of the teacher aide category which had three above fifty per cent and three below fifty per cent. There was a high degree of consistency of scores for performance above fifty per cent for all types of programs for planning and preparation, care and teaching and parent interaction tasks. Special and kindergarten programs both had over fifty per cent of the tasks in planning and preparation performed by ninety per cent or more subjects, special having only one task performed by fewer than fifty per cent. In the care and teaching category, day care had ninety per cent of the tasks performed by ninety per cent or more of the workers, kindergarten had eighty per cent, nursery school seventy per cent, special 63.3 per cent and headstart 53.3 per cent. Five of the six parent interaction tasks were performed by ninety per cent or more of the workers in the special category.

There was very little difference between levels of training under specific training, for any of the three Program task categories. The only marked difference was in performance of tasks by ninety per cent or more workers where ninety-eight per cent or more of those with three or more years of training performed 63.6 per cent of the tasks at this level, the other categories all scoring 36.4 per cent.

Noteworthy differences in scores on specific tasks occurred for task eighty-seven, "Formal testing of children-participate in". Although only five of nine kindergarten teachers and no nursery school teachers indicated performance of the task "Formal testing of children-participate in", seven of the ten teacher aides indicated they performed the task. However, six of nine and four of eight of the teachers, indicated that they performed the task "Formal testing of children-initiate and organize for". Nursery school programs had a low level of performance on the former task and day care programs on both tasks. Although all other categories are above 62.5 per cent for the tasks "Participate in individual parent conferences", and "Participate in staff - parent conferences", the teacher aide category has a performance level of forty per cent for the former and twenty per cent for the latter. For the task "Participate in parent meetings", teacher aide is thirty per cent, and the next lowest category, day care assistant, is performed by fifty per cent, and the other four categories perform this task at an 87.5 per cent or higher level.

The only level below fifty per cent for types of program was for the headstart category where 44.4 per cent of the subjects performed task 129, "Participate in staff-parent conferences." However, 77.8 per cent performed task 130, "Participate in individual parent conferences."

There is considerable congruity of performance for the top twenty-two of the thirty tasks in the care and teaching category, all of which are performed by 92.3 per cent or more of the respondents.

Teacher of the handicapped and special programs have a low performance rate of 42.9 per cent for task ninety-nine, "Watch over children during the rest time or nap time", which has an average score of 76.9 per cent for all groups, and the same rate of 42.9 per cent for the task 104, "Watch over child isolated because of illness or injury," with an average performance of 78.8 per cent.

Low levels of performance, thirty-three per cent and twenty-five per cent on task 111, "Perform activities of personal care for children" for kindergarten and nursery school teachers are distinguished from levels of seventy per cent or higher for the other four categories. Scores on this task for types of programs, range from 37.5 per cent for nursery school, 44.4 per cent for headstart, fifty per cent for kindergarten to 85.7 per cent for special and one hundred per cent for day care.

For task 109, "Arrange for care by other agents," the occupational title categories, teacher aide and day care assistant have low scores of twenty per cent and 12.5 per cent respectively, all other categories having sixty per cent or higher. Headstart and day care programs both have scores below fifty per cent for this task as do subjects with less than one year and two years of training. For task 108, "Administer medication," day care supervisors have a performance level of one hundred per cent and day care assistants seventy-five per cent whereas all other categories are 28.6 per cent or lower. Similarily day care programs score 88.9 per cent performance, all others 28.6 per cent or lower, and the task is not performed by any subject in the kindergarten category. The only

training category above 37.5 per cent for this task is two years with an 88.9 per cent level of performance.

III. ADMINISTRATOR AND EDUCATOR SCORES

The administrator and educator card sort attempted to obtain four scores for tasks: Not the Function of Care and Teaching Staff, Requires at Least One Year of Training to Perform Effectively, Requires at Least Two Years of Training to Perform Effectively, and Requires Three Years of Training.

Tasks were awarded the score if six of the nine persons in the category agreed on the score. Because of considerable disagreement on the amount of training required, the four categories were reduced to two main categories: Not the Function, and Requires Training. Tasks which did not obtain a majority in either category are marked for no agreement. The findings are reported in Table 4.9.

Two-thirds or more of each group of judges agreed that twenty-five of the tasks were not properly the function of the subjects involved in the study. All of these tasks were in the superordinate Facilitating category.

The greatest number of these tasks were in the food provision category where twelve of the seventeen tasks were scored N.F. Three of these tasks were performed by over half of the subjects and three were performed by over three-quarters of the subjects.

Nine of the tasks were in the housekeeping category which contained seventeen tasks. One of these tasks was performed by over ninety per cent of the subjects, and two others were performed by

Table 4.9

DISTRIBUTION OF ADMINISTRATOR AND EDUCATOR SCORES BY TASK CATEGORIES

Category		Facilitating						Program				
		Housekeeping 17 Tasks	Food Provision 17 Tasks	Clerical 18 Tasks	Administrative 23 Tasks	Professional Development 4 Tasks	Sub-total 79	Planning & Preparation 22 Tasks	Parent Interaction 6 Tasks	Care and Teaching 30 Tasks	Sub-total 58	Total 137 Tasks
Administrators	NF(1)	9	14	3	5	0	31	0	0	0	0	31
	Tr(2)	6	1	11	12	4	34	22	6	29	57	91
	NA(3)	2	2	4	6	0	14	0	0	1	1	15
Educators	NF	13	13	10	3	0	39	0	0	0	0	39
	Tr	2	3	4	11	4	24	22	6	28	56	80
	NA	2	1	4	9	0	16	0	0	2	2	18
Totals for Tasks Agreed On	NF	9	12	3	1	0	25	0	0	0	0	25
	Tr	2	1	4	8	4	19	22	6	28	56	75

(1) NF = Not the Function of a care or teaching person

(2) Tr = Requires training of 1, 2 or 3 years

(3) NA = No agreement by six of nine subjects for either category

more than half the subjects. Several of the other six were performed by over half the workers in certain types of jobs or programs and by over half those persons with higher levels of specific training.

Although educators saw ten clerical tasks as not the function, administrators agreed only for three, and scored eleven tasks as requiring training. All three of the tasks agreed upon by both groups as not the function were performed by fewer than half the subjects. Five of the tasks which educators agreed upon as not the function were performed by over half the subjects.

Only one of the administrative tasks was agreed upon as not the function and it was performed by 21.2 per cent of the subjects. This category had the highest numbers of tasks for which there was non-agreement within the educator and administrator groups. There were frequent four to five splits in both groups between not the function and two or three years of training. Seven tasks were scored not function for one group and no agreement for the other, or no agreement for both groups. These seven tasks were all performed by fewer than half the subjects.

All of the tasks in the categories for professional development, planning and preparation, and parent interaction were agreed upon as the function of the subjects in the study, and as requiring training of one or more years to be performed effectively. There was no non-agreement on these tasks in either group of judges.

Despite non-agreement within the groups of judges on two care and teaching tasks, the only two performed by fewer than half

the subjects, fifty-six of the fifty-eight tasks were agreed upon as requiring training. As shown in Table 4.10, seven of these tasks were seen as requiring one year to be performed effectively, fifteen as requiring one or two years, and four as requiring two or three years. All these tasks were performed by 57.1 per cent or more of those with less than one year of training and most of them are performed by over ninety per cent of those with less than one year of training.

Both groups of judges agreed that seventy-five of the 137 tasks required training. They agreed upon eleven tasks as requiring one year of training to be performed effectively, seven of these being in the care and teaching category, three in the planning and preparation category, and one in the housekeeping category. Thirty tasks were agreed upon as requiring one to two years, nine of these were Facilitating tasks and twenty-one were Program tasks. Four tasks were seen as requiring two years of training, twenty tasks as requiring two or three years of training, and five as requiring three or more years of training for effective performance. Six of these last twenty-nine tasks were Facilitating tasks and twenty-three were Program tasks. Twenty-five of these are performed by over half the subjects with no training and twenty-two by over half the subjects with less than one year of training. Scores for specific tasks may be found in Appendix E.

The two groups did not agree on the training required for the remaining five tasks.

Table 4.10

EDUCATOR-ADMINISTRATOR OPINION ON TRAINING REQUIRED FOR EFFECTIVE TASK PERFORMANCE

Category	Housekeeping 17 Tasks	Food Preparation 17 Tasks	Clerical 18 Tasks	Administrative 23 Tasks	Professional Development 4 Tasks	Sub total 79	Planning and Preparation 22 Tasks	Parent Interation 6 Tasks	Care and Teaching 30 Tasks	Sub total 58	Total 137 Tasks
1 year	1					1	3		7	10	11
1 or 2 years	1	1	3	1	3	9	2	4	15	21	30
2 years			1			1	2	1		3	4
2 or 3 years				5		5	10	1	4	15	20
3 years							5			5	5
*				2	1	3			2	2	5
Totals	2	1	4	8	4	19	22	6	28	56	75

* Tasks for which Educators and Administrators did not agree on the amount of training required.

The data on characteristics of the programs and subjects, the task checklist, and administrator-educator responses which have been reported in this chapter, will be discussed in the chapter to follow.

Chapter 5

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The first section of this chapter will summarize and discuss the findings presented in Chapter 4, the second section will present some tentative conclusions, and the last section will present some suggestions and recommendations for further study.

I. SUMMARY AND DISCUSSION OF THE FINDINGS

In this section, the data are discussed as they relate to the personal and program information, and to each of the research questions.

Personal and Program Information

The analysis of the data revealed the following information:

1. Approximately one-third of the subjects were employed in day care centers which carry out a full-day program.

2. The remaining subjects were distributed fairly evenly among four main types of part day programs, kindergarten, nursery schools, headstart, and remedial and treatment programs.

3. The respondents were fairly evenly distributed among six occupational designations, nursery school teacher, kindergarten teacher, teacher of the handicapped, teacher aide, day care supervisor, and day care assistant.

4. Approximately one-quarter of the subjects had no specific

training for early childhood programs. Most of these had some type of related training.

5. Forty per cent of the subjects had some specific training, but less than one year, such as inservice training or non-credit short courses.

6. Altogether, approximately two-thirds of the subjects had less than one year of specific training.

7. The other third had two or more years of specific training for early childhood care or teaching.

8. No subjects had credit for just one year of specific training.

9. Almost all the subjects employed in nursery school, and headstart programs had less than one year of specific training.

10. All of those employed in remedial and treatment programs had no specific training for early childhood, but all had specialized training for the handicap they worked with.

11. Seven-tenths of those in kindergarten had no specific training.

12. Approximately seven-tenths of those in day care programs had two or more years of specific training.

13. Teacher aides had the most persons with low levels of training for all occupational groups.

14. Nursery school teachers had the next lowest level of training.

15. Day care supervisors had the greatest number of persons with high levels of specific training.

16. The teacher of the handicapped category had high levels of training related to their specific type of program.

17. All the subjects were female.

18. Over half the subjects were above thirty years of age.

19. Three-quarters of the subjects had completed one or more years of post-secondary education.

20. The subjects divided into three fairly even groups for work experience: approximately one-third had less than two years, one-third had two to five years, and one-third had five or more years.

Question 1.

What tasks are performed by workers in six preprimary occupations in Edmonton and vicinity? The Child Care Tasks Checklist data yielded the following answers to this question.

1. About one-third of the tasks were performed by over ninety per cent of the workers.

2. About two-thirds of the tasks were performed by over half of the subjects.

3. Program tasks, which made up forty-two per cent of the tasks, were performed by more subjects than Facilitating tasks. Sixty per cent of the Program tasks were in the top third of the tasks, and about ninety per cent were in the top two-thirds.

4. The parent interaction and professional development categories had all tasks performed by over half the subjects.

5. Ninety-three per cent of the care and teaching tasks were performed by over half the subjects and over seventy-five per cent were in the top third tasks, performed by over ninety per cent of the subjects.

6. Planning and preparation tasks were next with eighty-six per cent performed by over half the subjects and forty-five per cent in the top third.

7. About half the Facilitating tasks were performed by over fifty per cent of the subjects, and only eleven per cent were in the top third of the tasks.

8. The administrative tasks had the lowest performance scores, only thirty per cent were performed by over half the subjects, and only nine per cent were performed by over ninety per cent of the workers.

9. Slightly over half the food provision tasks were performed by over fifty per cent of the subjects and none of these tasks were in the top third.

Question 2.

What is the relationship, if any, between the tasks performed and the occupational title?

The data indicated a high degree of commonality among the six occupational groups on task performance. Fifteen of the tasks were performed by all subjects in all groups. Forty-two tasks were performed by over seventy-five per cent in all groups, and sixty-two tasks were performed by over fifty per cent in all categories. The commonality was most evident for the Program tasks, especially the care and teaching tasks. Approximately three-quarters of all the tasks in the latter category were performed by over half of all groups, and half of these tasks were performed by over seventy-five per cent of the subjects in each job category.

Differences appeared among job title categories on total task performance, performance of various categories of tasks, and for specific tasks. Kindergarten and nursery school teachers had the highest number of tasks performed by fifty per cent of more subjects, and day care assistants and teacher aides had the lowest. Day care supervisors had over half the tasks performed by more than ninety per cent of the subjects, twenty per cent above all the other categories.

The teacher of the handicapped category was generally at or near the average score for performance of each task category. Kindergarten and nursery school teachers performed more food provision, clerical and administrative tasks than other groups; day care supervisors performed many more of the housekeeping tasks than day care assistants or other types of occupations. Day care assistants performed fewer Facilitating tasks than any of the other groups and had the highest number of tasks not performed at all by any member of the group.

Day care supervisors and assistants showed much higher performance levels for tasks related to sleeping arrangements and supervision, activities which probably occur most frequently in full-day programs.

Teacher aides and day care assistants were ten to twenty per cent below the performance levels of other job title categories on the Program tasks. This resulted from their much lower performance levels on the planning and preparation tasks.

Certain tasks such as task seven, "Care for pets. . . ," obtained degrees of differentiation from zero to one hundred per cent between types of occupations.

Question 3.

What is the relationship, if any, between the tasks performed and the type of program in which the subject is employed?

As pointed out in Chapter 4, there is considerable correspondence between the categories for type of program and job title: the comparison of data leads to almost the same results. However, the averaging effect of distributing the teacher aides to kindergarten and nursery school programs, and of combining the two day care job categories under one title, results in an even higher degree of commonality among the programs. Forty-nine tasks were performed by over seventy-five per cent of the subjects in all program groups, and seventy-one tasks were performed by over fifty per cent.

There was little differentiation among types of programs on the Program tasks. Headstart programs were slightly below the others in each category. More differentiation appeared in the Facilitating tasks. Here day care programs had definitely lower performance levels on the total average and were especially low in the food provision and clerical and administrative categories.

Levels were similar for housekeeping tasks, but kindergarten programs had high levels of performance for food provision tasks and nursery school programs had the highest levels of performance of administrative tasks.

The same differentiation as for job title appeared for tasks related to sleeping arrangements and supervision, day care programs

having a markedly higher level of performance. Other tasks in several categories revealed marked distinctions between programs.

Question 4.

What is the relationship, if any, between the job title and the type of program?

For purposes of this study, subjects were assigned to occupational categories depending upon the type of program in which they were employed and the job title which they gave. Where these did not coincide, the type of program took precedence, i.e. one subject in a day care center designated herself as "Class Supervisor-Teacher," but she was placed in the day care supervisor category. Consequently there is a close relationship between job title and type of program. In actual fact there were thirty-two different job titles given on the Personal Information sheets. The only categories used in the study for which the subjects consistently used the same title to describe themselves were kindergarten teacher and day care supervisors. Descriptions for day care assistants ranged from "assistant teacher" to "junior supervisor," "assistant day care attendant," and "child care assistant." Description for teacher aides included "kindergarten aide," "assistant," and "assistant nursery teacher." Teacher, handicapped included "speech therapist," "teacher of multi-handicapped deaf," teacher (pre-school level)," "teacher for mentally retarded" and others. The teacher-nursery school category includes "teacher," "principal teacher," and "play-school leader."

Question 5.

What is the relationship, if any, between the tasks performed and the amount of specific training for the occupation?

Grouping based on specific training produced the most congruence of scores for task performance at the fifty per cent level. Once again, the most similarity is found for the Program tasks. Slightly more than one-third of the Facilitating tasks were performed by over fifty per cent of all categories from no training through three years. This was higher than for any other occupational characteristic. Fifty of the fifty-eight Program tasks, or just over eightly-five per cent were performed by seventy-five per cent or more of all groups. A total of seventy-eight tasks or approximately fifty-six per cent were performed by over half the subjects in all the groups.

There was a range of only five per cent between the top and bottom group of scores on the performance of Program tasks, but greater differences were evident for Facilitating tasks. Workers with three or more years of training were slightly above the group with no specific training, and both were fifteen to twenty per cent above the two lower groups. As pointed out previously, the group with no specific training for early childhood generally had high levels of training. This was not true for the group with some training of less than one year. Subjects in the three or more years specific training category had the highest levels of performance of tasks for housekeeping tasks, clerical tasks, and administrative tasks in which category they performed almost twice as many tasks as

any of the other groups. The group with two years of training had the lowest levels of performance for food provision, clerical, and administrative tasks, but were second highest for housekeeping tasks.

Wide differences appeared once again for specific tasks. Groups with two and three years of training had markedly higher performance levels on such tasks as "Care for pets," "Set up and arrange beds or cots," "Perform activities for personal care for children. . ." Several other tasks had high performance levels for one training category, e.g. "Administer medication" was performed at a very high level by those with two years of training but by few workers in the other groups.

Question 6.

What is the relationship, if any, between the amount of training conceptualized as being necessary to perform a task effectively, and the amount of training actually held by those performing the task?

The administrator and educator groups agreed upon one hundred of the tasks, seventy-three per cent. Seventy-five of the tasks were reviewed as requiring training to be performed effectively. They agreed also that twenty-five of the tasks were not properly the function of care and teaching personnel in preprimary programs. They saw ninety-six per cent of the Program tasks as requiring training, and none of these as not the function of the personnel in the study. However, only one-quarter of the Facilitating tasks were seen as requiring training; almost a third were agreed upon as not the function. Educators agreed upon more of these tasks as not

the function, but there was considerable non-agreement within groups and between groups on these tasks.

Sixteen of the twenty-five tasks seen as not the function were performed by less than fifty per cent of the subjects, but one of them was in the top third of the tasks, performed by over ninety per cent of the workers.

For the seventy-five tasks seen as the function of the subjects, and requiring training, forty-two were in the top third of the tasks, performed by over ninety per cent of the workers, twenty-six more were performed by over fifty per cent of the workers, and only seven were performed by fewer than fifty per cent of the workers.

The educators and administrators agreed upon forty-one tasks as requiring one year, or one or two years of training. For these tasks, all forty-one were performed by over fifty per cent of those with no training, forty were performed by over half of those with less than one year of training, all were performed by those with two years of training and forty were performed by over half of those with three or more years of training.

The two groups agreed upon twenty-four tasks as requiring two years, or two or three years, of training. Twenty-two of these tasks were performed by over fifty per cent of those with no specific training, twenty were performed by over fifty per cent of those with less than one year, twenty-one by over fifty per cent of those with two years, and twenty-three by over fifty per cent of those with three or more years.

For the five tasks viewed as requiring three years of training to be performed effectively, four were performed by over fifty per cent of those with no training, three were performed by over fifty per cent of those with less than one year of training, three by over fifty per cent of those with two years of training, and all by over fifty per cent of those with three years of training.

The two groups disagreed completely on only seven tasks as to whether or not they were functions of the subjects in the study. On the other tasks for which there was no agreement between groups, there was disagreement within either the educator or administrator group, or both, as to whether the task was or was not the function. This occurred most often for tasks in the administrative category, and secondly for tasks in the clerical category. Nevertheless, seventeen of these tasks for which there was disagreement, or confusion, were performed by over half the subjects.

Comparison With Other Studies

In comparing the findings in this study with two other related studies some interesting comparisons may be noted. Rahmlow and Kiehn (1967b) carried on a similar study, but fifty-eight per cent of their subjects were in day care centers compared with one-third of the subjects in this study, and none of their subjects were in kindergarten programs (p. 7). The CCSD *Report* (1972) does not give percentages for subjects, but approximately one-quarter of the programs studied were day care centers (p. 76).

The present study found that approximately two-thirds of the subjects had less than one year of specific training for early

childhood. Rahmlow and Kiehn noted that sixty-seven per cent of their subjects had on-the-job training, and ninety-nine per cent had less than one year of specific training (p. 8). The Canadian Council on Social Development study (1972) found that sixty-three per cent had some training (p. 82).

The present study found that teacher aides had the lowest levels of training, nursery schools next lowest, and day care supervisors the highest levels of specific training. The CCSD *Report* findings were the opposite; day care had the lowest levels, nursery schools were higher (p. 101). However, the procedures by which only "leading-edge" programs were selected for the present study may have influenced the findings for this criterion.

Both this study and the CCSD *Report* found that workers in special programs had superior levels of total education (CCSD, 1972, p. 101).

The CCSD *Report* and this study have similar findings for specific work experience levels as shown below:

Years of Experience	CCSD *Report* (p. 103)	This Study
Less than two years	32%	32.7%
Two to eight years	39%	48.1%
Over eight years	29%	19.2%
	100%	100.0%

Rahmlow and Kiehn found that almost all the tasks on their checklist were performed by over half the subjects (1967b, p. 11). This was true for only two-thirds of the tasks in this study. However, this study found a higher performance level for day care supervisors,

and since the Rahmlow and Kiehn study had such a high performance of day care personnel, the difference may have resulted from this. Both studies found Program tasks to have the highest levels of performance, and administrative tasks the lowest (Rahmlow and Kiehn, 1967b, p. 16).

Rahmlow and Kiehn found that workers in private centers did more clerical work (p. 12), and this compares with findings in this study that part-time programs were above day care in performance of these tasks. Rahmlow and Kiehn noted that headstart programs had a lower performance level in planning tasks (p. 12), and the same was true of this study. Only twenty-one per cent of the subjects actually prepared meals in the Rahmlow and Kiehn study, but seventy per cent prepared snacks and cleared away food (p. 11), a similar finding to the present study.

II. CONCLUSIONS

This study was carried out in an attempt to determine the tasks performed by workers in preprimary occupations in Edmonton and vicinity, and the possible relationship between tasks performed and certain characteristics such as occupational title, type of program in which the subject is employed, and specific training for preprimary programs. It attempted also to determine tasks performed as part of the occupation, and tasks conceptualized as part of the occupation; and to determine the amount of training actually held by those performing tasks, compared with the amount of training conceptualized as necessary to perform the task effectively. Several conclusions have resulted from the consideration of the data.

Conclusions With Respect To Research Design

1. The sample was heavily biased in favor of day care programs and this may have adversely affected the findings. It had an obvious effect on the overall averages. There was a close similarity between findings for day care supervisors, day care programs, and personnel with two years of training. All of those with two years of training were day care supervisors or assistants.

2. It is questionable whether the teacher of the handicapped category should have been included in the study. This group may have affected the data because, despite high levels of related training, the members were placed in the no specific training category. Furthermore, this was the only group which did not consider that the checklist completely covered their tasks. Nevertheless, they had higher performance levels on more of the tasks than day care assistants or teacher aides.

3. The checklist represents a fairly comprehensive and easily understood list of tasks performed by care and teaching persons in preprimary programs.

4. The checklist succeeded in differentiating task performance between subject categories. This might be interpreted as demonstrating that the subjects perceived the tasks similarly and answered honestly.

Conclusions With Respect To The Findings

Subject to the limitations of the study, the following conclusions seem justified:

1. A care and teaching person in a preprimary program is required to perform a great variety and number of tasks.

2. Although they perform more care and teaching tasks, preprimary personnel also perform a great many concomitant tasks.

3. There is a great deal of similarity among the six occupations studied.

4. The most similarity occurs between kindergarten and nursery school teachers.

5. Day care assistants and teacher aides are the most different from the other occupations.

6. Certain tasks are more likely to occur in certain occupations, e.g. housekpeeing tasks in day care occupations, food provision, clerical tasks and administrative tasks for kindergarten and nursery school teachers.

7. Persons in the teacher and supervisor categories perform more of the Facilitating tasks and more of the planning and preparation tasks than assistants and aides; and assistants and aides perform as many of the care and teaching tasks. These findings may be due to several causes. Since the presence of teacher aides and day care assistants would permit some distinction of and division of duties, it appears this does in fact occur, but that this division is not necessarily that which might be expected. Either these auxiliary persons are in fact assigned to the care and teaching of the children, or they wish to perceive themselves as doing so because these tasks are perceived as being the professional role. The more highly trained person may be able to evaluate more

realistically the tasks performed, or may in fact perceive the professional role to be more related to administrative and planning functions. This is suggested by the findings from the administrator-educator survey where all five of the tasks viewed as requiring three or more years of training to be performed effectively were planning and preparation tasks involving determining goals, determining needs, selecting activities, and formal testing. An additional twelve planning and preparation tasks were seen as requiring two or three years. In contrast, only three of the actual care and teaching tasks which involve interaction with children were seen as requiring more than one or two years to be performed effectively.

Rahmlow and Kiehn suggested that it appeared that no real distinction was attempted or accomplished between professional and non-professional task performance (1967b, p. 11).

8. Other than kindergarten teachers there are no universal titles for preprimary occupations.

9. The greatest differences in performance from other programs, were noted for subjects in day care programs. These subjects were all in large programs with more auxiliary staff. Special programs stood second in respect to performance, and these were all part of large programs also which would imply more auxiliary staff. Apparently, availability of staff determines or has an impact on staff performance.

10. Specific training for preprimary programs does not have a significant effect on the kind of tasks performed. Those subjects with no or less than one year of specific training perform Program

tasks at the same level as those with two or more years of training. These tasks include all those generally viewed as the exclusive preserve of the professional teacher. Rahmlow and Kiehn concluded that the level of education had no significant effect (1967b, p. 9).

11. Occupational title is much more likely to depend upon the type of program in which a person is employed than the tasks performed or the training obtained. The kind of tasks performed probably are more related to the type of program than title or training, and are dependent on two factors, daily length of program, and number of staff employed.

12. The Program tasks are clearly perceived as the function of care and teaching personnel, by educators and administrators, but planning and preparation tasks are perceived as requiring higher level of training than care and teaching tasks.

13. Housekeeping and food preparation tasks are generally perceived as not the function of care and teaching personnel, but perceptions are confused for clerical and administrative tasks. In respect to the latter, in particular, and the Facilitating tasks in general, the decision on whether the task was properly the function or not of a care and teaching person did appear to be influenced by the position, training, and experience of the respondent.

14. As perceived by administrators and educators, few tasks require more than two years of training to be performed effectively. Those that do require more are related to the administrative function.

15. Many persons are performing tasks while having less than the specific training viewed as necessary to perform the task effectively.

This can mean several things: the task is not being properly performed, or factors other than training, perhaps experience, or general education level, or personal characteristics permit effective task performance. Rahmlow and Kiehn noted this phenomenon as well (1967b, p. 11).

RECOMMENDATIONS

Always keeping in mind the limitations and assumptions stated in Chapter 1, the findings of this study appear to support the following recommendations:

1. It is necessary to distinguish more accurately which tasks are the function of the professional care and teaching person as well as which tasks require higher levels of training to be performed effectively. Administrators in agencies, and educators in training programs must strive to distinguish professional care and teaching tasks from non-professional tasks. Administrators need to implement staffing procedures designed to provide auxiliary and support staff to permit performance of care and teaching tasks by persons trained to perform them effectively. Educators must play a part in resolving the apparent role confusion in which professional is obviously equated with administrative, or the downgrading of the significance of care and teaching tasks will continue. In the opinion of this researcher, such tasks as task 120, "Respond to child's questions," task 124, "Encourage acceptable behavior," and task 119, "Encourage developmental behavior (physical, mental, social and emotional)," are tasks which require high levels of knowledge and skill to

peform effectively. Yet all of these were assigned to the one or two year training category. It is questionable whether the respondents appreciate the true significance of these tasks in the teaching repertoire.

2. Nevertheless, it is important to note that there is clear agreement that all but two of the Program tasks require one or more years of training to be performed effectively. It has been of concern to many early childhood specialists for some time that so many of the persons working in the occupations studied are trained below this level. This study indicates that minimum training levels of one year are required for effective performance of the majority of tasks, and that a minimum level of two years is indicated to ensure that the most important tasks are effectively performed.

If the implications of the possible significance of experience or general education are taken into consideration, it is apparent that practical experience may be an important component of training programs, or that higher levels of general education, or general broadening education may be an important part of the professional background. In the opinion of the researcher, the higher the levels of general and specific education, the more effective the task performance observed up to a certain optimal level. Prescott and Jones offer support for this theory in their study which found that certificate levels of training produced optimal results for high quality of program in day care centers (1972, p. 31).

3. Staffing differentiation must be introduced into preprimary programs. However, if as this study indicates, teacher aide and

assistant personnel are performing care and teaching tasks, it is imperative that they have the minimum levels of training required for effective task performance. Failing this, staffing practices must ensure that the untrained person is assigned to the facilitating tasks while the trained professional is concentrating on the important care and teaching tasks.

This study also suggests that auxiliary personnel relieve the care and teaching person of many tasks perceived as not their function; therefore, it is important that sufficient auxiliary staff be provided for in preprimary programs to permit such differentiated performance.

4. It is important that studies be carried out to determine which are the most significant tasks, and to develop criterion measures for evaluating effective task performance. In the interim, curriculum writers in preprimary programs should make use of task studies to develop curricula based on what the worker does, determining the most significant tasks on the basis of their own philosophies and theories. In so doing, they should always keep in mind, the apparent bias toward administrative tasks as being most significant. While the importance of the planning and evaluating functions is undeniable, it is not acceptable that these are more important than the care and teaching interaction functions.

5. Training units should be stated in terms of length by hours to enable valid comparisons between types of training. A similar recommendation was presented in the CCSD study (1972, p. xvii).

6. Since there is evidence in the findings that factors other than the ones investigated here may be influencing task performance, further research on these factors could provide valuable insights into staffing and training procedures, and yield valuable curriculum data. Size of program, number of auxiliary staff, and experience are three that might prove highly significant.

In conclusion, it is important to note that preprimary personnel perform a great number of tasks, and that it is impossible for any one person to perform all of these tasks effectively and efficiently. Allowing for some variation according to program, the effective performance of the majority of these tasks is obviously important to produce a high quality program. If, as appears highly likely, effective performance is related to training and sufficient supply of staff, there is an obvious message for all those who care about high quality programs for preprimary children: better trained staff, more auxiliary staff, and concomitantly, sufficient funds to employ them.

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APPENDICES

APPENDIX A

FINAL VERSION OF CHILD CARE TASKS CHECKLIST

CHILD CARE TASKS CHECKLIST

IT IS NECESSARY THAT YOU CHECK EITHER "YES" OR "NO" FOR EACH ITEM.

YES	NO	FACILITATING TASKS Housekeeping Tasks
		Wash floors, walls, woodwork, cabinets, storage areas, windows, tables, sinks, bathrooms, etc.
		Wash toys and equipment (blocks, dolls, puzzles, play furniture, etc.).
		Launder doll clothing and dressup clothing.
		Launder towels, washcloths, blankets, spare clothing.
		Sweep, dust and tidy floors, furnishings and equipment.
		Remove waste containers to central garbage collection area.
		Care for pets (clean cages, feed, water, etc.).
		Care for plants (water, trim, etc.).
		Make <u>minor</u> repairs or part replacements to small equipment (books, toys, games, etc.).
		Make <u>major</u> repairs or part replacements.
		Set up and arrange beds or cots.
		Change blankets, sheets or coverings on beds or cots.
		Sand and paint furniture.
		Store supplies and equipment in own room ready for use.
		Store equipment and materials in central storage.
		Perceive and report maintenance problems (e.g. broken equipment, damage to building or fixtures, etc.).
		Maintain grounds (rake lawn, etc.).

YES	NO	Food Provision Tasks
		Plan menu for meals.
		Plan menu for snacks (includes juice and cookies).
		Plan food for special occasions as part of program activities.
		Inventory food supplies.
		Order food supplies.
		Prepare meals.
		Prepare snacks (includes juice and cookies).
		Prepare food for special occasions.
		Help children prepare foods.
		Set table.
		Transport food from kitchen to serving area.
		Serve and dish out food.
		Clear tables after eating.
		Return leftover foods and soiled dishes to kitchen.
		Wash dishes.
		Store food and food equipment.
		Clean and care for food preparation area (kitchen) and equipment.

YES	NO	Clerical Tasks
		Receive persons arriving at agency.
		Answer telephone.
		Take messages (phoned or other).
		Record and deliver messages.
		Inventory equipment or supplies.
		Prepare lists of supplies and/or equipment.
		Prepare orders for equipment and/or supplies.
		Secure data and estimate costs for purchases.
		Order equipment and/or supplies.
		Accept delivery of equipment and/or supplies.
		Pick up supplies and/or equipment, major items.
		Pick up supplies and/or equipment, incidental items.
		Distribute equipment and supplies to staff.
		Typing and filing of reports, correspondence, records, etc.
		Receive fees.
		Keep financial records (petty cash, fees received, expenditures, etc.).
		Record information on children (development, progress, etc.)
		Record information on program (plans, activities, etc.).

YES	NO	Administrative Tasks
		Set administrative policy (admissions, personnel, fees, salary schedule, hours, budget, etc.).
		Be informed regarding administrative policy.
		Attend meetings of administrative body (board or committee and make reports).
		Interpret administrative policy (to staff, to clients, to landlords, to public).
		Maintain good relationships with community (landlord, other agencies, news media, general public).
		Interview and approve prospective clients.
		Organise and coordinate introduction of clients to program (children, parents).
		Interview prospective employees.
		Make final decision to hire employees.
		Organise staff meetings.
		Assign duties to other staff.
		Supervise and evaluate staff.
		Organise and coordinate purchase of equipment and supplies for entire program of agency or enterprise.
		Organise and coordinate planning of goals for entire program of agency or enterprise.
		Organise and coordinate carrying out of activities (scheduling, making arrangements for transportation, etc.).
		Organise and coordinate evaluation of entire program for agency or enterprise.
		Initiate conferences on individual children.
		Organise in-service training for staff.
		Assist with in-service training (of staff).
		Train and supervise volunteers.
		Promote and assist with planning of parent meetings.
		Organise individual parent - staff conferences.
		Oversee and maintain all records of agency or enterprise.

PROGRAM TASKS (WITH CHILDREN)

Planning and Preparation Tasks

YES	NO	
		Determining goals for specific program.
		(a) Initiate and finalise
		(b) Participate in
		Planning (selection and organising) of activities for specific program.
		(a) Initiate and finalise
		(b) Participate in
		Planning (selection and organising) to meet the needs of children with special problems.
		(a) Initiate and finalise
		(b) Participate in
		Selection of equipment and/or supplies for specific program.
		(a) Initiate and finalise
		(b) Participate in
		Observation of children for purposes of discovering needs or development.
		(a) Initiate and organise
		(b) Participate in carrying out
		Formal testing of children.
		(a) Initiate and organise for
		(b) Participate in
		Consult social worker on problems of child or family.
		Determine need for assistance or care by other agents (medical, diagnostic, parents, etc.).
		Determine if child should be in another type of program.
		Determine child's ability to participate in daily activities (appropriate clothing, state of health, etc.).
		Evaluation of activities and programs.
		(a) Initiate and organise
		(b) Participate in
		Make or prepare materials for program activities (paint, dough, clay, etc.).
		Make simple equipment (games, number sets, etc.).
		Gather equipment and materials for program activities.
		Arrange materials and equipment ready for use in program.

YES	NO	Care and Teaching Tasks
		Watch over children during snack time and/or mealtime (maintain order, ensure safety and correct procedures).
		Watch over children during rest time or nap time (maintain order, ensure safety and correct procedures).
		Watch over children during toileting and washing up, dressing and undressing (maintain order, ensure safety and correct procedures).
		Watch over children during indoor activities.
		Watch over children during activities on playground (maintain order, ensure safety and correct procedures).
		Watch over children during special activities--field trips, parties (maintain order, ensure safety and correct procedures).
		Watch over child isolated because of illness or injury.
		Watch over child isolated because of emotional or behavioural difficulties.
		Encourage and promote recovery of upset child.
		Administer first aid.
		Administer medication.
		Arrange for care by other agents (medical, diagnostic, parents, etc.).
		Accompany child for care and/or treatment by other agents.
		Perform activities of personal care for children (bathing, changing wet or soiled diapers or clothing, etc.).
		Instruct a group of children or an individual child in method of carrying out a routine activity (tying shoelace, buttoning coat, washing hands, eating a meal).
		Demonstrate to children a method of carrying out an action (painting, washing hands, playing rhythm instruments, etc.).
		Instruct a group or individual child in method of carrying out a program activity (painting, drawing, playing a game, making a sound, singing a song).
		Carry out an activity to engage children's interest (read or tell a story, play an instrument, play a record, etc.).
		Assist children in performing actions (buttoning coats, washing hands, assembling a puzzle, climbing steps, etc.).

Care and Teaching Tasks (cont.)

YES	NO	
		Lead group discussion with children (show and tell, talking time, etc.).
		Provide companionship for a child (talk to, listen to, sit with, hold, etc.).
		Encourage developmental behaviour (physical, mental, social and emotional).
		Respond to child's questions.
		Communicate with child (orally, physically, para-language).
		Decide and enforce rules for behaviour of children.
		Instruct children in proper ways of behaving.
		Encourage acceptable behaviour.
		Perform action to prevent unacceptable behaviour.
		Determine and administer punishment for unacceptable behaviour.
		Arbitrate disputes of children.

Program Tasks (With Parents)

YES	NO	
		Participate in acquainting parent with center and its program.
		Participate in staff - parent conferences.
		Participate in individual parent conferences.
		Communicating casually with parents.
		Developing and maintaining working relationships with parents.
		Participate in parent meetings.

Staff and Professional Development Tasks

YES	NO	
		Develop and maintain working relationships with other staff.
		Participate in staff meetings.
		Participate in in-service training and workshops.
		Continuing to upgrade skills and knowledges.

APPENDIX B

PROGRAM INFORMATION SHEET

PROGRAM INFORMATION SHEET

Name of Agency or Program _____

Address _____ Telephone _____

Operated by:

Municipality _____

Co-operative Parent Board _____

Non-profit Private Society _____

Religious Order _____

Private Entrepreneur _____

Other _____

Financed by:

Government grants (%) _____

Charitable Donations (%) _____

Fees (%) _____

Other _____

Rates _____

Staff:

Administrators _____

_____

Child Care Personnel _____

_____

Institutional Service Personnel _____

_____

_____

Clerical Personnel _____

_____

Other _____

_____

_____

Clients:

Number of families using _____

Number of children in program _____

Age range of children _____

Groupings of children _____

_____

_____

_____

Program:

Average number of hours daily each child is in program _____

Number of days per week program operates _____

Number of months per year program operates _____

Main reason why clients use program	Number
Single-parent family -- parent working	_____
Single-parent family -- parent retraining or continuing education	_____
Two-parent family -- both working	_____
Two-parent family -- one or both continuing education or retraining	_____
Two-parent family -- one parent ill or incapacitied	_____
To provide for educational experience for child	_____
To provide socialization experience for child	_____
To provide special help or remediation for problems of child	_____

Consulting services utilized:

Nurse _____

Psychologist _____

Doctor _____

Psychiatrist _____

Other _____

_____

_____

APPENDIX C

PERSONAL INFORMATION SHEET

PERSONAL INFORMATION

1. Name: _____ Sex: _____

2. Age: a) Under 20 b) 20-30 c) 31-40 d) 41-50 e) Over 50

3. Present Job Title: _____

4. Agency: _____

5. Formal Education:

	No. of Years	Name of Institution
Elementary Schooling		
Secondary Schooling		
Post-Secondary Schooling		

6. Specific Training for Present Position:

In-Service: _____

Specialized Vocational School: _____

University - Faculty: _____

Department: _____

High School: _____

Junior College: _____

Correspondence: _____

Other: _____

_____

_____

_____

7. Certificates or Degrees:

Type of certificates or degrees presently held:

_____

Name of certificates or degrees presently held:

_____

Certifying Agency: _____

8. Employment Since Completion of Education:

Occupation and Position	Employer	Length of Time in Position or Occupation

APPENDIX D

INSTRUCTION CARDS FOR EDUCATORS AND ADMINISTRATORS

INFORMATION CARD

This research project has been set up by Mrs. Sheila Campbell, a student in Graduate Studies at the University of Alberta, to study the tasks performed by care and teaching personnel in group programs for young children. It is hoped that the information gained will be useful in developing training programs for care and teaching personnel.

The persons employed as care and teaching personnel have been interviewed using a checklist questionnaire of tasks to determine if they performed any of the tasks listed. We did not expect that any person would do all of them.

As your part in the study, we are asking you to sort these cards which have the tasks from the checklist typed on them, one task to each card. In this part of the study, we are attempting to relate the tasks to the level of training required to perform the task effectively.

Here are your instructions and the cards. This sort should take about one-half hour.

At the conclusion of the sort, would you please fill out the Personal Information sheets. I would like to emphasize that all the data for this study will go into a general pool, and the name of any specific person or program will not be used in the report. All the information will be kept confidential.

INSTRUCTION CARD 1

These are a group of tasks performed by various personnel in preschool programs such as day care centers, kindergartens, nursery schools, readiness and headstart programs, and treatment programs. In this study we are interested only in <u>care and teaching</u> personnel. Please sort the cards according to the following instructions: (Please do not look at Instruction Card 2 until you have completed the steps on this card.)

1. Look quickly through all the tasks.

2. Place in one pile all those tasks which in your opinion are not properly the function of personnel directly involved in the care of the children. That is, those tasks which are not properly the function of the teacher, or child care attendant. Even though they may sometimes do the task, if you feel it is not properly their function, place it on the pile. Place the card with the numeral 0 on top of this pile, and bind the pile with an elastic band.

3. Proceed to Instruction Card 2, stapled underneath.

INSTRUCTION CARD 2 (Please do not read this card until you have completed the steps on Instruction Card 1.)

4. For the remaining tasks, please consider the task this way: "If I had three persons of equal experience, but with three levels of training, one year or less, two years, and three years, which ones could perform the task effectively?"

Then:

STEP A. Place in one pile all those tasks which could be performed effectively only if a person had three or more years of training in the care and teaching of preschool children. Place the card with the numeral 3 on this pile, and bind the pile with an elastic band.

STEP B. Place in one pile all those tasks which could be performed effectively if a person had two or more years of training in the care and teaching of preschool children. Place the card with the numeral 2 on this pile, and bind the pile with an elastic band.

STEP C. Place in one pile all those tasks which could be performed effectively by a person with one year or less of training in the care and teaching of preschool children. Place the card with the numeral 1 on this pile, and bind the pile with an elastic band.

5. See Instruction Card 3.

INSTRUCTION CARD 3

5. Please place the bundles of cards and the Personal Information Sheets in the envelope provided, staple the envelope closed, and return them on or before July 15th. This final step could not be carried out until the checklists had been completed, but I am hoping to complete the writing of my thesis by August 31st.

I am most grateful for your generous contribution of time and expertise.

APPENDIX E

TASKS RANKED IN ORDER OF FREQUENCY OF PERFORMANCE BY CATEGORIES

TASKS RANKED IN ORDER OF FREQUENCY OF PERFORMANCE BY CATEGORIES

I. FACILITATING TASKS

Housekeeping Tasks

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
5	Sweep, dust and tidy floors, furnishings and equipment.	49	94.2	N.F.(1)
9	Make minor repairs or part replacements to small equipment (books, toys, games, etc.).	48	92.3	N.A.(2)
14	Store supplies and equipment in own room ready for use.	48	92.3	1 yr.(3)
8	Care of plants (water, trim, etc.).	45	86.5	N.A.
16	Perceive and report maintenance problems (e.g. broken equipment, damage to building or fixtures, etc.).	45	86.5	1 or 2 yrs.
1	Wash floors, walls, wood work, cabinets, storage areas, windows, tables, sinks, bathrooms, etc.	43	82.7	N.F.

Key: (1) N.F. Administrators and Educators agreed this task was not properly the function of a care and teaching person.

(2) N.A. No agreement. There was disagreement between the educator and administrator groups, or there was disagreement within one or both groups.

(3) Educators and administrators agreed that this was the amount of training required to perform the task effectively. Some tasks are shown as Tr. only because the two groups disagreed widely on the amount of training required.

Housekeeping Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
2	Wash toys and equipment (blocks, dolls, puzzles, play furniture, etc.).	38	73.1	N.A.
15	Store equipment and materials in central storage.	31	59.6	N.A.
7	Care for pets (clean cages, feed, water, etc.).	30	57.7	N.A.
6	Remove waste containers to central garbage collection area.	29	55.8	N.F.
11	Set up and arrange beds or cots.	21	40.4	N.A.
3	Launder doll clothing and dressup clothing.	20	38.5	N.F.
13	Sand and paint furniture.	20	38.5	N.F.
4	Launder towels, wash-cloths, blankets, spare clothing.	19	36.5	N.F.
12	Change blankets, sheets or coverings on beds or cots.	17	32.7	N.F.
17	Maintain grounds (rake lawn, etc.).	13	25.0	N.F.
10	Make major repairs or part replacements.	8	15.4	N.F.

Food Provision Tasks

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
29	Serve and dish out food.	44	84.6	N.F.
30	Clear tables after eating.	43	82.7	N.F.
31	Return leftover foods and soiled dishes to kitchen.	41	78.8	N.F.
27	Set table.	35	67.3	N.F.
20	Plan food for special occasions as part of program activities.	35	67.3	N.A.
26	Help children prepare foods.	30	57.7	1 or 2 yrs.
24	Prepare snacks (includes juice and cookies).	29	55.8	N.F.
28	Transport food from kitchen to serving area.	29	55.8	N.F.
25	Prepare food for special occasions.	27	51.9	N.F.
32	Wash dishes.	25	48.1	N.F.
33	Store food and food equipment.	23	44.2	N.F.
19	Plan menu for snacks (includes juice and cookies).	20	38.5	N.A.
34	Clean and care for food preparation area (kitchen) and equipment.	17	32.7	N.F.
22	Order food supplies.	12	23.1	N.F.

Food Provision Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
21	Inventory food supplies.	9	17.3	N.F.
18	Plan menu for meals.	3	5.8	N.A.
23	Prepare meals.	1	1.9	N.F.

Clerical Tasks

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
51	Record information on children (development, progress, etc.).	47	90.4	2 yrs.
37	Take messages (phoned or other).	46	88.5	N.A.
38	Record and deliver messages.	46	88.5	N.A.
36	Answer telephone.	44	84.6	N.A.
35	Receive persons arriving at agency.	38	73.1	N.A.
52	Record information on program (plans, activities, etc.).	37	71.2	1 or 2 yrs.
46	Pick up supplies and/or equipment, incidental items.	36	69.2	N.A.
39	Inventory equipment or supplies.	35	67.3	N.A.

Clerical Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
40	Prepare lists of supplies and/or equipment.	33	63.5	1 or 2 yrs.
44	Accept delivery of equipment and/or supplies.	31	59.6	N.A.
49	Receive fees.	26	50.2	N.A.
41	Prepare orders for equipment and/or supplies.	24	46.2	1 or 2 yrs.
48	Typing and filing of reports, correspondence records, etc.	22	42.3	N.F.
47	Distribute equipment and supplies to staff.	21	40.4	N.A.
50	Keep financial records (petty cash, fees received, expenditures, etc.).	21	40.4	N.F.
43	Order equipment and/or supplies.	20	38.5	N.A.
42	Secure data and estimate costs for purchases.	18	34.6	N.A.
45	Pick up supplies and/or equipment, major items.	7	13.5	N.F.

Administrative Tasks

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
54	Be informed regarding administrative policy.	49	94.2	1 or 2 yrs.
57	Maintain good relationships with community (landlord, other agencies, news media, general public).	47	90.4	2 or 3 yrs.
56	Interpret administrative policy (to staff, to clients, to landlords, to public).	30	57.7	N.A.
72	Train and supervise volunteers.	30	57.7	2 or 3 yrs.
69	Initiate conferences on individual children.	28	53.8	2 or 3 yrs.
59	Organize and coordinate introduction of clients to program (children, parents).	27	51.9	N.A.
73	Promote and assist with planning parent meetings.	27	51.9	2 or 3 yrs.
55	Attend meetings of administrative body (board or committee), and make reports.	24	46.2	2 or 3 yrs.
67	Organize and coordinate carrying out of activities (scheduling, making arrangements for transportation).	24	46.2	N.A.
71	Assist with in-service training (of staff).	19	36.5	N.A.

Administrative Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
63	Assign duties to other staff.	19	36.5	2 or 3 yrs.
58	Interview and approve prospective clients.	18	34.6	N.A.
66	Organize and coordinate planning of goals for entire program of agency or enterprise.	17	32.7	N.A.
64	Supervise and evaluate staff.	15	28.8	N.A.
74	Organize individual parent-staff conferences.	14	26.9	2 or 3 yrs.
68	Organize and coordinate evaluation of entire program for agency or enterprise.	14	26.9	N.A.
65	Organize and coordinate purchase of equipment and supplies for entire program of agency or enterprise.	13	25.0	N.A.
53	Set administrative policy (admissions, personnel, fees, salary schedule, hours, budget, etc.).	11	21.2	N.F.
75	Oversee and maintain all records of agency or enterprise.	10	19.2	N.A.
62	Organize staff meetings.	9	17.3	N.A.

Administrative Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
60	Interview prospective employees.	7	13.5	N.A.
61	Make final decision to hire employees.	5	9.6	N.A.
70	Organize in-service training for staff.	4	7.7	N.A.

Professional Development Tasks

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
137	Continuing to upgrade skills and knowledges.	51	98.1	1 or 2 yrs.
134	Develop and maintain working relationships with other staff.	48	92.3	1 or 2 yrs.
135	Participate in staff meetings.	47	90.4	1 or 2 yrs.
136	Participate in in-service training and workshops.	34	65.4	Tr.

II. PROGRAM TASKS

Planning and Preparation Tasks

Task No.	Task Description	No. of Yes Responses N=52	Average Score	Administrator Educator Score
96	Gather equipment and materials for program activities.	52	100.0	1 yr.
97	Arrange materials and equipment ready for use in program.	52	100.0	1 yr.
94	Make or prepare materials for program activities (paint, dough, clay, etc.).	51	98.1	1 or 2 yrs.
77	Determining goals for specific program--participate in.	50	96.2	2 or 3 yrs.
79	Planning (selection and organizing) of activities for specific program--participate in.	50	96.2	2 or 3 yrs.
85	Observation of children for purposes of discovering needs or development--participate in carrying out.	50	96.2	2 yrs.
93	Evaluation of activities and programs--participate in.	50	96.2	2 or 3 yrs.
81	Planning (selection and organizing) to meet the needs of children with special problems--participate in.	48	92.3	2 or 3 yrs.

Planning and Preparation Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score	Administrator Educator Score
83	Selection of equipment and/or supplies for specific program--participate in.	47	90.4	2 yrs.
95	Make simple equipment (games, number sets, etc.).	47	90.4	1 yr.
91	Determine child's ability to participate in daily activities (appropriate clothing, state of health, etc.).	40	76.9	1 or 2 yrs.
80	Planning (selection and organizing) to meet the needs of children with special problems--initiate & finalize.	36	69.2	3 yrs.
84	Observation of children for purposes of discovering needs or development--initiate and organize.	36	69.2	2 or 3 yrs.
89	Determine need for assistance or care by other agents (medical, diagnostic, parents, etc.).	36	69.2	2 or 3 yrs.
92	Evaluation of activities and programs--initiate and organize.	36	69.2	2 or 3 yrs.
78	Planning (selection and organizing) of activity for specific program--initiate and finalize.	35	67.3	2 or 3 yrs.

Planning and Preparation Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
76	Determining goals for specific program--initiate and finalize.	34	65.4	3 yrs.
82	Selection of equipment and/or supplies for specific program--initiate and finalize.	32	61.5	3 yrs.
88	Consult social worker on problems of child and family.	28	53.8	2 or 3 yrs.
87	Formal testing of children--participate.	25	48.1	2 or 3 yrs.
90	Determine if child should be in another type of program.	25	48.1	3 yrs.
86	Formal testing of children--initiate and organize for.	22	42.3	3 yrs.

Parent Interaction Tasks

Task No.	Task Description	No. of Yes Responses N=52	Average Score	Administrator Educator Score
131	Communicating casually with parents.	52	100.0	1 or 2 yrs.
128	Participate in acquainting parent with center and its program.	48	92.3	2 or 3 yrs.

Parent Interaction Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
132	Developing and maintaining working relationships with parents.	46	88.5	1 or 2 yrs.
130	Participate in individual parent conferences.	39	75.0	2 yrs.
129	Participate in staff-parent conferences.	38	73.1	1 or 2 yrs.
133	Participate in parent meetings.	37	71.2	1 or 2 yrs.

Care and Teaching Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
98	Watch over children during snack time and/ or mealtime (Maintain order, ensure safety and correct procedure).	52	100.0	1 yr.
101	Watch over children during indoor activities.	52	100.0	1 yr.
102	Watch over children during activities on playground (maintain order, ensure safety and correct procedure).	52	100.0	1 or 2 yrs.

Care and Teaching Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
106	Encourage and promote recovery of upset child.	52	100.0	1 or 2 yrs.
114	Instruct a group or individual child in method of carrying out a program activity (painting, drawing, playing a game, making a sound, singing a song).	52	100.0	1 or 2 yrs.
115	Carry out an activity to engage children's interest (read or tell a story, play an instrument, play a record, etc.).	52	100.0	1 or 2 yrs.
116	Assist children in performing actions (buttoning coats, washing hands, assembling a puzzle, climbing steps, etc.).	52	100.0	1 yr.
118	Provide companionship for child (talk to, listen to, sit with, hold, etc.).	52	100.0	1 yr.
119	Encourage developmental behavior (physical, mental, social and emotional).	52	100.0	1 or 2 yrs.
121	Communicate with child (orally, physically, para-language).	52	100.0	1 or 2 yrs.

Care and Teaching Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
124	Encourage acceptable behavior.	52	100.0	1 or 2 yrs.
125	Perform action to prevent unacceptable behavior.	52	100.0	2 or 3 yrs.
112	Instruct a group of children or an individual child in method of carrying out a routine activity (tying shoelace, buttoning coat, washing hands, eating a meal).	51	98.1	1 yr.
113	Demonstrate to children a method of carrying out an action (painting, washing hands, playing rhythm instruments, etc.).	51	98.1	1 or 2 yrs.
120	Respond to child's questions.	51	98.1	1 or 2 yrs.
123	Instruct children in proper ways of behavior.	51	98.1	1 or 2 yrs.
100	Watch over children during toileting and washing up, dressing and undressing (maintain order, ensure safety and correct procedures).	50	96.2	1 yr.
117	Lead group discussion with children (show and tell, talking time etc.).	50	96.2	1 or 2 yrs.

Care and Teaching Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
122	Decide and enforce rules for behavior of children.	50	96.2	2 or 3 yrs.
127	Arbitrate disputes of children.	50	96.2	1 or 2 yrs.
103	Watch over children during special activities (field trips, parties-- maintain order, ensure safety, and correct procedures).	49	94.2	1 or 2 yrs.
105	Watch over child isolated because of emotional or behavioral difficulties.	48	92.3	2 or 3 yrs.
126	Determine and administer punishment for unacceptable behavior.	47	90.4	2 or 3 yrs.
107	Administer first aid.	42	80.8	1 or 2 yrs.
104	Watch over child isolated because of illness or injury.	41	78.8	Tr.
99	Watch over children during rest time or nap time (maintain order, ensure safety and correct procedures).	40	76.9	1 yr.

Care and Teaching Tasks (continued)

Task No.	Task Description	No. of Yes Responses N=52	Average Score %	Administrator Educator Score
111	Perform activities of personal care for children (bathing, changing wet or soaked diapers or clothing).	36	69.2	1 or 2 yrs.
109	Arrange for care by other agents (medical, diagnostic, parents, etc.).	28	53.8	Tr.
108	Administer medication.	21	40.4	N.A.
110	Accompany child for care and/or treatment by other agents.	13	25.0	N.A.