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AUTHOR Mayfield, Margie I.; And Others
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ABSTRACT

The procedures, results, and recommendations of the 1980-81 British Columbia Kindergarten Needs Assessment, the first province-wide kindergarten survey to investigate all aspects of the kindergarten program, are presented in this general report. Kindergarten teachers, district administrators and supervisors of licensed preschools, and a sample of school administrators and first-grade children received questionnaires. Recommendations were made in the following areas: curriculum revision and content, teacher education and qualifications, admission policies, funding, facilities, class size and organization, role of parents, evaluation of children, support services, and future research. (Author)

BRITISH COLUMBIA
KINDERGARTEN NEEDS ASSESSMENT
1980

General Report

A REPORT TO
THE MINISTRY OF EDUCATION
PROVINCE OF BRITISH COLUMBIA

BRITISH COLUMBIA

KINDERGARTEN NEEDS ASSESSMENT

GENERAL REPORT

Submitted to the

Learning Assessment Branch

Ministry of Education

Province of British Columbia

by

Margie Mayfield (Chair)	Faculty of Education University of Victoria
Jean Dey	Faculty of Education University of Victoria
Norman Gleadow	Faculty of Education University of Victoria
Werner Liedtke	Faculty of Education University of Victoria
Annetta Probst	Teacher Greater Victoria School District

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PREFACE

The Contract Team wishes to thank the many people whose co-operation made this assessment possible. We wish to thank the teachers, administrators, and parents who gave their time to complete the questionnaires and especially those who wrote comments.

We would like to recognize the help and suggestions given by the Review Panels and the Advisory Committee.

We appreciate the help of Mary Cooper of B.C. Research and Nancy Greer and Robert Wilson of the Learning Assessment Branch. Our special thanks to Iris McIntyre of the Learning Assessment Branch who served as consultant to this assessment.

And finally, our thanks to our students, colleagues, families, and friends for their support and understanding.

The British Columbia 1980 Kindergarten Needs Assessment

Kindergarten Advisory Committee

Mary Begin	Teacher Coquitlam School District
Jessie Bryant	Teacher Merritt School District
Mary Cooper	Project Director B. C. Research
Lucy Lennox	Principal Prince Rupert School District
Margie Mayfield	Faculty of Education University of Victoria
Iris McIntyre (Chair)	Learning Assessment Branch Ministry of Education
Erika Meeker	Trustee Maple Ridge School District
Judy Ridgway	Teacher Cranbrook School District
Jan Sarkissian	Primary Supervisor Greater Victoria School District
Juaneva Smith	Teacher Campbell River School District
Luanne Whiles	Helping Teacher Vancouver School District
Robert Wilson	Learning Assessment Branch Ministry of Education

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CHAPTER 1

THE KINDERGARTEN NEEDS ASSESSMENT

The purpose of this chapter is to provide a general description of the 1980 Kindergarten Needs Assessment: its purpose, terms of reference, and procedures.

1.1 Purposes of the Assessment

The 1980 Kindergarten Needs Assessment was the first province-wide assessment of Kindergartens in British Columbia. It was one of a series of provincial needs assessments and the general purposes of the Kindergarten Needs Assessment were to:

1. Inform professionals and the public of the strengths and weaknesses of the public school system at the Kindergarten level;
2. Assist the Ministry and school districts in decisions related to the development, review, modification, revision, and implementation of existing curricula and supporting instructional resource materials;
3. Assist the Ministry in decisions concerning allocation of resources;
4. Identify areas of need and provide directions for change in both pre-service and in-service teacher education and professional development;
5. Provide directions for educational research.

The last revision of the Kindergarten curriculum in British Columbia occured in 1973. Since that time, there has been considerable growth in the field of Early Childhood Education reflecting some of the considerable change that has taken place in society. Therefore at this time, it is necessary to provide an accurate and current picture of Kindergarten programs in British Columbia before decisions on possible changes to the Kindergarten curriculum can be made. The specific areas of investigation of the 1980 Kindergarten Needs Assessment are outlined below.

1.2 Terms of Reference

The Call for Proposal and Terms of Reference (1979) distributed by the Learning Assessment Branch of the Ministry of Education outlined the following questions to be addressed by the 1980 Kindergarten Needs Assessment:

1. Kindergarten Curriculum: Theory and Models

   What are the major curriculum models which are currently guiding Kindergarten programs throughout North America and elsewhere in the world?

2. The Kindergarten Child in the 1980's

   What is the profile of the child presently in Kindergarten in B.C.?

3. The Present Kindergarten Program

   What is the status of Kindergarten programs currently in B.C.?
   Which model(s) are currently being applied in B.C. as reported by questionnaire respondents?

4. Expectations for Kindergarten Programs in the Future

   Which curriculum model(s) are preferred by the teachers, administrators, parents, and other interested groups for future Kindergarten programs in British Columbia?
   What is required to adequately equip the Kindergarten to provide the ideal environment to serve the needs of children?

5. Discrepancies

   What are the discrepancies between 3 and 4?

6. Recommendations

   What recommendations can be made to resolve the discrepancies?

1.3 Outline of Procedure

The 1980 Kindergarten Needs Assessment consisted of seven phases. Phase 1 was the planning stage which began in early 1980. During April and May, the Contract Team met with the Advisory Committee and the Technical Agency to discuss the requirements and procedures of the assessment. (See Mussio & Greer, 1980, for a description of these groups and the general procedures for assessments in British Columbia.)

Phase 2 was the development stage during which two members of the Contract Team wrote a paper reviewing the major curriculum and program models currently used in Early Childhood Education (see Chapter 2). The Contract Team developed separate questionnaires for Kindergarten, Grade 1, and Preschool teachers and Kindergarten, Grade 1, and Preschool parents, School and District administrators. The paper and questionnaire items were reviewed by the Advisory Committee in June.

Phases 3 and 4 were the review and piloting of the questionnaire by four review panels throughout British Columbia. These panels were composed of Kindergarten, primary and preschool teachers, parents, administrators, and school trustees (See Appendix). As a result of input from these review panels and pilot studies, the questionnaires were revised during July.

Phase 5 was the printing and distribution of the questionnaires and the tabulation and analysis of the results by B.C. Research. (Copies of the questionnaires may be obtained from Learning Assessment Branch, Ministry

of Education, Richmond, B. C.) In September, the questionnaires were distributed to a predetermined sample of teachers, parents and administrators throughout British Columbia (see Section 1.4). Keypunching and data analyses were completed in late October (see Section 1.5 for the description of data analyses).

Phase 6 was the review of the results and preparation of the reports. The Contract Team presented a draft report to the Advisory Committee in December. The final draft of the report was reviewed by the Advisory Committee in January 1981 and the final report submitted to the Learning Assessment Branch in February.

Phase 7 will be a follow-up stage that includes discussion of the results of the study and the reports with teachers, trustees, Ministry of Education officials, the Kindergarten Curriculum Review Committee, members of the Curriculum Development Branch and others during Spring 1981.

1.4 The Sample and Return Rates

1.4.1 Groups Surveyed

Early in the assessment it was decided to survey teachers, administrators and parents. More specifically the groups were:

1. Teachers
   - (a) Kindergarten Teachers
   - (b) Grade 1 Teachers
   - (c) Preschool Teachers
2. Administrators
   - (a) Principals of Elementary schools which enrolled Kindergarten children.
   - (b) School District Primary Supervisors, or the person at the District level most familiar with Kindergartens.
3. Parents
   - (a) Kindergarten Children's Parents
   - (b) Grade 1 Children's Parents
   - (c) Preschool Children's Parents

Table 1.1 shows the response rates by geographical region for the groups surveyed.

1.4.2 Sampling Procedures

1.4.2.1 Kindergarten Teachers

A questionnaire was mailed to all regular Kindergarten teachers and other school instructional staff who registered either a morning or an afternoon Kindergarten class. The teachers were identified using the September 1979 Ministry of Education Form J. In September, 1,289 questionnaires were mailed. The overall response rate was 79.5%.

1.4.2.2 Grade 1 Teachers

A questionnaire was sent to every Grade 1 teacher who did not also register a Kindergarten class, and who was not in a school selected for the principal's or parent's survey. The B.C. Ministry of Education Form J was used to identify the teachers. In September, 736 questionnaires were mailed. The overall response rate was 71.5%.

1.4.2.3 Preschool Teachers

B.C. Ministry of Health records yielded a list of 743 licenced preschools. In addition, 67 Indian Affairs Schools, enrolling five-year-old Kindergarten were included for a total of 810 preschools. The following categories of preschool were identified:

Category	Number in Category	Number of Children
Nursery	385	8,136
Kindergarten	10	223
Group Day Care	312	7,007
Special Day Care	67	1,283
Dept. of Indian Affairs and Band Operated	67	325
Total	810	16,974

The supervisor of each preschool was mailed a questionnaire. The response rate was 44.1% but was geographically representative.

1.4.2.4 School Administrators

The principal or administrator of every second school which enrolled any Kindergarten children but which had not been selected for either the Grade 1 parent or Kindergarten parent survey, was mailed a questionnaire. The questionnaire was packaged with the questionnaire(s) for the Kindergarten teacher(s) in that school. A total of 505 questionnaires were sent, with a response rate of 84.4%.

1.4.2.5 District Administrators

A questionnaire was sent to each primary supervisor (or equivalent) in each of the 75 school districts. Fifty-eight supervisors completed the questionnaires, for a response rate of 77.3%.

1.4.2.6 Parents of Kindergarten Children

From the data available on the September 1979 Ministry of Education Form I (enrolment data), all schools enrolling any Kindergarten children were listed by decreasing Kindergarten class enrolment within geographic zones. Within each zone, class size strata were selected so that each included at least two classes. Classes were then randomly sampled within strata so that there was proportional representativeness by class size and geographic zone. No school received a set of questionnaires for both the Grade 1

children's parents, and the Kindergarten children's parents. A sufficient number of questionnaires was sent to the principal of each selected school. Each principal was instructed to distribute the questionnaires to the parents of the Kindergarten children. Of the estimated 1,048 parents surveyed, 40.8% returned completed questionnaires.

1.4.2.7 Parents of Grade 1 Children

The same sampling procedure described in Section 1.4.2.6 was used. An estimated 1,031 parents were sampled, and 47.7% returned completed questionnaires.

1.4.2.8 Parents of Preschool Children

The sample of parents was selected in the same way as that for the parents of Kindergarten and Grade 1 children: proportional representation by preschool centre enrolment and geographical zone enrolment. The response rate was 30.5% of the estimated 1,182 parents sampled.

TABLE 1.1

SAMPLE SIZE AND RESPONSE RATE BY REGION AND GROUP

Region		Teachers			Administrators		Parents			Total
		Kinder-garten	Grade 1	Pre-School	School	District	Kinder-garten	Grade 1	Pre-School	
Okanagan	Mailed	212	110	86	93	16	146	130	91	884
	Returned	154	80	33	67	12	74	45	23	488
	Response	72.6%	72.7%	38.4%	72.0%	75.0%	50.7%	34.6%	25.3%	55.2%
Metro	Mailed	464	274	363	157	9	348	384	570	2,569
	Returned	382	208	158	144	5	124	136	163	1,320
	Response	82.3%	75.9%	43.5%	91.7%	55.6%	35.6%	35.4%	28.6%	51.4%
Fraser Valley	Mailed	138	76	79	57	11	125	140	93	719
	Returned	119	47	36	50	10	43	63	22	390
	Response	86.2%	61.8%	45.6%	82.7%	90.9%	34.4%	45.0%	23.7%	54.2%
Vancouver Island	Mailed	208	127	173	84	13	181	177	267	1,230
	Returned	147	90	82	66	11	123	81	107	707
	Response	70.7%	70.9%	47.4%	78.6%	84.6%	68.0%	45.8%	40.1%	57.5%
Kootenays	Mailed	88	45	30	42	12	80	62	33	392
	Returned	69	34	11	34	10	44	47	22	271
	Response	78.4%	75.6%	36.7%	81.0%	83.3%	55.0%	75.8%	66.7%	69.1%
North	Mailed	179	104	79	72	14	151	155	128	882
	Returned	144	65	36	63	10	72	55	24	469
	Response	80.4%	62.5%	45.6%	87.5%	71.4%	47.7%	35.5%	18.8%	53.2%
Uncoded		10	2	1	2	0	12	1	0	28
Total Mailed		1289	736	810	505	75	1031	1048	1182	6,676
Total Returned		1025	526	357	426	58	492	428	361	3,673
Mean Response		79.5%	71.5%	44.1%	84.4%	77.3%	47.7%	40.8%	30.5%	55.0%

1.4.3 Precision of Results

It should be borne in mind that all sample surveys are subject to sampling error, that is, the extent to which the results may differ from what would be obtained if everyone in the defined population had completed a questionnaire.

Table 1.2 may be used in estimating the sampling error of reported percentages in this report. The figures in the table identify the limits of the 95% confidence interval for a category response of 50% (which has the maximum error) and 25% (which has the same error as 75%). The values in the table should be added to and subtracted from the obtained values in order to determine the confidence interval. For the parent samples, an infinite population was assumed. A finite population correction has been applied to the educator samples. The calculations assume an unbiased sample.

TABLE 1.2

ESTIMATED SAMPLING ERRORS FOR THE KINDERGARTEN ASSESSMENT

Group	Obtained Sample	Estimated Population for Calculating Sampling Error	Estimated Sampling Errors	
			25% Category Response	50% Category Response
K Teachers	1025	1289	1.2%	1.4%
Gr.1 Teachers	526	1472	2.9%	3.4%
Preschool Teachers	357	810	3.4%	3.9%
Sch. Admin.	426	1010	3.1%	3.6%
Dist. Admin.	58	75	5.3%	6.1%
K Parents	492	∞	3.8%	4.4%
Gr.1 Parents	428	∞	4.1%	4.7%
Preschool Parents	361	∞	4.5%	5.2%

1.4.4 Limitations of the Survey

The results of this survey should be interpreted in light of the following limitations:

1. Observation of Kindergarten classrooms and Kindergarten teachers, though planned, was not possible due to financial restraints. Questionnaires were the primary information-gathering instruments.

2. The limitations associated with questionnaires are:
   (a) Self-reported data. The accuracy of the responses could not be verified. Although the guarantee of anonymity aids increased accuracy of reporting, other factors such as the true identity of the person actually completing the questionnaire and possible contamination from other respondents or sources could not be controlled.
   (b) Respondent motivation. Completion and return of questionnaires requires time and effort on the part of the subjects. It is recognized that the degree of motivation among respondents differs and hence may affect return rate and completeness of response.
   (c) Format. The length of the questionnaire, the questions used, the layout, instructions, etc., may also have affected the response. The extensive use of a pilot study, review panels, and review of the questionnaires by a variety of informed people aided the revision and refinement of the final forms of the questionnaires, in order to reduce possible negative effects due to format.
   (d) Timing of the questionnaires. Due to time-line constraints, the questionnaires were to be completed during September. The timing of the questionnaire did not permit Kindergarten parents the time to become thoroughly familiar with the Kindergarten program and therefore limited the questions they could be asked. As September is a very busy month in the schools, this could have affected the response rate and/or completeness of response. As the questionnaires were distributed so early in the school year, some questions were asked based on the previous year's experience; therefore, new teachers could not be asked to respond to some questions.

3. A postal disruption during the period scheduled for return of the questionnaires may have resulted in a reduced return rate especially from parents and preschool teachers who had no other options for returning the questionnaires.

1.5 Data Treatment

The coding and processing of all data were performed by B.C. Research.

A number of programs available in the Statistical Package for the Social Sciences (S.P.S.S.) were used to process the responses of the different groups. Another program used was a hierarchical grouping program called UBC CGROUP.

One or two pages were provided at the end of each questionnaire for additional comments by the respondents. The length of comments ranged from a sentence to ten additional pages. The Contract Team read all comments and did a content analysis of these written comments.

CHAPTER 2

A REVIEW OF EARLY CHILDHOOD EDUCATION MODELS AND PROGRAMS

2.1 Introduction

The purpose of this chapter is to provide a background on the major curriculum models currently used for Early Childhood Education programs and a description of the theoretical foundations of these models. There are two parts in this chapter. The first section is a presentation of general background to Early Childhood Education programs and the five year old child. The second part is a discussion of a theoretical framework for current Early Childhood Education programs, detailed descriptions of various aspects of specific programs (assumptions about children and learning, goals/objectives, content, materials, teacher role, parent involvement, and evaluation), and a table summary of the models.

2.2 Background of Current Early Childhood Education Programs

The 1960's and 70's saw an increase in the emphasis placed on Early Childhood Education. The roots of this increased interest were observed in theoretical writings, research, social trends, societal pressures, governmental interests and other forces. Dowles (1971) summed up this trend by observing:

> Social scientists "discovered" what educators of young children for half a century had taken for granted, that the preschool years are a crucial time not only for social and emotional but also for intellectual growth. Almost overnight, childhood became a precious commodity — a valuable national resource which had previously been underestimated. (p 13)

The educational community's search for maximum use of intellectual resources in the post-Sputnik years combined with the social philosophy of the sixties resulted in more research and writing on the implications of early education for children. At that time, two of the most influential writers in this area were J. McV. Hunt and Benjamin Bloom.

After a review of research and theory, Hunt (1961) concluded:

> It is no longer unreasonable to consider that it might be feasible to discover ways to govern the encounters that children have with their environments, especially during the early years of their development, to achieve a substantially higher level of intellectual capacity. (p. 363)

Bloom's review of the research also had impact on Early Childhood Education. His work supported that of Hunt; and, in commenting on Hunt's work, Bloom (1963) hypothesized:

> If general intelligence is a developmental characteristic and is related to the time it takes the individual to learn various concepts, skills, etc., it would seem reasonable that lack of such learning in one time period may be difficult or impossible to make up fully in another period, whereas unusually excellent learning in one time period is not likely to be lost in subsequent period. (p. 71)

And as a result of this synthesis of research findings, Bloom (1964) concluded that "put in terms of intelligence measures at 17, from conception to age 4, the individual develops 50 percent of his mature intelligence, from ages 4 to 8 he develops another 30 percent; and from ages 8 to 17 the remaining 20 percent (p. 68)."

Bloom (1964) also investigated the areas of general achievement, reading comprehension, and vocabulary development and concluded that "by age 9 (grade 3) at least 50 percent of the general achievement pattern at age 18 (grade 12) has been been developed (p. 105)." This statement has important implications for Kindergarten instruction because in relating these findings to four to six year old children, Bloom stated that about 17 percent of the growth in this area of general achievement occurs during these years. He hypothesized "that nursery school and Kindergarten could have far reaching consequences on the child's general learning pattern (p. 110)."

Bloom (1964) also reviewed the research on interests, attitudes, and personality and found evidence that suggested major development occurs during the early years. He stated that by approximately age two, "it seems evident that at least one-third of the variance at adolescence on intellectual interest, dependency, and aggression is predictable (p. 177)." By age five, nearly one-half of this variance is predictable. In summary, Bloom's work emphasized and supported the importance and impact of the early years on the development of intelligence, general achievement, attitudes, and personality.

Another significant influence in Early Childhood Education was Jean Piaget. Although Piaget did not directly comment on the relationship of his work to classroom instruction, his work has had two important educational applications. The first is Piaget's ideas on the instruction of the intellect and environment. The second application is Piaget's concept and identification of a developmental sequence, each stage of which is characterized by special modes of thinking and responding to the environment. As Furth (1970) stated, "If Piaget's theory of development has any validity, surely its first application should be in early education (p. ix)."

The development and functioning of the brain and the implications of this for education are recent and expanding areas of research and speculation. Some people theorize that if so-called critical or sensitive periods (i.e., optimal times for the acquisition of new responses) could be accurately identified, education would be more likely to meet individual needs (Epstein, 1978). Others think that all of early life is a sensitive period (Lanquis, Sanders & Tipps, 1980, p. 29). Whether such research and speculations prove fruitful and influential in Early Childhood Education in the future remains to be seen; however, the "collaboration of educators and brain scientists in research and in practice is essential" (Chall & Mirsky, 1978, p. 372).

One historical influence on Early Childhood Education has been the work of Maria Montessori. The Montessori Method was the first systematic attempt to educate children under six years of age. It was developed by Dr. Montessori in 1907 during her work with mentally deficient children. It proved so successful with these children that she was encouraged to apply it to the education of the under-privileged children in the slums of Rome. Although many of its concepts have influenced coventional nursery school and Kindergarten practice, true Montessori schools have never been part of the public school systems of North America. There was an initial flurry of interest in the method by 1916 there were nearly two hundred authorized schools in the United States. Her ideas about education were at odds with the then popular Progressive Education Movement and according to her chief critic William Kirkpatrick, "in the content of her doctrine she belongs to the mid-nineteenth century, some fifty years behind the present development of educational theory" (Kirkpatrick, 1915, pp. 62-63). His book was widely circulated and effectively dampened enthusiasm for Montessori's work. Her work was virtually ignored by educators until about 1958 and since then, there has been a growing interest in its principles, methods and materials. Evans (1975) suggests that the search for appropriate methods to educate disadvantaged children, the awareness of the close relationship between Montessorian principles and Piagetian theory, the appeal of discovery learning, have all combined to renew the interest in the Montessori Method.

The Montessori Method was the forerunner of the current emphasis on language development, the prepared responsive environment, learning how to learn, the sequencing of learning programs, the child-centered school, concern for the individual, and the orientation of pre-academic and early academic skill development.

One contemporary researcher and educator who commented on classroom implications of research was Jerome Bruner. Bruner's (1960) oft-quoted statements are:

> Our schools may be wasting previous years by postponing the teaching of many important subjects on the grounds that they are too difficult (p. 12)
> (and)
> any subject can be taught effectively in some intellectually honest form to any child at any stage of development (p.33).

were considered to be particularly appropriate for the educational climate of the sixties and seventies. The rationales of many Early Childhood Education programs reflected the work of Bruner, Bloom, and Hunt.

Another source of support for Early Childhood Education in the early sixties was the work of Martin Deutsch among disadvantaged children in New York City. Deutsch (1966) reported:

> We found that, controlling for socioeconomic status, children with some pre-school experience have significantly higher intelligence test scores than do children with no pre-school experience. (p. 90)

In a discussion of readiness, Ausubel (1963) cited other research studies which "indicate kindergarten attendance facilitates academic performance during the first grade and that evidence of this facilitation can be found in the eleventh grade" (p. 124).

Two studies in British Columbia which reported on the relationship of Kindergarten attendance to subsequent achievement were Conway (1968) and Reading Assessment: Summary Report (1980). Conway concluded that " a slight superiority in achievement in Grade 7 was indicated for those of both sexes who had attended Kindergartens of either type (public or private)" (p. 12). The 1980 Reading Assessment reported on the performance of Grade 4 children as a function of previous Kindergarten attendance:

> There is a consistent and sizeable difference in performance associated with this variable (attendance in Kindergarten) . . . . This effect exists regardless of sex, time in Canada, age and linguistic background (p. 47).

Overall, after reviewing studies which investigate the relationship of Kindergarten to later achievement, it can be concluded that "while some studies are inconclusive, much research favors children with Kindergarten experience" (Leeper, 1968, p. 30).

On the other hand, some educators (e.g., Moore & Moore, 1975) are highly critical of the role of schooling during the early years. They do not question the importance of the early years, but these educators believe that young children do not have sufficient backgrounds of experience and levels of development to benefit from early learning environment. Others (e.g., Rohwer, 1971) speculate that other developmental periods (e.g. adolescence) may be the prime learning years.

Societal and economic trends have eliminated "home education" as an option for many young children and their families. The National Day Care Information Centre of Health and Welfare Canada (1978) reported that "it is a fact that an increasing number of mothers with preschool children

are entering the labour market" (p. 1).

One result of the increase in working mothers and the subsequent placement of their children in child care has been an increase of public awareness of education in the early years. This has been seen in popular magazines, television, newspapers, governmental reports, etc.

The increase in awareness of the importance of early education had important effects in the 1960's. Education, and especially early education, came to be seen as an antidote to cultural deprivation and poverty. In the United States, this thinking led to the creation of massive federally funded Early Childhood Education programs such as Head Start and Follow-Through. These programs were particularly significant historically in Early Childhood Education because it was the first time a variety of early childhood programs had been implemented and evaluated on such a grand scale. The following sections present a brief summary of Project Head Start and the subsequent Project Follow-Through.

2.3 Project Head Start

Project Head Start was the manifestation of the accumulating evidence of the importance of the early years, the change possible in young children as a result of early intervention, the concept of education as a remediating influence on poverty and its attendant problems, a national political commitment to attempting to deal with these problems, and a feeling of optimism that concentrated effort would improve the current lives and the future lives of a nation's children. It was in this context that Head Start was begun as a summer program in 1965 with more than 580,000 preschool age children in approximately 2500 centres across the United States. Full-year Head Start programs began in the fall of 1965 with 21,500 children.

The Office of Economic Opportunity established the following broad goals for Head Start which were to be interpreted and adapted to meet local needs:

> Improving the child's health.
> Helping the child's emotional and social development by encouraging self-confidence, self-expression, self-discipline, and curiosity.
> Improving and expanding the child's mental processes, aiming at expanding the ability to think, reason, and speak clearly.
> Helping children to get wider and more varied experiences which will broaden their horizons, increase their ease of conversation, and improve their understanding of the world in which they live.
> Giving the child frequent chances to succeed. Such chances may thus erase patterns of frustration and failure, and especially, the fear of failure.
> Developing for the child a climate of confidence which will make him want to learn.

> Increasing the child's ability to get along with others in his family and, at the same time, helping the family to understand him and his problems-thus strengthening family ties.
> Developing in the child and his family a responsible attitude toward society, and fostering feelings of belonging to a community.
> Planning activities which allow groups from every social, ethnic, and economic level in a community to join together with the poor in solving problems.
> Offering a chance for the child to meet and see teachers, policemen, health and welfare officers-all figures of authority-in situations which will bring respect and not fear.
> Giving the child a chance to meet with older children, teenagers, and adults who will serve as "models" in manners, behavior, speech, etc.
> Helping both the child and his family to a greater confidence, self-respect, and dignity.
> (Office of Economic Opportunity 1965, quoted in Frost & Kissinger 1976, p. 82)

The early evaluations of Head Start were predominantly positive:

> The short-range data showed evidence of growing interest in school, gains in I.Q. scores, better results on reading readiness or language tests, and even growth in initiative, imagination, and expressiveness (Maxim, 1980, p. 23).

In addition to the cognitive and affective gains, OEO reported the following facts:

> 93,000 children with eye defects treated
> 96,000 children with bone and joint disorders referred
> 900,000 dental cases treated
> 740,000 children immunized against polio
> +1,000,000 children immunized against measles.
> (quoted in Smith and Bissell, 1970, p. 58)

The major evaluation of long-term results was the Westinghouse Learning Corporation/Ohio University evaluation of 1968-69. The basic question for investigation was: To what extent are the children now in the first, second, and third grades who attended Head Start programs different in their intellectual and social-personal development from comparable children who did not attend?

The major conclusions of the Westinghouse study (1969) were:

1. Summer programs have been ineffective in producing any persisting gains in cognitive or affective development that can be detected by the tests used in grades 1, 2, and 3...

Due to budget cuts, Project Follow-Through became a planned variation project in which a variety of types of programs were funded in order to determine which were most effective in which situations. Project Follow-Through included twenty-two planned variation programs for 84,000 children in Kindergarten through Grade 3.

These programs were required to maintain medical, dental, psychological, social and nutritional services, community and parent involvement. In a report by Abt Associates (1974) the following characteristics were identified as common to these twenty-two programs. They all (a) seek to develop children's abilities, (b) recognize the importance of individual and small group instruction, (c) are committed to making learning interesting and relevant to the child's cultural background, and (d) believe that the child's success in learning is inseparable from his self-esteem, motivation, autonomy, and environmental support.

Differences among the programs include different theoretical bases, objectives, teaching strategies, content, materials, evaluation procedures, etc. These differences reflect the fact that although educators have as their ultimate goal the greatest good and development of all children, there is much discussion over when, where, and how this can be best implemented.

Specific Follow-Through programs are described in detail in Section 2.6, Evaluation is discussed for each program. Overall, the Abt Associates' Follow-Through evaluation (1974) concluded that although there was not one program which was clearly superior to others, the "basic skills" models did better than the "cognitive" or "affective" models on measurement of affective and basic skills. The finding that different programs had very different effects in different communities would not permit the identification of one program or model as superior to the others.

The Abt evaluation was criticized for the inability of standardized measures to measure all outcomes of the various models (i.e., standardized measures favoured the "basic skills" models' objectives), for the use of certain statistical analyses on data from non-equivalent groups, for misleading classification of models and measures, and for other methodological and design problems (House, 1979).

As a result of such criticisms, the Ford Foundation funded the center for Instructional Research and Curriculum Evaluation to review the Abt evaluation (House, Glass, McLean & Walker, 1978). A re-analysis of the data by a panel of experts produced results that did not favour the "basic skills" models "but showed differences among models to be within the range of possible chance effects" (Moore, 1978, p. 54).

A 1979 report by the Consortium for Longitudinal Studies summarized "the findings of longitudinal studies of low-income children who participated in experimental preschool intervention programs over the past decade and a half" (Lazar & Darlington, 1979, p. 1). The original data were re-analyzed and new data gathered from the children now aged 9 to 19 years in 1976-77.

2. Full-year programs are marginally effective in terms of producing noticeable gains in cognitive development that can be detected by the measures used in grades 1, 2, and 3, but are ineffective in promoting detectable, durable gains in affective development...

3. Head Start children, whether from summer or full-year programs, still appear to be in a disadvantageous position with respect to national norms for the standardized tests of language development and scholastic achievement...

4. Head Start appears to have had a positive effect on the parents of its enrollers: they voiced strong approval of the program and its influence on their children. (pp. 243-4)

The recommendations of this report were:

1. Summer programs should be phased out as early as feasible, and converted into full-year programs or extended year...

2. Present programs should be continued but every effort should be made to render them more effective...

3. We are aware of "successful programs" carried out on an experimental basis, but it remains to be demonstrated whether such programs can be carried out on a mass basis, producing long-range effects with differences of such magnitude as to be worth the time and cost. With this in mind, we strongly recommend that some of the full-year programs be identified and operated as pilot or model centers and assigned the resources necessary to undertake comprehensive field experimentation. (Westinghouse, 1969, pp. 247-251)

One criticism of the Westinghouse evaluation is the rather limited focus given the broad goals of Head Start. Other criticism included methodology, design, sampling, and analysis (see Smith & Bissell, 1970, for a detailed analysis).

2.4 Project Follow-Through

Project Follow-Through was begun in 1967 in response to the problem of the gains achieved through Head Start programs "washing out" by the end of the primary grades. This larger-scale program was designed to extend the goals of Head Start through Grade 3 in order to maintain the gains achieved through Head Start programs.

Although the researchers were unable to identify one program as clearly superior, they reported that "early education programs for low-income children apparently had lasting effects in the following areas. Early education programs significantly reduced the number of children assigned to special education classes...significantly reduced the number of children retained in grade...increased children's scores on fourth grade mathematics achievement tests with a suggestive trend toward increased scores on fourth grade reading tests...(and) low-income children who attended preschools surpassed their controls on the Stanford-Binet IQ test for up to three years after the preschool programs ended...(and these) children... were more likely than control children to give achievement related reasons for being proud of themselves" (Lazar & Darlington, 1979, pp. 19-20).

Such results have implications in terms of the cost-effectiveness of early intervention. Moore (1979) described the results of a cost-effectiveness study of one project which showed that "a substantial portion of the project costs were recovered by the community from savings accrued by project children who did not require special education placement or other extraordinary care or intervention" (p. 80).

2.5 Who is the Kindergarten Child?

2.5.1 Background

Until the seventeenth century, when Comenius addressed his writing toward principles to guide the education of all the children of all the people, essayists did not concern themselves with the education of young children, nor with the education of any but the privileged classes. With the publication of School of Infancy in 1633 and the Great Didactic in 1657 Comenius began what were to be continuing attempts to describe the characteristics of children under the age of six years, and the activities appropriate for their optimum development.

In The New Heloise (quoted in Rusk, 1918), Rousseau stated his belief that Nature wanted children to be children before they were men; an unusual stance at a time when children were regarded as small adults. He also felt that childhood had ways of seeing, thinking, and feeling peculiar to itself, a sentiment which was to be repeated two centuries later by Bruner (1962) who said:

> Research on the intellectual development of the child highlights the fact that at each stage of development the child has a characteristic way of viewing the world and explaining it to himself. The task of teaching a subject to a child at any particular age is one of representing the structure of that subject in terms of the child's way of viewing things. (p. 33)

Rousseau (quoted in Rusk, 1933) outlined four stages in a child's development: (a) infancy: habit and the training of the emotions, (b) childhood: necessity and the training of the senses, (c) boyhood:

utility and the training of the intellect, and (d) adolescence: morality and moral, aesthetic, and social education.

Froebel (quoted in Rusk, 1933), as a student of Rousseau's writings, also recognized similar well-marked stages of development: (a) babyhood (birth to age 3) for nurture, (b) childhood (ages 3-7) for education through activity, and (c) boyhood (ages 7 to 12) for instruction. These stages are comparable to those of Piaget. He emphasized the continuity of development and the importance of making full use of each stage before proceeding to the next. For him, development was a process of the unfolding of that which was within the child, not an imposition from without. In The Education of Man, published in 1826, he stated his belief that play was the highest phase of human development in childhood and had deep significance in all facets of the child's development.

Montessori, too, was aware of stages in the development of children, each of which provided a predisposition for particular types of learning. She believed that there was a psychological moment when the consciousness of a need arose in the child's mind, and that it was necessary to offer exercises which correspond to the need for development felt by the organism. In order to do this, a prepared environment was required.

Both Froebel and Montessori were committed to the concept of predetermined development, but viewed the environment (i.e., education) as vital to the achievement of this potential but not a means to increase it.

The Child Study Movement which started in the United States in 1890, was the beginning of a trend to describe children scientifically. Arnold Gesell's longitudinal study of children at the Yale Clinic established age-norms which would serve as guideposts to the typical development of children and was representative of this movement. Observations, both physical and behavioral, of large groups of children were averaged so that a composite picture of any specified age could be drawn. This provided a wealth of information which had hitherto been unavailable. It emphasized the maturation process and ruled out the possibility that the provision of a suitable environment, other than a benevolent one for normal development, could foster the acquisition of skills which were not congruent with the child's age. This often led to narrow programs and limited expectations for children.

Like Piaget's early works, these "ages and stages" were criticized for the uniqueness of the sample upon which the norms were based as it did not truly represent the total population. They fell into further disrepute in the fifties with the emergence of psychological theories of development such as the Behaviorist Theory which held that rather than an unfolding of behavior, shaping through operant conditioning would increase the rate at which normal responses would occur. Other developmental theories from the psychoanalysts, the phenomenologists, and sociologists influenced how young children were perceived.

In spite of this, until 1960, most early education educators were developmentalists and maintained that, though experience might be related to the development of personality, intellectual development did not necessarily respond to changes in the environment.

J. McVicker Hunt (1961) disagreed with this position that intellectual development was genetically-bound and not influenced by environmental change. Basing his argument on the work of Piaget, he stated that "encounters in the environment" determine the rate of development and the final level of intellectual achievement. Thus it was necessary to match experience with the child's developing level of intellect much in the same way that Montessori advocated.

The re-discovery of Piaget's work at this time has had the greatest influence in resolving these opposing points of view. He appears to have synthesized all of these postulates of how children grow and develop within his own theoretical framework. His developmental stages link growth and intellectual development with maturation and experience playing important roles. Neither one alone can affect the total development of the child. Both must be geared to the level of understanding and be regulated by the level of development of the individual.

Spodek (1973) summarized Piaget's contribution:

> Piaget has provided not only a series of guidelines that can be used to assess children's levels of development and to select experiences that may be appropriate for children at a particular point in time, but he has also suggested possible limitations to the accomplishments of educators. In addition, Piaget has highlighted the role of the child as an active participant in the educative process. (p. 26)

However, educators must still be cautious in applying any developmental yardsticks. Biehler (1974) counsels educators against the absolute acceptance of any hierarchy of characteristics because:

> Age-level characteristics always refer to a non-existent typical child - even when the sample studied is sufficiently large and varied. In determining the characteristics of a particular age level, observers "average" the behavioral traits of many (or few) children, and in the process many subtle variations of behavior are cancelled out.
>
> The kind of prediction about behavior one can make on the basis of such group averages is sometimes called actuarial prediction. . . . Descriptions of groups of children may tell with some accuracy how a few hundred children out of a thousand will behave, but they do not enable one to predict how a PARTICULAR child or how small groups of children will behave. (p. 93)

2.5.2 Characteristics of Pre-Kindergarten and Kindergarten Children

A synthesis and summary of some of the characteristics of Pre-Kindergarten and Kindergarten children which are currently acceptable to psychologists and Early Childhood educators, are shown in Figure 2.1.

FIGURE 2.1

SUMMARY OF CHARACTERISTICS OF
PRE-KINDERGARTEN AND KINDERGARTEN CHILDREN

AGE	PHYSICAL	SOCIAL	EMOTIONAL	INTELLECTUAL (Cognitive)
Pre-Kinder-garten	At the end of a period of rapid growth Is active with improved motor and muscular control Runs, hops, jumps, catches a ball; can walk upstairs and begins to walk down-stairs alone, operates a tricycle, learns best through the senses, can wash and dry dishes. Can use pencils or crayons to copy circles or simple lines, can print large capital letters; uses modeling clay Gains control of eating, sleeping and elimination.	Enjoys parallel play, small loosely organized play groups, and dramatic play Is beginning to understand limits, sharing and taking turns. Asks for what he wants instead of taking Is experimental with friend-ship with special children; will play with either boys or girls Tattles a great deal, partly for reassurance about right and wrong. Sometimes runs to adult with bitter complaints but needs less supervision.	Is somewhat insecure, un-oredictable, and out of equilibrium. Has symptoms of anxiety. Has become more belligerent and assertive. Tensional outlets increase; is given to emotional ex-tremes: shy one minute, over-boisterous the next. Tantrums are violent. Is beginning to relate emotionally to parents, siblings, and others; is achieving some concepts of self. Needs regular routines and chances to develop self-help without pressure.	Language is developing rapidly - is talkative, expressive, imaginative and constantly asks "Why?" Utterances have communicative intent; is frustrated if adults do not understand. Speech is ego-centric and consists of phrases and sentences. There is a great deal of bragging, commanding, and demanding. Is learning to associate symbols and words with objects. Is restricted to intuitive thought. Experience is the basis for extracting or constructing relational concepts. Likes short stories with pictures to clarify characters and actio-
Kinder-garten	A period of slow growth, girls are usually bigger than boys. Is gaining increased skill in motor control, has good co-ordination and masters walking, jumping and skip-ping, begins to throw a ball and to climb, can co-ordinate movements to music; can jump rope and operate a two-wheel bike. Bones are soft especially in brain area. Can dress self, brush teeth, and lace shoes but cannot tie the laces. Has difficulty focusing eyes on small objects; handedness is usually established, with 90% being right-handed. Can print own names, the alphabet and numerals Can make crude wooden models	Has flexible friendships in which quarrels are frequent, of short duration, and quickly forgotten. Leaders are beginning to emerge; competition is evident as he/she strives for recog-nition by teachers and peers. Has little sex awareness, identifies with like-sexed parent and plays with like-sexed children. Wishes to develop indepen-dence and is able to accept responsibility.	Is achieving emotional stability with fewer ups and downs; still has frequent outbursts of anger. Fears and jealousy are common behaviors. Expresses feelings freely. Tries to inhibit aggression. Seeks attention and reinforce-ment from adult; reacts unfa-vorably if it is not forth-coming. Needs assurance that he/she is loved and valued. Finds it difficult to delay gratification	Is skilled in language, likes to talk, practices one-upmanship. Imagination is at peak level; creativity is soaring-decides in advance what he/she is going to do. Eager to solve simple problems, reaches conclusions intuitively; judgements are based directly on sensory experience. Faulty reasoning is the result of lack of experience. Learns largely through action and sensory impressions. Likes poems with a rhythmic swing and fantastic stories with pictures.

2.6 Models in Early Childhood Education

When a number of models in Early Childhood Education are discussed, "the most efficient way of describing them would be to classify them into categories" (Miller, 1979, p. 201). However, because of the diversity of models, classification of curricula can be difficult. In this section, a continuum with three points has been used. The classification of Early Childhood programs into three groups has been used in other studies (e.g. Bissell, 1971).

The three types of curriculum models were placed on a continuum in order to emphasize the fact that although there are distinct extremes, overlap can exist. In reference to this point, Miller (1979) stated:

> Contrasts are drawn between the extreme positions, though in fact there are many gradations in between these extremes. It should also be remembered that individual classroom implementations of any model may vary considerably. (pp. 201-2)

The range of models in Early Childhood Education chosen for this review spans a wide continuum from informal to formal approaches. This formal-informal continuum refers to the degree of structure or directiveness in daily activities. An informal model is oriented toward socio-emotional development where the emphasis is on a highly flexible program with provisions for children planning much of their own learning. A formal model is oriented toward definite cognitive development where the approach is rather inflexible and is teacher-planned and directed.

This continuum of Early Childhood Education models can be divided into three categories:

1. Academic/Preacademic Model
2. Cognitive Discovery Model
3. Discovery Model.

An Academic/Preacademic model is said to "foster development of pre-academic skills and place a heavy emphasis on systematic reinforcement and drills on individualized programmed instruction" (Beller, 1973, p. 580). An example of the Academic/Preacademic model is Engelmann-Becker/Distar program (see Section 2.6.1).

A Cognitive Discovery model is said to "promote the growth of basic cognitive process by helping children develop the appropriate verbal labels and concepts while they engage in sequence exploration" (Beller, 1973, p. 580). Examples of the Cognitive Discovery model include the Cognitively Oriented Curriculum (see Section 2.6.2) and Responsive Education (see Section 2.6.3). These two programs were chosen in order to illustrate the range found in the Cognitive Discovery model.

A Discovery Model is said to "view learning as part of the humanistic growth of the whole child with emphasis on free exploration and self-expression" (Beller, 1973, p. 580). An example of the Discovery model

is Educational Development Center Open Education (see Section 2.6.4).

The above models and the overall theoretical framework are summarized in Figure 2.2.

FIGURE 2.2

THEORETICAL FRAMEWORK OF
EARLY CHILDHOOD EDUCATION MODELS

FORMAL ← → INFORMAL

	cognitive development emphasis			socio-emotional development emphasis
Curriculum Models	Academic/ Preacademic Models	Cognitive-Discovery Models		Discovery Models
Model Programs	Engelmann-Becker/ Distar	Cognitively Oriented Curriculum	Responsive Education	EDC Open Education

It is impossible to find three or four programs that are so distinctive that there is no overlap whatsoever. These four programs were selected because they exemplify a certain type of model, they are based on specific theoretical and philosophical positions, there is extensive information available and they were all evaluated in the same study. In addition to these four programs, three other Early Childhood programs have been included because they are relevant to current Kindergarten education in British Columbia which must address the needs of native children, the need to establish appropriate programs for the growing number of children entering the schools for whom English is a second language, and the need to accommodate the popular demand for instruction in the French language in the early years. These programs are discussed in detail in the following sections.

2.6.1 The Engelmann-Becker Program/Distar

2.6.1.1 Background

In 1964, Carl Bereiter and Siegfried Engelmann developed a program at the Univeristy of Illinois for preschool children from poor homes and non-white ethnic background. Three years later, Dr. Bereiter left the program and in the same year, Dr. Wesley Becker joined the staff.[1] The program then became known as the "Engelmann-Becker Program" usually referred to as Distar (Direct Instructional System for Teaching Acceleration and Remediation), following the development of materials to implement

a complete curriculum in language, reading and arithmetic. This revised program is designed to be used in the first four or five academic years (Preschool, Kindergarten, Grades 1, 2, and 3).

2.6.1.2 Assumptions about Children and Learning

As Evans (1971) states:

> Distar is not built specifically from a theoretical frame of reference for child development. Rather it incorporates a number of concepts from learning psychology which have an empirical foundation. Among these concepts are active involvement, a random- (versus fixed-) order recitation strategy, immediate feedback to the learner (especially knowledge of results and social reinforcement), a graduated sequence of learning based on task analysis, transfer of learning, and the contiguity principal. (p. 150)

According to Chow and Elmore (1973) the program was built on three premises: (a) education must refer to what the children are taught, not what they learn, (b) there must be specific performance criteria in order to analyze what children are to be taught, (c) tasks are the same for all children, but different children may not have learned the same set of skills thus the role of the teacher is to teach every child all the skills necessary to handle a particular task.

2.6.1.3 Goals and Objectives

The purpose of the program is to help children acquire certain skills that will allow them to progress in school and compete successfully with other children. The developers place emphasis on developing skills in language, reading, and arithmetic. They also stress the importance of maintaining uniform goals for all students since economic success in adult life is measured by a single set of standards. While they are convinced that the preschool period is the optimal time to overcome the learning lag which is characteristic of disadvantaged children, they do not believe that the traditional nursery school program is adequate for the task. These children are behind other children in certain developmental aspects; they must progress at a faster than normal rate if they are to catch up. Time becomes a crucial factor. This means focusing upon academic objectives and relegating all nonacademic objectives to a secondary position. Positive affective outcomes are viewed as byproducts of academic success.

Based on this rationale, the following set of minimum objectives were established, the attainment of which the developers believe was necessary if children are to enter the first grade with a successful prognosis (Bereiter & Englemann, 1966):

1. Ability to use affirmative and not statements in reply to the question "What is this?"
2. Ability to use both affirmative and not statements in response to the command "Tell me about this."
3. Ability to handle polar opposites ("If it is not _____ it must be _____").
4. Ability to use the following prepositions correctly in statements describing arrangements of objects: on, in, under, over, between.
5. Ability to name positive and negative instances for at least four classes, such as tools, weapons, pieces of furniture, wild animals, farm animals, and vehicles. The child should also be able to apply these class concepts correctly to nouns with which he is familiar.
6. Ability to perform simple if-then deductions.
7. Ability to use not in deductions.
8. Ability to use or in simple deductions.
9. Ability to name basic colors, plus white, black, and brown.
10. Ability to count aloud to 20 without help and to 100 with help at decade points (30, 40, etc.).
11. Ability to count objects correctly up to ten.
12. Ability to recognize and name the vowels and at least 15 consonants.
13. Ability to distinguish printed words from pictures.
14. Ability to rhyme in some fashion to produce a word that rhymes with a given word, to tell whether two words do or do not rhyme, or to complete rhyming jingles.
15. A sight-reading vocabulary of at least four words in addition to proper names, with evidence that the printed word has the same meaning for them as the corresponding spoken word.

These objectives specify kinds of learning that are likely to be missed by any educational program that is not deliberately planned to produce them. They are kinds of learning that do not arise easily and naturally from casual conversations and experience. (pp.48-50)

2.6.1.4 Organization of the Preschool and Kindergarten

Preschools based on this program, ideally can accommodate fifteen pupils organized into three study groups. Children are placed in the groups according to their assessed achievement level, so that those of comparable learning rates and developmental status may be instructed together.

Teachers are assigned to subjects not groups with the groups moving to each teacher. A schedule of activities is shown below:

	Group 1 5 Children	Group 2 5 Children	Group 3 5 Children
Period 1 (10 minutes)	Unstructured Activity		
Period 2 (20 minutes)	Language	Arithmetic	Reading
Period 3 (30 minutes)	Toilet, Juice, and Music		
Period 4 (20 minutes)	Arthmetic	Reading	Language
Period 5 (20 minutes)	Semistructured Activity		
Period 6 (20 minutes)	Reading	Language	Arithmetic

Although in actual implementation there may be variations, ideally, the work-oriented preschool should have four rooms to provide a relatively large room equipped with a piano and chalkboards for whole-group activities, and one small one for each of the study groups. The study rooms should be small and not cluttered with toys or stimulating materials to reduce the temptation to run about and explore. All rooms should be as sound-proof as possible so that loud vocal activity can go on simultaneously in every room without interfering with speech comprehension.

Many variations of the program are possible depending upon the age of the children, their level of the mastery of the basic skills, and the space available. If the space is limited to one room, each group can be located along three adjacent walls. Under such arrangement emphasis must be placed on chalkboard work and tasks which force the children to ignore what is going on in other parts of the room. In Kindergarten, it is possible to increase the number of children in each group to between eight or ten, and the amount of time spent with the groups to thirty minutes. These modifications must not include any reduction in the brisk pacing of the instruction, or change of goals for slower learning pupils.

2.6.1.5 Materials and Content

In the original Bereiter and Engelmann model which was originated for four - and five-year-olds, toys and other materials for sensory experiences were kept to a minimum. They were included to serve only two purposes: (a) to teach a concept, and (b) for the short periods of unstructured activity. The developers explained this departure from the usual preschool practice as follows (Bereiter & Engelmann, 1966):

> An object-rich environment stimulates the culturally deprived child to attend to the glitter or super-abundant stimuli. . . . Sterilizing the environment is a firm requirement of the work-oriented preschool. Toys should be limited to form boards, jigsaw puzzles (which are usually favorites with the children), books,

> drawing and tracing materials, Cuisenaire rods (to be handled during free time under the direction of the teacher), and a miniature house, barn, and a set of farm animals. Paper, crayons (but no paint) should be available for expressive play. Motor toys such as tricycles and wagons, and climbing equipment are not necessary for the program. (p. 72)

Engelmann and Becker subsequently developed and published Distar Language, Reading and Arithmetic Follow-Through Programs which have three levels with each containing sufficient material for one academic year of instruction. The total classroom time per day devoted to the direct instruction of these three subjects is approximately two hours. Two other subject areas developed to reinforce the Distar programs are Language Concepts in Song and Language Concepts through Drawing which take approximately 30 - 45 minutes of instruction per day. Theoretically, any one or combination of the subjects can be used. The materials are boxed separately; no other materials or equipment are required.

All directions and materials for teaching Distar are provided and again, boxed separately. These include a detailed teacher's guide, presentation books, and special materials for each subject, e.g. form boards and geometric figure cards for arithmetic, and records and pictures for music. The teacher's guide with explicit teaching instructions, is the only necessary material for Language Concepts Through Drawing.

The content of the original Bereiter and Engelmann program was first published in Teaching Disadvantaged Children in the Preschool (Bereiter & Engelmann, 1966, pp. 122-299). The developers further depended on in-service workshops to acquaint the teachers with the methods, scope, and sequence of the program. Following the change in Project personnel, the Englemann and Becker team developed materials to accomplish these purposes.

The following outlines were presented by the developers (Chow & Elmore, 1973):

Distar Language I

Statements (both affirmative and negative)	Categories
Action Statements (both affirmative and negative)	Plurals
Polars (opposites)	Cause and Effect
Prepositions of Polars (both affirmative and negative)	Verb Tenses
Multiple Attributes and Pronouns	Before-After (Sequential Action)
Same-Different	Naming Parts

Distar Reading I

Symbol-Action Games (left to right orientation)	Symbols - Say It Fast (reading words printed in Distar symbols; i.e., modified i.t.a. orthography)
Blending-Spelling by Sounds	Sound Recognition (sound-symbol correspondence)
Blending-Say It Fast	Sound Sliding (each sound said and held until producing the next sound, without pausing between sounds)
Rhyming	

Distar Arithmetic I

Counting to a Number	Equality and the Equal Sign
Counting Events in Time	Addition
Object Counting (including grouping)	Subtraction
Counting from One Number to Another	Counting by Fives
Counting Backwards	Counting by Twos
Symbol Identification	Algebraic Addition and Subtraction

Language Concepts in Song: The music program

(The music program is designed to reinforce the work in language skills. Traditional music objectives are ignored).

Language Concepts through Drawing: The art program

(One of the purposes of the program is to teach children how to become critical observers. Most of the early exercises are drawings from which a small part has been omitted - a man's nose, an apple's stem, a boy's hand, a house's door, etc. Each drawing has an associated group of questions focusing on the name of the object, the names of the parts, and the function of objects. The last section concentrates on drawing of faces).

2.6.1.6 The Role of the Teacher

Englemann, critical of teacher education programs particularly those for preschool teachers, decided that teachers of this model must be told exactly what to do and how to do it (Evans, 1971). All objectives, activities, and interaction strategies are carefully defined in the materials. The principal method of instruction is pattern drill. The program is highly teacher-centered. The teacher's primary responsibility is to: (a) present the curriculum according to detailed specifications, (b) perform basic diagnostic operations, (c) reinforce children for correct answers, and (d) maintain the desired instructional pace.

Because this model is based on the principles of operant conditioning, reinforcement, both positive and negative, is an important feature of the teacher's role. It may take the form of anything that appeals to the children as long as it may be quickly given or withdrawn. Material rewards (cookies, candy, raisins, and etc.), evidence of approval (shaking hands with the children), lavish praise ("Oh, your're so smart!"), and giving the children "Take Homes" (worksheets) for work well done are suggested.

Another important aspect of the teaching task is to maintain a fast pace of instruction. During a twenty minute period as many as five hundred verbal responses may be required of each child. These are done in unison to maximize the total output of the individual. Individual turns to respond should not exceed thirty seconds (five seconds is ideal), and should be in random order to keep each child alert and actively involved. All responses must be loud and distinct; half-hearted or careless performance is not tolerated. Children are required to work hard, pay attention, and display task-relevant behavior.

Evans (1975) commented:

> Distar, then, accentuates the teachers as a technician. Precise schedules of social and material reinforcement are utilized to sustain motivation . . . the authors continue to strive for a "teacher-proof" curriculum. (p. 151)

2.6.1.7 Parent Involvement

Originally the parents were required to attend four meetings, see that the children attended regularly, were punctual, and received adequate rest. In addition, they were to encourage the children and require them to speak in full sentences. This was later expanded to allow them to become teacher aides after preservice training. They are also advised to work with their children on the "Take Homes."

A child management program "to help parents learn to be more effective teachers of their children has been initiated" (Chow & Elmore, 1973, p. 21). Emphasis is placed on teaching the concepts and application of reinforcers and punishers in the everyday life relationship between children and parents. Since all the needed information is provided in a workbook containing readings, exercises, and answer keys, anyone can conduct this program.

2.6.1.8 Evaluation of the Program

Evaluation of the pilot Head Start program was undertaken by the developers in 1966. Assessment of the entering behavior of the fifteen "disadvantaged" four-to five-year-olds showed that they were operating at approximately a three-year-old level. The Stanford-Binet was administered indicating a mean I.Q. of 93. Periodic I.T.P.A. assessments were made to measure progress; the Wide Range Achievement Test was administered at the end of the nine-month period. The data reported a seven point increase in I.Q., average to above average rating on the I.T.P.A., and reading and arithmetic abilities comparable to those of first grade children. On the strength of these findings, the Bereiter-Engelmann Program was published (Bereiter & Engelmann, 1966). As a technical report, there were many weaknesses in the data: (a) there was no control group, (b) the sampling design was faulty, and (c) there was lack of control for the effects of repeated testing.

In 1967, Bereiter and Engelmann concluded a two-year evaluation study of their program. Forty-three "disadvantaged" four-year-olds participated. The mean Binet I.Q. was 95. Fifteen children were placed in the experimental group. The remaining twenty-eight acted as controls and received a "traditional" pre-school education. In addition, eighteen middle-class four-year-olds were selected for the same experimental treament with a comparable number of middle-class children acting as controls (Chow & Elmore, 1973, pp. 278-279).

The major findings of this study were:

Disadvantaged Group

		Experimental	Control
I.Q. (Year 1)		+17.4	+8.06
(Year 2)		+ 8.61	-2.96
Grade Placement	(Reading)	2.6	No data
	(Arithmetic)	2.51	No data
	(Spelling)	1.87	No data

The middle-class group's achievement showed a similar trend:

		Experimental	Control
Grade Placement	(Reading)	3.41	1.04
	(Arithmetic)	2.91	1.21
	(Spelling)	2.06	No data

Evans (1971, pp. 125-129) summarized other studies done by Karnes, Teska and Hodgins, Dilorenzo and Salter, Miller, Day, and Dickie. Evans (1971) characterizes these studies as "conventional and gross," that is, they were only broad comparisons with other programs. The findings of these studies, he suggests, "modestly support the claims of its originators" (p. 118). He further comments that the short term effects are more apparent than are the long term, and only in the cognitive domain as no research data are presented concerning the affective characteristics and generalized thinking operations of the children. This was to be expected as the developers were not concerned with non-cognitive objectives.

Larsen (reported in Evans, 1975) summarized the available case study reports which cover the period during which the preliminary versions of the Follow-Through program were tested and revised in a wide variety of settings — Head Start classroom, regular kindergarten-primary programs — in both rural and urban districts. Two year longitudinal results from the published versions of Distar I and II were also included. It was generalized that Distar seemed effective in accomplishing its purposes. With grade-level achievement as the criterion the measured academic growth of the children for whom the program is intended usually surpasses that of comparable children in other programs. Evans (1975) concluded that:

> Few will deny that Distar children generally do better on Distar tasks than do non-Distar children. If one values the objectives of this structured program, then the content sequence and the instructional methods seem to provide an effective way to achieve them. (p. 149)

A study by Shanner, Tallmadge, and Wright (1972) indicated that Distar children can achieve a grade equivalent of 2.6 on standardized reading tests in nine fewer months of comparable instructional time than children in any other reading program.

Becker and Engelmann (1973) report that poor children who begin Distar in Kindergarten progressively exceed average achievement norms especially in reading decoding skills. Children who do not begin Distar until the first grade do not show as rapid a rate of acceleration yet achieve better than those in a conventional program. It seems that the achievement gains also are related to the number of Distar lessons taught during the Kindergarten and primary grades.

Miller (1972) reported a three year follow-up study of children who received only preschool Distar instruction and then entered other K-3 programs. These children, especially the boys, generally compared less favorably on a variety of cognitive and behavior rating measures with children who had been in the other programs from the beginning. As in other reports, in spite of a positive response and immediate gains in the early stages, unless the program is continued, its effect diminishes.

A summary of the Engelmann-Becker/Distar program in comparison with other programs is presented in Section 2.6.8.

2.6.2 The Cognitively Oriented Curriculum Program

2.6.2.1 Background

The origin of the Cognitively Oriented Curriculum Program was the Perry Preschool Project developed by David Weikart in Ypsilanti, Michigan from 1961 to 1967. The original project was designed as a two year preschool program which emphasized general cognitive and language skills of disadvantaged three-and four-year-old children.

The Cognitively Oriented Curriculum Program was included in the Planned Variation Head Start and Follow-Through projects. The current program includes preschool, Kindergarten, and primary levels for use with children of all abilities.

2.6.2.2 Assumptions about Children and Learning

The Cognitively Oriented Curriculum is based on the assumption that young children develop in the stages outlined by Piaget as a result of active learning; i.e., "the direct and immediate experiencing of objects, people and events" (Hohmann, Banet & Weikart, 1979, p. 3). This active learning is seen as a necessary condition for cognitive restructuring.

This program is also based on the assumption that children learn concepts through self-initiated activity:

> Such activity . . . makes it possible for the child to be involved in experiences which produce the optimal degree of cognitive disequilibrium and hence the impetus for cognitive restructuring. The interests and talents of the child are most readily enlisted when learning is conceived as an interplay of physical and mental action initiated by the learner. (Hohmann, et at., p.3)

Piaget believed that development occurs in a series of stages and that all children experience the same sequences of development. Two-to-seven year-old children are in the pre-operational or second-stage of development which is characterized by a concrete, egocentric orientation to the world.

2.6.2.3 Goals and Objectives

The major premise "underlying the Cognitively Oriented Curriculum is that there cannot be a basic understanding of self and world without the ability to place the self in time and space and to classify and order objects and events" (Weikart, Rogers, Adcock, & McClelland, 1971, p. 6). When the Cognitively Oriented Curriculum was being designed, it was decided that the program should reflect a:

> Structured theoretical position . . . (and) upon review of the literature, few appropriate, well-developed, and systematic child development theories were found. One of the most elaborated, if esoteric, was the child development theory of Piaget. The principles of this theory were adopted as the basis of the Cognitively Oriented Curriculum. (Weikart et al, 1971, p. viii)

The work of other theorists was also used in lesser and varying degrees: Smilansky on sociodramatic play, and Chomsky, McNeill, and Cazden on language.

The goals for the various areas of content in the Cognitively Oriented Curriculum result from the major concern of "the development of symbolic functioning during the sub, iod of preoperational thought . . . based on the assumption that intellectual growth is the result of the child's ability to create meaningful representations of himself and his environment and to relate these representations to each other" (Weikart, 1972, p. 2).

The general goals for the primary level of the Cognitively Oriented Curriculum Program reported by the developers to the U.S. Office of Education were:

1. Nurture in the child the thinking and communication skills he will need throughout his school years and his adult life.
2. Develop the child's ability to make decisions about what he is going to do and how he is going to do it.
3. Develop the child's ability to express himself to speak, write, dramatize, and graphically represent his experiences and communicate these experiences to others.
4. Develop the child's ability to comprehend others' self-expression by reading their writing and understanding artistic and graphic representation.
5. Develop the academic subject competencies through application of developing thinking abilities.
6. Develop the child's ability to work with other children and adults so that work done is a result of group planning and cooperative effort.
7. Develop the child's self-discipline, his ability to identify personal goals, and to pursue and complete chosen tasks.
8. Help the child develop a spirit of inquiry and openness to knowledge and the points of view of others. (Abt Associates, 1974, I - 14-15)

2.6.2.4 Content

In the Cognitively Oriented Curriculum:

> The specifics of the curriculum are not defined activities which are utilized over and over; rather, they are constantly changing activities which may be employed to implement the goals derived from Piagetian theory and from content areas of Piaget's research. Thus, in this curriculum, the focus is always on the process of learning rather than on facts or subject matter, and . . . particular attention is paid to the developmental levels of individual children. (Weikart, et al., 1971, p. 1)

The basis for the curriculum of this program is fifty "key developmentally valid programs for young children" (Hohmann, et al., 1979, p. 5).

These "key experiences" are interrelated and are meant to be integrated into the learning activities. The developers (Hohmann, et al., 1979) describe this interrelationship as follows:

> Learning activities should be built upon active experiences with objects. These active experiences can be extended through language and through nonverbal representation . . . Concrete, active experience is examined and elaborated through language and nonverbal representation; it is not replaced by symbolic modes. (p. 5)

Examples of "key experiences" for each of the eight major areas are:

Active Learning - exploring actively with all the senses discovering relations through direct experience acquiring skills with tools and equipment.
Language - talking with other children and adults about personally meaningful experiences describing objects, events, and relations having one's own spoken language written down and read back
Experiencing and Representing - imitating actions and sounds role playing drawing and painting
Classification - investigating and describing the attributes of things sorting and matching holding more than one attribute in mind at a time
Seriation - making comparisons arranging several things in order and describing their relations fitting one ordered set of objects to another through trial and error
Number - comparing amounts arranging two sets of objects in one-to-one correspondence counting objects
Spatial Relations - fitting things together and taking them apart observing and describing things from different spatial viewpoints experiencing and representing one's own body
Time - stopping and starting an action on signal experiencing and comparing time intervals anticipating future events

Within each of these eight areas, the "key experiences" are arranged from simple → complex, concrete → abstract, here and now → remote in time and space.

The developers (Hohmann, et al., 1979) state that these "key experiences":

> Should be embedded in a wide variety of activities. The Cognitively Oriented Curriculum is a framework

> from which teachers can extend and broaden the interests of children rather than an agenda of lessons on a "cookbook" of specific activities. (p. 6)

As can be seen from the above, no specific provision is made for the affective development of the child. Weikart et al., (1971) stated that "the complete lack of attention explicitly paid to the affective development of the child . . . does not mean that the curriculum is unconcerned with the emotional and social needs of the children who participate . . . these needs are being met as the program progresses through the style of classroom operation that the curriculum creates" (p. x).

Although a variety of teaching strategies may be appropriate for implementation of this program:

> The main instruction strategy is one of sequential step-by-step skill building. The framework of the curriculum specifies the sequence in which skills should be taught. Every activity is designed to meet a specific objective. In this step-by-step process the teacher makes sure every child learns one concept before going on to a more difficult one. (Chow & Elmore, 1973, p. 34)

The following is the daily schedule for the Preschool-Kindergarten programs (Hohmann, et al., 1979):

> Planning Time by teacher and pupils (about twenty minutes)
>
> Work Time including both individual and small group activities (about forty minutes)
>
> Clean-up Time (about fifteen minutes)
>
> Recall, Snack and Small-Group Time including children discussing Work Time activities and working on "key experiences" in small groups (about thirty minutes)
>
> Outside Time (about twenty minutes)
>
> Circle Time including songs, dances, finger plays and discussion (about twenty minutes)
>
> Dismissal (about ten minutes)

One important component of the Cognitively Oriented Curriculum program is home teaching in which:

> Teachers visit the homes of children in their classes in order to involve their mothers in the educational process and to augment and extend the school activities on an individual basis. (Weikart, et al., 1971, p. 79)

A further description of this component is presented in the Parent Involvement section below.

Another component of this program is a maintenance system called a staff model. In discussing the preschool program, Weikart, et al., (1971) stated:

> A good curriculum alone is not sufficient to guarantee an adequate and productive preschool experience for young children . . . Critical, and perhaps even more essential than the curriculum itself, is the way in which the preschool staff functions to produce a preschool experience . . . . These conditions for operation are called the staff model. (pp. 69-70)

The components of this staff model are described in Section 2.6.2.6 on Teacher Role.

2.6.2.5 Materials

As the Cognitively Oriented Curriculum emphasizes the importance of the child physically interacting with the environment, the structure of the classroom is seen as an important element of the program. In this program:

> The classroom is set up in specified ways to facilitate and reinforce certain goals . . . . Since the classroom structure is changed gradually through the course of the program, the child encounters the concept in many guises, and this enables him to begin to separate concept from context. . . . Structuring the classroom environment so that certain concepts are emphasized provides a variety of opportunities for direct experience with these concepts and facilitates the child's mastery of them. (Weikart, et al., 1971, p. 37)

This environment is divided into core areas: (a) a meeting/large group time area, (b) a house area, (c) a block corner, (d) a quiet corner, (e) an art corner, (f) construction area, (g) sand and water area, (h) outdoor play area, (i) music and movement area, and (j) animal and plant area.

The materials found in these areas are those traditionally found in most Kindergartens and the program does not require specially purchased equipment or materials. However, Weikart, et al, (1971) cautioned that although the traditional equipment and materials . . . are compatible with the objectives of the Cognitively Oriented Curriculum . . . the teacher will find herself using the equipment and materials in new ways for new purposes (p. 40).

The developers (Weikart, et al., 1971) stated that as "too many materials in the classroom at one time will result in over-stimulation and confusion in the minds of young children" (p. 42), the teacher should select materials to accommodate the individual needs of the children, the needs of the group, and the long range goals.

2.6.2.6 Teacher Role

An important component of the Cognitively Oriented Curriculum is the staff model which consists of:

1. The involvement of the teacher in planning within the curriculum.
2. Participation in the give and take of a team teaching situation (teachers, aides, and volunteers).
3. Supervision by a knowledgeable curriculum supervisor (Weikart, et al, 1971, p. 70).

The developers believe that the classroom teacher is the essential element in the success of the program. This program rejects "the utilization of curriculum 'scripts' of what to think, what to say, and how to put a particular goal into operation. Instead, the cognitive curriculum offers a series of cognitive goals to guide classroom activity planning" (Weikart, et al., 1971, p. 70). This means that the teacher must be thoroughly familiar with the theories of Piaget and the theoretical framework of the program in order to implement it.

The teacher is responsible for observing each child to determine his/her level of development and progress in the cognitive skill areas. Teaching goals are determined and included in the planning on a daily and weekly basis. The teachers also prepare and implement plans for the afternoon home visits (described in the next section).

Chow and Elmore (1973) reported:

> The Cognitive Curriculum uses many teaching strategies to achieve its goals . . . (and these include) the sequencing of activities . . . verbal stimulation, questioning, sociodramatic play, field trips, and structuring of the class day. (p. 34)

2.6.2.7 Parent Involvement

The major parent involvement in this program is the Home Visit by the teacher. The developers believe that this is an essential component of a successful program. The objectives of the Home Visit component are

1. To involve the mother in the teaching process in order to give her a background of knowledge concerning the educational needs of her child so that she could provide educational support at home,

> Savings of resources, that is, awesome amounts of time, money, and effort usually expended by society to provide remedial or rehabilitation services for young adolescents, both academically and socially. (p. 231)

In a longitudinal study comparing three curricula (a structured-didactic approach, a unit-based approach and the Cognitively Oriented Curriculum), it was found that none was more effective than another as measured on aptitude and school achievement (Hohmann, et al, 1979, pp. 285-6).

An evaluation of the preschool home teaching program reported:

> There is little doubt that the mothers who participated in the project accepted home teaching with enthusiasm . . . the home teaching program had significant positive impact upon the general intellectual growth of the child independent of environmental conditions. (Weikart & Lambie, 1968, pp. 493-4)

Although the gains in I.Q. by children in this program tended to "washout" by Grade 3, their scores on reading, vocabulary, and mathematics measures were more than one full grade higher than those of the control group by Grade 8. By Grade 4, 38% of the control group had been retained a grade or placed in special classes compared to .7% of the experimental group (Hohmann, et al, 1979, p. 285).

A follow-up study of the first group of children enrolled in the program found that the "indications are that the impact of preschool education has carried over into adulthood" (Hohmann, et al., 1979, p. 285). Among these children there were fewer on welfare and fewer unemployed as the original children tended to stay in school longer and to acquire marketable skills.

In summarizing the evaluation since 1962, the developers concluded (Hohmann, et al, 1979):

> Practitioners have been consistently successful with diverse groups of children. Cognitively Oriented programs have achieved solid results with young children in terms of both short-term gains and long-term outcomes. The decision to have this program instead of some other, however, is primarily one of values. (p. 289)

A summary of the Cognitively Oriented Curriculum program in comparison with other programs is presented in Section 2.6.8.

(and)

2. To implement the curriculum on a one-to-one basis with the child in the home. (Weikart, et al, 1971, p. 79)

The content of the weekly visit by the teacher to each child's home is determined by the child's point of development. The teacher selects activities in areas where the child needs extra work and also areas that are being presented in the classroom. After working with the child, the teacher spends time in informal conversation with the mother answering questions, discussing the child's needs, etc.

The purpose of the parent meeting, another type of parent involvement, is to influence and modify the parents' child-rearing practices. These meetings deal with topics which parents, mostly mothers, have identified as areas of concern. Parents are also encouraged to work as classroom volunteers and to observe their child in the classroom setting.

2.6.2.8 Evaluation of the Program

Evaluation of the Cognitively Oriented Curriculum program will be considered in two stages: (a) the data from the Perry Preschool Project which was a forerunner of the current program, and (b) the data from the Follow-Through evaluations of the primary programs. The latter will be presented first.

The Follow-Through evaluations (Abt Associates, 1974) reported:

> The High/Scope program appears to be having some success in the development of achievement, motivation, internal locus of control, and verbal ability as measured by this test battery. It also appears to be having some impact on attendance. (VII - 100-101)

Evaluation of the children in the Perry Preschool Program from 1962 through 1967 consisted of yearly assessments by three intelligence tests (Stanford-Binet, Peabody Picture Vocabulary Test, and Leiter International Performance Scale) and one instrument to measure non-academic factors (Ypsilanti Rating Scale). A pupil behavior inventory of classroom conduct, motivation, social-emotional state, etc., was also used. Chow and Elmore (1973) reported that

> on the whole . . . the differences do favor the experimental groups in the early years but by the second grade these differences disappear on intellectual measures. However, on social-emotional adjustment factors and on achievement, differences in favor of the experimental group persist (pp. 42-43).

Evans (1975) reported that the persistance of these results is most striking in the lower rate of remedial placements and incidents of social deviance and dependency of the original group (1962-63) when compared to the control group. He concluded:

2.6.3 The Responsive Education Program

2.6.3.1 Background

The Responsive Education program evolved from the New Nursery School Program developed by Glen Nimnicht at Colorado State College in Greeley, Colorado in 1964. This program was originally designed to meet the needs of children from low-income and ethnically-different backgrounds. Later, another program, the Responsive Environment Nursery, was begun for middle-class children.

The Responsive Education program, as it is currently known, was begun in 1967 by Nimnicht at the Far West Laboratory for Educational Research and Development in Berkeley, California. A program for preschool children aged three and four years was developed in 1967, a primary school program in 1968, a parent involvement program in 1969, and a day care program in 1971. Thus, the current program is designed for preschool through Grade 3 children.

2.6.3.2 Assumptions about Children and Learning

The Responsive Education program synthesizes the theories and work of Maria Montessori, Martin Deutsch, O.K. Moore and others. As Nimnicht (1973) has stated:

> The program is not based on any single theory of learning since there appears to be no single theory that adequately accounts for all the ways children learn. The program does, however, draw from many different theories. Much of the program is based on the assumption that there is a relationship between maturation and learning, although this relationship between maturation and the learning of specific skills or concepts is not altogether clear. Although the program is based more heavily on the work of developmental theorists, we also find some of the ideas of operant conditioning useful. For instance, to define objectives in clear behavioral terms is sometimes useful, but we do not believe that every objective can be defined in behavior which can be immediately observed. (pp.200-201)

The development of a healthy self-concept is a frequently expressed goal of most early childhood programs. In the Responsive Education program children are considered to have healthy self-concepts if they like themselves and their people, believe that what they think, say and do makes a difference, believe that they can be successful in school and solve a variety of problems. The children will have a realistic estimate of their abilities and limitations and be able to express feelings of pleasure and enjoyment.

2.6.3.3 Goals and Objectives

The major goals of the Responsive Education program are: (a) the development of a healthy self-concept by children, (b) the development of intellectual ability, and (c) the development of problem-solving ability.

The major goals of the Responsive Education program to develop intellectual problem-solving abilities are very broad. Nimnicht (1973), further delineated these goals when he stated that after being in the program two or three years, most children should be able to:

1. Recognize, complete, extend and discover patterns in one direction;
2. Recognize, complete, extend and discover patterns in two directions (matrix games);
3. Recognize, extend, and discover rules from examples (inductive thinking);
4. Persevere, concentrate and succeed on problems involving the breaking of set;
5. Adapt to games involving rule changes;
6. Eliminate what is known to determine what is unknown;
7. Use feedback productively to modify actions;
8. Solve verbal and math puzzles;
9. Seek a solution to one-person problems without assistance;
10. Recognize that a problem cannot be solved with information at hand;
11. Anticipate the probable response of the other player in interactional games;
12. Anticipate the probable response of others to alternative actions of the individual in some social situation; and
13. Cope with the emotions of other individuals (p. 202).

Another important objective this program has in common with others reflects the compensatory-intervention origins of these programs. This objective is that children should have a knowledge and understanding of their cultural background.

2.6.3.4 Content

The Responsive Education program does not have a specific curriculum for use with all children. Instead, the developers (Nimnicht, Arango & Adcock, 1977a) selected broad areas that:

> The teacher should cover in order to achieve the objectives of the program. These include problem-solving, senses and perceptions, language skills, concept-formation, social concepts, and understanding of and respect for cultural differences. Within these areas,

> we do not advocate any particular content, although our teacher training materials give examples of content that a teacher might use. (p. 352)

In order to meet objectives for each of the areas mentioned above, instructional units (termed "learning episodes") were developed. These learning episodes of varying difficulty utilize specific materials and many learning episodes are provided for each objective. Not every child is expected to complete every learning episode nor do so in a set sequence because:

> In many instances, we do not claim to know how the learning of a particular behavior contributed to the future learning ability or achievement of a child. This has sometimes been described as the sandpile theory of learning: that is, we know that it takes a tremendous number of grains of sand to support more sand. But we are not certain which grains of sand are necessary to support the next one. And, as the analogy implies, we are not certain that any particular grain is necessary-others could be substituted and still support the pile. (Nimnicht, et al, 1977a, p. 352)

The following is an example of a typical Preschool and Kindergarten timetable in the Responsive Education program:

9:00 - 10:30	Free choice activities during which time children have the opportunity to use a variety of materials. The teacher and assistant use various learning episodes with individuals or small groups.
10:30 - 10:45	Snack Time
10:45 - 11:00	Group Time which is devoted to large group activities such as show and tell, singing, listening to stories, etc.
11:00 - 12:00	Outdoor Play (whenever possible).

In the Grade 1 and 2 programs a similar schedule is followed (repeated in afternoon for a full-day program) with more large group activity time and more materials for math, reading and science.

An important component of the Kindergarten programs is a Learning Booth which consists of typing booth equipped with an electric typewriter with colored keys and other materials. The booth activities emphasize problem-solving skills often related to reading. Each child is asked two or three times per week if they wish to play with the typewriter. The child progresses through various stages from free exploration of the typewriter to matching keyboard letters to given letters, discriminating between letters, and finally to typing their own words and stories.

Another component, The Parent/Child Toy Library, is described in Section 2.6.3.7 on Parent Involvement.

2.6.3.5 Materials

A learning environment that responds to the needs and interests of the learner is central to the Responsive Education program. Nimnicht (1973) stated that this learning environment:

> permits the learner to explore freely...
> informs the learner immediately about the consequences of his actions...
> is self-pacing, with events occuring at a rate determined by the learner...
> permits the learner to make full use of his capacity for discovering relations of various kinds, and
> its structure is such that the learner is likely to make a series of interconnected discoveries about the physical, cultural or social world. (p. 200)

In order to maximize the responsiveness of the environment, the activities and materials within this environment are autotelic (i.e., self-rewarding and not dependent upon external punishment or reward). Such materials include puzzles, nesting objects, alphabet board, lotto games, flannel-board with shapes, pegboards, property blocks, pattern box, stacking blocks, etc. The influence of Montessori and O.K. Moore can be seen in these types of materials and their use.

In addition to the special electric typewriter described earlier, a Language Master is also recommended. Additional materials include record player, unit blocks, rhythm instruments, dress-up clothes, wood for carpentry and motor materials such as balance boards. The program emphasizes toys, games, and manipulative materials rather than printed materials such as worksheets and workbooks.

The classroom environment is organized into well-defined activity areas: concept formation, blocks, manipulative toys, reading/books, dramatic play, art, listening, and outdoor play. Each area contains a limited but everchanging selection of materials. A simple, uncluttered, calm environment is emphasized.

2.6.3.6 Teacher Role

The major role of the teacher in this program is to respond to the children and to establish a responsive environment. Nimnicht, McAfee, and Meier (1969) suggested five kinds of guidances which define the teacher's role:

1. Organization of the physical facilities of the classroom, including its equipment and toys;
2. Alert supervision;
3. Working with the children's interests and abilities in mind;

4. Understanding cultural differences and child psychology;
5. The way she speaks and what she says. (p. 126)

There are three staff roles in the Responsive Education program: teaching assistant, teacher and Program Advisor (teacher trainer). The developers (Nimnicht et al., 1977a) are insistent that the role of the assistant is to be actively involved:

> In the teaching/learning process (instead of merely performing such tasks as pouring juice and helping the children with their coats) especially when the teaching assistant comes from the same ethnic group as the children in the classroom and the head teacher does not. (p. 356)

2.6.3.7 Parent Involvement

Parent involvement is considered to be crucial in the Responsive Education program. A basic assumption of this program is that parents have the primary responsibility for the education of their children and the educational institution should help the family to carry out this responsibility.

One component of the Responsive Education program, the Parent/Child Toy Lending Library, is designed especially to aid parents in educating their children. This is an eight week program of weekly meetings during which parents learn to use selected educational toys with their five-to nine-year-old children. These toys include sound cans, color lotto, feely bag, stacking square, wooden table blocks, number puzzles, color blocks, and flannel board. After the parents complete the course, they can check out the toys from library One or more learning episodes have been developed describing how to use each toy.

It is interesting that this component was not developed as an intervention program but was designed for parents whose income levels were too high to qualify for a Head Start program. The program is centre-based, as it was felt that a program of home visits implies that "the parents cannot provide an environment that will nurture the intellectual development of their children without some direct involvement from the outside" (Nimnicht, et al, 1977b, p. 135).

It was hoped that after completion of the course and use of the library parents would:

1. (feel) more competent in helping their children learn skills and concepts the parents believed were important,
2. (feel) that they could influence the decisions that affected the education of their children,
3. . . . (have) a better understanding of what their children were capable of learning and, therefore, a feeling that they could be

successful, (and
4. that the children would learn) some specific skills and concepts as a result of the interaction with their parents. (Nimnicht et al., 1977b, p. 135)

The Responsive Education program also includes parents as classroom aides. A competency-based training program was developed to train members of the local communities as classroom assistants or volunteers. Another aspect of parent involvement is the weekly meeting designed to familiarize parents with the program, provide information on a variety of topics, and receive input from parents for improving the program.

2.6.3.8 Evaluation of the Program

A comprehensive review of the evaluation of the Responsive Education program done by the developers, school districts, government agencies and individuals was presented by Chow and Elmore (1973). Another review of the evaluations undertaken by the developers themselves was presented by Nimnicht et al (1977 a & b). A major analysis of the Responsive Education program was done by Abt Associates (1974) as part of the evaluation of the Follow-Through program. A brief summary of each of these reports follows.

In their review of the evaluations of the Responsive Education program, Nimnicht et al., (1977 a) stated that "the evaluation of the Responsive Educational Program to date has shown consistent gains (I.Q. and academic) for children when the effects of the program have been measured immediately" (p. 360). However, it must be remembered that research has shown that these effects tend to "washout" over a number of years if no follow-up program is provided.

Evaluation of the Parent/Child Toy Library Program (Nimnicht et al., 1977 b) showed that "we had achieved at least acceptable levels on the objectives of the course, (p. 144) . . . that the teacher-librarians perceived the training to be successful (p. 145) . . . (and that parents) responded favourably to the toys and games; and they reported that their children responded favourable also" (p. 147).

The Follow-Through evaluations (Abt Associates, 1974) found that the teachers in the Responsive Education program showed values which reflected the philosophy of the program, valued working with parents, were child-centered in goals and practices, and made many home visits. The comparison of children in the Responsive Education program to a control group showed "a trend in favor of the FT group (i.e., Follow-Through group, in this case the Responsive Education program) on the MAT reading subtest, and the variability of the MAT-Arithmetic subtest results across schools suggests that some FT schools may also be having positive effects in this area" (VIII-60). Also, "the program was found to have a significant positive effect on the development of achievement motivation (at the school level) as measured by the Gumpgookies test" (VII-63-5). This evaluation reported that "the program's effects were found to differ with the level of analysis employed (i.e., school level, class level, child level) . . . these findings suggest that the Far West Lab program may be having a differential impact on the types of children and families served, or on the types of classes and/or schools in which the program is implemented" (VII-65).

Chow and Elmore (1973) reported on seven independently conducted evaluations of the Responsive Education program. Of the five evaluations that assessed academic achievement, four found that the Responsive Education program produced favorable results and one study showed no significant differences between the Responsive group and a control group. Of the three studies that investigated parent attitude, two studies reported favorable response and one was inconclusive because of methodological problems. Another study concluded that "the Responsive Model Follow-Through provides the necessary social and language support to facilitate children's performance when they get into the classroom" (Chow & Elmore, 1973, p. 102).

A summary of the Responsive Education program in comparison with other programs is presented in Section 2.6.8.

2.6.4 The Education Development Center Open Education Program

2.6.4.1 Background

The program developed by the Education Development Center (EDC) is based on the British infant school. The beginnings of this program can be traced to the growth of North American interest in the British infant school during the mid-1960's. Several staff members of EDC became interested in the infant school and began developing a program for EDC in Newton, Massachusetts. Len Sealey (from Leicestershire), William Hull, and David Armington of EDC were granted Follow-Through funding in 1968 to develop an Early Childhood program based on the approach of the British infant school.

The British infant school approach has itself evolved over many years and there is a wide range of variation of programs in the British infant schools. The program of the British infant school that was implemented by EDC is typically found in approximately one-third of the British infant schools.

In addition to the British infant school, the EDC Open Education program:

> Also draws heavily on the knowledge gained in child development over the past 50 years. The approach is essentially a program for helping communities generate the resources to implement open education. (Abt Associates, 1974, I-15)

EDC has stated that "the approach we advocate is neither a system, a technique, nor a program in any prescriptiv sense" (quoted in Chow & Elmore, 1973, p. 51).

2.6.4.2 Assumptions about Children and Learning

The EDC Open Education program emphasizes the "whole child" and incorporates many aspects from the theories of Froebel, Montessori, Piaget and Bruner. This emphasis is seen in the "strong belief that telling is not teaching and that, as children use good, open-ended materials, their intelligence grows and basic concepts develop" (Lavatelli, 1970, p. 245).

Learning is highly individualized with the children planning their own activities in a rich environment of open-ended materials. This program does not dichotomize work and play and play is seen as the way in which children learn and develop alone and in cooperation with other children.

The child is thought of as an explorer guided by his/her natural curiosity and interests to self-initiate and carry out a variety of activities and projects from which learning can develop. This learning is self-rewarding to the child and thereby encourages the child to "explore" further. The belief "that learning grows out of the child's own interest in something and occurs when the child needs to learn . . . the child learns to trust his abilities, to realize that what he does affects what happens, and to accept a failure as an important means of learning . . . he develops a love of learning and the habit of probing deeply" (Chow & Elmore, 1973, p. 53).

2.6.4.3 Goals and Objectives

The overall goal of the EDC Open Education program is to promote the British infant school approach and to provide help in its implementation. The major objectives for this program as reported by the developer to the U.S. Office of Education in 1973 were:

1. Create classroom environments which are stimulating and responsive to a child's individual needs and which make full use of the talents and creative styles of the teachers and aides.
2. Develop academic skills in flexible, self-directive ways that allow learning to become part of children's life-styles outside as well as in the classroom.
3. Provide resources and environment for children's growth in problem solving skills, ability to express themselves creatively in their social and emotional development, and their ability to take responsibility for their own learning. (Abt Associates, 1974, I-16)

Instructional objectives for the cognitive and psycho-motor domains are:

1. Improved ability to express thoughts and feelings through the medium of spoken and written language.
2. Growth of encoding and decoding skills, with particular reference to reading.
3. Improved ability to abstract from a variety of experiences, to generalize and form concepts.
4. Growth of problem-solving and problem-finding abilities.
5. Improved coordination and control of sensory-motor operations, leading to growth of manipulative skills. (Chow & Elmore, 1979, p. 52)

The effective domain receives particular emphasis in this model. For example, the Follow-Through final report (Abt Associates, 1974) stated that "learning to take responsibility for one's own learning is perhaps the most important goal" (I-16). This emphasis on the affective is seen in the EDC Open Educational objectives for the affective domain:

1. Greater self-awareness and self-control.
2. Improvement of the self-image in relation to
   a. problem-solving
   b. intergroup relationships
3. Increased levels of aspiration.
4. Shift from a need for extrinsic motivation towards intrinsic motivation as a more normal mode.
5. Development of positive attitudes towards school. (Chow & Elmore, 1973, p. 52)

In addition to the objective for children in this program, EDC Open Education provided specific objectives for assisting schools to implement the program. These objectives are:

1. The design and establishment of the physical conditions, in schools, which care for the individual and group needs of children in relation to the affective and cognitive objectives already described.
2. The development of inservice training programs for teachers and aides which enable these persons to understand and contribute to the project in action.
3. The development of methods of continuous assessment of children's growth and development in relation to objectives already specified.
4. To communicate to administrators, parents, and others the nature and intent of the program.
5. The development of materials, methods, and other organizational procedures appropriate to work within the classrooms concerned. (Chow & Elmore, 1973, p. 52)

2.6.4.4 Content

The EDC Open Education program does not advocate specific concepts and skills. Evans (1975) stated:

> There is no curriculum in the usual sense, and certainly none that satisfies the criterion of exportability power. Curriculum suggestions are provided, however, and consist largely of ideas in green: one-to-three page statements about possible classroom activities. Sample topics include water play, woodwork, combining music and poetry, improvising with dance, and exploring color. Some of the more conventional pre-packaged curriculum materials for the early childhood education may be recommended from time to time, but any list is intended only to be suggestive. (p. 309)

Although there is no specific curriculum framework, the developers believe that students should develop a variety of skills, including reading, writing, and mathematical skills. The EDC Open Education program, as does the British infant school, recognizes the importance of communication and mathematical skills.

This "openness" of the curriculum is characteristic of the total EDC program. Evans (1975) found it included "openness in communication (dialogue), classroom organization, time, and space. Most fundamentally, openness applies to self. . . . Teaching methods and conditions are primary concerns; intellectual content is secondary" (p. 309).

This openness is also seen in the flexibility of timetabling. EDC Open Education does not suggest a timetable but feels that a highly flexible schedule best meets the needs of the children to plan their own learning. A child is free to begin and end an activity according to individual interests. Typically, there are a variety of activities being pursued simultaneously with each child working on a self-determined task in a self-determined way at a self-determined pace.

In discussing timetables for this type of "Open" program, Morrison (1976) pointed out that there are innumerable ways of organizing the day and suggested the following as one example:

8:30 Enter School
↓
Plan
↓
Participate in - communication
↓ - math

12:00 Family-Style lunch
↓
Plan
- creative arts
- environmental studies
↓
Review/Recap/Plan
↓
3:30 Dismissal

Another characteristic of the EDC Open Education program is the emphasis on an Inter-disciplinary approach. This is characteristic of the British primary school. According to Brown and Precious (1968), whose book on the integrated day is given to each teacher in the EDC projects:

> Subjects and interests soon became integrated quite naturally as children worked out their individual ideas. The school day was gradually being determined by the interests and needs of children . . . . The integrated day could be described as a school day which is combined into a whole and has a minimum of timetabling. Within

> this day there is time and opportunity, in a planned environment for the social, intellectual, emotional, physical and aesthetic growth of the child at his own rate of development. (pp. 12-13)

2.6.4.5 Materials

A rich and varied environment is a major feature of the EDC Open Education program. Great emphasis is placed on the materials and the classroom environment as a way to "provide both stimulation for the child to engage in a learning process and corrective feedback to reinforce the child directly in his unaided independent achievement striving" (Beller, 1973, p. 566). However, the developers temper this emphasis with the warning:

> Instructional aids and materials have no inherent power. A classroom can offer a rich material environment yet be sterile and lifeless. Materials -- 'stuff' in the broad sense -- acquire value only as they are acted upon by children's and teacher's minds . . . . They do not and cannot teach. Learning arises when children use such materials as aids to intellectual activity and as stimulants to feeling and imagination. (EDC, 1971, p. 1)

The influence of the British infant school with its relatively limited budget is seen in the emphasis on "natural," inexpensive materials and the selection of materials by individual teachers for their individual situations. EDC recommends "a wide variety of materials rather than identical texts for each child, and a creative use of 'junk' materials" (Chow & Elmore, 1973, p. 54). Such materials include sand, woodworking tools, cardboard boxes, scrap (wood, cloth, wire, etc.), chalk, ink, clay, musical instruments, housekeeping/dramatic play items (dress-up clothes, toy stove, dishes, etc.), family/community life materials (puppets, dolls, etc.), construction equipment, cooking equipment, mathematics materials, (unifix cubes, pattern blocks, tangrams, abacus, marbles, dice, play money, etc.), science materials, and children's books.

Although there is no set organizational pattern to the classroom, the developers state that the classroom organization should provide a "structured way of unstructured living" (quoted in Chow & Elmore, 1973, p. 57). The recommended physical arrangement of the classroom is one of informal activity areas including areas for mathematics, science, messy projects, quiet activities, etc.

The philosophy of "openness" is applied in a physical sense as the children are not limited to the actual classroom but are encouraged to use other areas of the school building as well as the outdoors.

2.6.4.6 Teacher Role

The teacher's role is one of assisting and guiding the children in their learning rather than "instructing". The teacher is seen as an active participant in this learning process and must "establish an intimate personal relationship" with the child because "the teacher is the child's partner in this relationship and in turn she learns much from the child . . . . Respect, trust, confidence, affection, and lack of fear are some of the ingredients which go to make up the relationship" (Brown & Precious, 1968, pp. 27-28).

Another aspect of the teacher's role is "to make the environment . . . attractive and thought provoking and one in which there is the widest opportunity for the development of the children's creativity and intellectual ability" (Brown & Precious, 1968, p. 28). Within this environment the teacher is also an observer who assesses the children's needs and determines ways of meeting these needs and stimulating the children's interest. The teacher also encourages the children to explore and to experiment with working and discussing with other children.

EDC emphasizes that their approach requires competent and dedicated teachers. Brown and Precious (1968) stated that "as well as being intelligent and well trained, the teacher needs to be an adjusted, resilient and sympathetic person having a fund of humour and common sense . . . . Perception and creativity are the two essential characteristics possessed by the inspired teacher" (p. 25).

2.6.4.7 Parent Involvement

Although the EDC Open Education program has the required parent involvement as specified in the Follow-Through guidelines, (i.e., parents participate on the policy advisory board), the degree and type of parent involvement may vary from one situation to another. Examples of such involvement are observing in classroom, working as aides, and serving as resource persons.

2.6.4.8 Evaluation of the Program

Evaluation of the EDC Open Education program has been more limited than that of other programs because of EDC's belief that standardized evaluation is inappropriate. This position is expressed by Vito Perrone (1974):

> The entire practice of standardized testing, which many schools use to respond to an array of Evaluation/Accountability demands, contributes to many of the pressures to work at reading, math and science through narrow instructional means limiting further the potential for more integrated learning. It is absolutely essential that schools get out from under the 'tyranny of tests' that tend to influence instructional patterns negatively and do not contribute to the learning of children or to the capacity of teachers to improve the quality of what they do. (p. 9)

Evaluation work by EDC has consisted primarily of case studies, studies on such topics as the role of the advisors, and observational data.

Given the paucity of data on the EDC program, one must examine more general studies of the open vs. traditional approach. In a review of such studies, Evans (1975) reported mixed results: some studies found that children in open classrooms rated higher in independence, creativity, school attitude and self-esteem than children in traditional classrooms; others report no differences in self-concept; still others found increased school achievement by children of social and ethnic minorities in open classrooms while others question this finding.

One study (Gardner, 1966) which compared the "open" classrooms of the British infant school (which were the prototype of the EDC program) to the traditional British classrooms found that upon completion of the primary grades, children in the open classrooms were superior in listening and recalling, neatness and skill, ingenuity, free drawing and painting, English, and interests. They were "slightly superior" in social situations, concentration on an uninteresting task, moral judgment, general information, reading, and handwriting. There was no significant difference on concentration on task of own choice, social distance scale, moral conduct. The more traditional schools were superior on measures of arithmetic mechanical skills and arithmetic problem-solving skills (pp. 199-200).

The Follow-Through evaluations (Abt Associates, 1974) found that "while it appears that the EDC program is having some impact on certain children in both achievement and motivation, it varies greatly depending upon the analytic sample" (VII - 115). Teachers in the EDC program "place more value on children's exploring and manipulating of their environment and less on social skills development relative to their NFT group in either their values or behaviors toward parents" (VII - 115). Overall, this report concluded that "the EDC program, being concerned with the process of learning as much as if not more than the product, is perhaps more susceptible to differences in implementation than any other" (VII - 115).

A summary of the EDC Open Education program in comparison with other programs is presented in Section 2.6.8.

Three additional Early Education Programs have been included because of their relevance to Kindergarten education in British Columbia which must address the needs of native children, the need to establish appropriate programs for the growing number of children entering the schools for whom English is a second language, and the need to accommodate the popular demand for instruction in the French language in the early years.

These programs are: (a) The Tucson Early Education Model (TEEM) which outlines a program for minority groups, (b) Bilingual Education which emphasizes initial teaching in the children's first language with a gradual introduction of instruction in English, and (c) French Immersion programs which conduct Kindergarten and Grade 1 instruction in French and gradually introduce English from the second grade on. If these programs were to be included on the Theoretical Framework of Early

Childhood Models (see Figure 2.1) French Immersion would be classified as a model program under Academic/Preacademic, Bilingual Education under Cognitive-Discover, and TEEM under Discovery Models.

2.6.5 The Tucson Early Education Model

2.6.5.1 Background

This program for preschool through the third grade is a project of the Arizona Center for Early Education at the University of Arizona. It originated in 1965 under the direction of Dr. Marie Hughes as a co-operative project with the Tucson District No. 1. The schools selected for the program were those with the largest proportion of economically limited families, most of which were Mexican-American. Historically, the children from these families had found school irrelevant and meaningless for them and their reaction was general passivity to school tasks and early school dropout. Although it is now used with children of all cultural and ethnic backgrounds in Head Start and Follow-Through programs, it retains its original emphasis on language development.

2.6.5.2 Assumptions about Children and Learning

The developers believe that traditional programs have not been successful in motivating children often from low income families to learn. These children lack the basis for skills, particularly language skills, that they will need to participate successfully in modern technical, social, and economic life. In addition, low self-esteem contributes to their academic difficulties and to vocational failures later on. They require an intrinsically motivating educational program which will recognize differences in needs and learning rates to improve language competencies and develop positive self-concepts.

2.6.5.3 Goals and Objectives

The main purpose of the model is to prepare the children for later participation in the technical, social, and economic life of contemporary America.

Although there are no specific objectives listed for the program, its general objectives are classified into four areas (Hughes, Wetzel, & Henderson, 1969):

1. Language Competence includes learning linguistic labels, concepts, language forms, and an awareness of the function of language.
2. Intellectual Bases means all the skills assumed to be necessary for successful learning, such as, the ability to attend, recall, organize stimuli, plan, choose, predict, and organize behavior.
3. Motivational Base refers to having a positive attitude toward school and learning, persistence, expectation of success, and a willingness to change.

4. Societal Arts and Skills include the traditional academic skills of reading, writing, and arithmetic, as well as the social skills of co-operation and participation in the democratic process.

2.6.5.4 Content

There is no specified set of skills but the children are expected to progress according to their levels of development, within the four areas described above. Learning activities are said to be "orchestrated," that is, skills and concepts from different subjects are developed in the same activity. These activities are based on life experiences such as food preparation and woodworking. They are selected to be co-ordinated as closely as possible with the cultural background, the attitudes, and the values of the children. The developers (Henderson, 1966) view the child's home and neighbourhood as:

> Instructional resources, thus avoiding the discontinuity which confronts minority group children who are presented with a sterotyped middle-class curriculum . . . . When skills are acquired in real and meaningful settings, it is possible to develop more than one skill simultaneously. A teacher organizing a small group of children in the activity of ice-cream making, for example, will be teaching new words, the processes of proper order and sequence of events, new concepts, and new technical and social skills. In addition, the manner of her interaction with children plus the eating of the product will significantly influence the child's attitude toward the activity and the learning experience. (p. 5)

The program includes structured and self-selected activities. Interest centers provide open-ended experiences and interaction with materials at different developmental levels. Tables facilitate small-group instruction and independent group work. Groups are kept heterogeneous to increase the opportunity for peer modeling.

2.6.5.5 Materials

Materials consist of standard equipment which can be found in most preschools and Kindergartens, such as manipulative materials, housekeeping equipment, dress-up clothes, books, paper, paint, record player, tape recorder, etc. Also suggested are a primary typewriter, and equipment for life experiences (a sewing machine, woodworking equipment, real cooking utensiles and a stove, etc.).

The developers supply a list of materials for interest centers in reading, writing, arithmetic, science and social studies. Most of these are common household items or those which can be made by the teacher and/or children.

Some published materials are recommended: (a) The Language Experience Approach to Reading by Roach Van Allen which suggests a method using the children's experiences, both individual and group, individual conferences, and the integration of language arts skills with the concept from other subject areas, (b) The Owl Reading Series particularly the Teacher's Guide, which gives ideas to promote further competence in language skills.

Many small group activities are planned around "home-made" kits which are collections of items in a given category such as, jewelry, seeds, containers, buttons, clothing, and etc. File cards are developed by the teachers for each kit. An example follows:

Hinges

Dictionary Definitions

A jointed or flexible device on which a door, lid, or other swinging part turns.

A determining factor.

Turning point.

A bodily joint that permits motion in one plane.

Possibilities for Materials

hasp	spring clothespin	hair clamps
butt hinge	pillbox	bow tie
strap hinge	scissors	wallet
T or H hinge	tweezers	glass frames
pliers	nutcracker	match folder

Instructional Possibilities

Exploration: Manipulation of hinges in an interest center

Elaboration: Structured activity: Let children discuss, build on, and extend their knowledge. (Example: Yes, that is a clothespin. Where have you ever seen anything like this before? How was it used? If you had one, how would you use it?)

Suggest looking for things in the room or on the body which work the same way.

If the term hinge has not come up, introduce and use it in identifying hinges in the environment.

Identify book hinges and introduce or make drawings of hinges.

Make comparisons with things that hinges are like and not like.

Discuss differences in sizes and shapes.

Discuss differences in materials.

Discuss differences in weight.

Discuss differences in length.

Discuss differences in form.

2.6.5.6 Teacher Role

The primary responsibility of the teacher is to arrange and maintain an environment for learning. This implies skill in selecting and arranging materials, planning activities to meet the children's interests and abilities, conducting small-group activities, setting examples of behavior, accepting each child, and providing reinforcement.

Since the development of language competence is a major program objective, the teacher must have: (a) a consciousness of oneself as a modeller of language, and (b) a firm knowledge of the syntactic structure of the language of instruction. The developers feel that a language-rich environment rather than direct instruction by pattern drill is the most effective vehicle to accomplish the acceleration of language learning.

In addition the teacher must be able to interact purposefully with children, to plan, and to evaluate child behavior and activity.

2.6.5.7 Parent Involvement

This component of TEEM aims to emphasis the complementary roles of the home and the school. It aims to modify the natural environment in ways that supplement and support classroom instruction.

Henderson (in Hughes, et al, 1969) pointed out that "target families in Follow-Through programs are often those who have been alienated from the school through a long history of aversive experiences" (p. 336). Goals and objectives of the Parent Involvement Program are:

1. To establish positive contact with parents by initiating frequent, always positive, communications to the home concerning the child's progress.
2. To acquaint the parents with the instructional program.
3. To encourage the parents to re-inforce the child's motivation through giving attention to what is done in school.
4. To provide a variety of opportunities for parents to participate in guided observation of classroom activities. These are structured to focus attention on particular activities and procedures. Discussions follow the observations to clarify what has been done.
5. To have the parents serve as volunteers using their own special skills and experiences under the guidance of the school personnel.
6. To promote the transfer of principles the parent have observed to the home environment.
7. To allow for different interests of parents through helping them learn a variety of skills connected with education.

The Parent Involvement Program accommodates the parents at the many points of the program, they are not required to participate at all levels.

2.6.5.8 Evaluation of the Program

Comparative studies summarized in Evans (1975) report that:

1. TEEM children are provided with a greater than "usual" opportunity to express their thoughts and perceptions.
2. Children in TEEM Head Start can maintain task-orientation and display less inappropriate personal and social behavior than those in local comparison classrooms when their teachers are absent from the classroom.
3. Greater incidence of child-initiated learning sequence was observed in TEEM Head Start classrooms.
4. TEEM children were generally favored in work knowledge, visual and verbal memory, conceptual grouping, number questions, and reasoning by analogy. (p. 169)

Chow and Elmore (1973) report that the results on the Metropolitan Achievement tests were "mixed" and not available for publication.

TEEM personnel felt that the available achievement tests did not measure TEEM's objectives adequately. Therefore they continue to develop an evaluation model which would complement standardized achievement tests. These instruments are: (a) The Activity Preference Task to test an increased interest in school activities. The child is asked to select a favorite activity from pictures of home and school activities. (b) A classroom observation system through which program implementation can be evaluated.

2.6.6 The Bilingual Early Childhood Program

2.6.6.1 Background

The Bilingual Early Childhood Program was developed in 1966 under the direction of Shari Nedler at the Southwest Educational Development Laboratory, Austin, Texas. It grew out of an attempt to evolve and describe the developmental process approach to curriculum design which could be used as a model in the development of a program for any population and for any specific educational purpose. The target population consisted primarily of Mexican-Americans who spoke Spanish but who spoke little or no English, (Day & Parker, 1977). Previously, compensatory programs had given little attention to children who enter school speaking a different language from that of the community and whose native language was not proficient.

2.6.6.2 Assumptions about Children and Learning

Typically, urban and migrant Mexican-American children with a home language of Spanish, reach school age with little knowledge of English. Proficiency in Spanish is often limited as well. A large percentage of these children fail the first grade mainly because they are so involved in learning English they cannot master first grade content.

The problem of language and consequent failure alienates the learners from school and society, an attitude which is often passed on to the next generation. It was felt that if they could learn English as a second language and re-inforce and extend their use of Spanish before the first grade, not only language and cognitive skills would be acquired, but also an essential sense of competence and self-esteem would result.

2.6.6.3 Goals and Objectives

The main objective of the program was to develop a developmentally appropriate comprehensive learning system that would include new methods for teaching English as a second language to children between the ages of three and six. The preservation, re-inforcement, and extension of the native language was a corollary of this objective.

The general objectives of the instructional program are (Nedler, 1973):

1. Development of child's sensory perceptual skills.
2. Development of the child's language skills in both English and Spanish.
3. Development of the child's thinking and reasoning abilities.
4. Development of the child's positive self-concept.

Specific terminal objectives are provided for each of the eight activities in the three-level curriculum.

2.6.6.4 Content

Eight different types of activities are included in the program to assist the children in achieving the program objectives. They include: (a) Visual skills, (b) Auditory skills, (c) Motor skills, (d) Concept development, (e) Vocabulary building, (f) English syntax development, (g) Prewriting skills, and (h) Exploring and discovering to develop mathematical and scientific concepts. These activities are sequenced so that the children achieve some measure of success to foster a positive self-concept. Sequencing also provides for individual differences, increasing the attention span, and for encouraging the children to work independently.

The content is arranged into three levels:

Level I	Level II	Level III
(three-year-olds)	(four-year-olds)	(five-year-olds)
Visual	Visual	Visual
Auditory	Auditory	Auditory
Motor	Motor	Motor
Ideas and concepts	Ideas and concepts	Ideas and concepts
	Syntax in English	Syntax in English
	Building vocabulary	Building vocabulary
		Prewriting
		Exploring and discovering

The children learn to speak and listen in two languages and both are used for instruction. Teaching begins in the children's first language and is repeated later in English. Most of the teaching at Level I is in Spanish. At Level III instruction in English predominates. Colloquial Spanish is used to meet the idiom of each area.

Similarly, the content begin with what the children know — concrete objects — then moves to pictures and two-dimensional representations, and concludes with words.

Different teaching methods, media, and instructional settings are used. Direct instruction, discovery, large and small group instruction, individual activities, games, manipulative equipment and etc. are all involved in implementing the program to allow teachers to incorporate the culture of the community.

2.6.6.5 Materials

When the program began there was a serious lack of suitable materials for bilingual instruction. Instructional units built around a theme were developed consisting of familiar concrete objects, puzzles, transparencies, filmstrips, audio recordings, games, photographs, charts, posters, stories, and etc. Media to be used is suggested in the three levels of each of the eight activity elements. Each unit contains twenty to twenty-five planned lessons and activities plus mastery tests. Because of the sequencing of concepts and skills it is essential that instructional units be presented in order.

Staff training materials are vital to the program. These consist of a series of manuals for teachers, site coordinators, and administrators. These are divided into two major categories: pre-service and in-service training. There are three volumes of the pre-service Manual, two volumes of the In-service Manual, an Administrator's Handbook, and a Coordinator's Handbook. Training workshops augment information about the rationale and the implementation of the program.

2.6.6.6 Teacher Role

Each class is directed by a supervising teacher and an assistant teacher who share responsibility for teaching and class management. They work as a team and each has specific duties. Shared responsibilities include: (a) Setting up the classroom, (b) Classroom maintenance, (c) Advance planning and preparation, (d) Daily planning and preparation, (e) Daily classroom routine, (f) Making home visits and dealing with parents.

The supervising teacher teaches most small-group instruction. In addition, she administers tests, demonstrates how to use equipment, observes children working independently, gives individual instruction, and has the major responsibility for planning and decision-making. Another important responsibility is the training and supervision of the assistant teacher.

The assistant teacher has the primary responsibility for handling classroom management and control problems. Her teaching load is lighter but she does spend much of her time teaching small groups and observing the progress of children working independently. When the supervising teacher is working with the entire group she models the behavior expected of the children and intervenes if they become inattentive or disruptive.

Each teaching team works out its own pattern of teaching of responsibilities in accordance with the time available, teaching abilities and preferences, and the demands of other duties. Planning together must take place on a daily basis so that each will know what the other is doing in each class session.

2.6.6.7 Parent Involvement

Strategies for involving parents in the educational process are outlined in a Southwest Educational Development Laboratory manual School and After: Parents Help (1971). Teachers are encouraged to make home visits, to invite parents to observe in the classroom, and to urge them to serve as volunteers. A series of home activities complements the classroom curriculum and is designed to follow the classroom presentations about four weeks later. The objectives of the series are to reinforce basic concepts and to build positive expectations by the parent of the children's ability to learn and achieve. It is also an effort to open communication between the home and the school as well as between parent and child, and to link home and school.

2.6.6.8 Evaluation of the Program

Evaluation of the program has been both formative and summative. The former was used to improve and refine instruction at each stage of the program's development. Sources of data were the measurement of student achievement and interest, teacher feedback, and on-site observation.

During 1971-1972, data were collected in 169 classrooms in 31 communities

in Colorado and Texas. Nedler summarized the findings in an article (reprinted in Day & Parker, 1977) as follows:

1. Teachers perceived the instructional objectives of the program to be realistic and relevant to the needs of bicultural children.
2. Mastery tests based on curriculum objectives indicated that a high percentage (generally over 73 percent) of the children mastered program content goals.
3. Although no control groups were used, standardized test results indicated substanti- ns among project children in English and h language comprehension, measured by the y Test of Language Comprehension, and in ive abilities, measured by the Raven Progressi trices.
4. Participant feedback indicated t the staff development component increased teacher knowledge of program implementation and contributed to teacher confidence. (p. 315)

Follow-Through evaluations (Abt Associates, 1974) reported that the SEDL program appeared to be having some success in developing listening and reading skills. It also seems to be affecting attendance in a positive direction but measures of achievement motivation and school enjoyment were not higher than those of children not in Follow-Through classes. The report suggests that further exploration into the effectiveness of the program in varied settings is needed.

2.6.7 French Immersion Program

2.6.7.1 Background

The St. Lambert Experiment in Bilingual Education, a parent-initiated French Immersion Program, was the first of its kind in Canada. The immersion approach for English-speaking children involves the use of French as the language of instruction. Unlike the Bilingual Program described in the preceding section, instruction begins at the Kindergarten level in the children's second language (French) and English is gradually added from Grade 2 on. The success of this program and an increasing concern for bilingualism and biculturalism resulted in the spread of the concept to all the provinces. The St. Lambert Immersion Program became the model upon which most of these programs were based.

In 1967, the French Canadian Federation of British Columbia requested that the Coquitlam School Board initiate a bilingual program to serve the needs of the French-speaking community and any interested English-speaking parents in the area. They asked for a program in which the first three or four school years would be conducted entirely in French. The Department of Education gave the School Board permission to open a Kindergarten class provided that one-half hour per two and one-half sessions be in English, and that evaluation would be an integral part of the program.

W ton (1974) reports that in 1968, two French Kindergarten classes e opened for children whose parents wished them to attend. More an two-thirds of the children enrolled knew no French, and English was the dominant language of the other third.

The satisfaction of the parents led to the extension of the number of programs in the school district. The success of these classes encouraged teachers and administrators to consider increasing the amount of instruction in French. An interested group visited the classes in the South Shore School District and were impressed with its Immersion Program. In 1974, permission was sought and granted to conduct instruction in Kindergarten and Grade 1 classes entirely in French. By the 1976-77 school year, similar programs were operating in seven schools (Shopson ."aufman, 1978).

The Federal-Provincial Assistance to promote biligualism in British Columbia, has given impetus to the expansion of programs where French is the language of instruction. The Ministry of Education's Minority Language Survey, 1979-80 shows that 1,594 children in 29 schools in 13 districts are enrolled in French Immersion Classes in Kindergarten and Grade 1 in British Columbia.

2.6.7.2 Assumptions about Children as Learners

The rationale for beginning instruction in a foreign or second language at an early age, is contained in a statement representing consensus reached at a conference of the Modern Language Association in May, 1956. Andersson (1960) reports it as follows:

> The optimum age for beginning the continuous learning of a second language seems to fall within the span of ages four through eight with superior performance anticipated at ages eight, nine, and ten.
>
> In this early period the brain seems to have the greatest plasticity and specialized capacity for acquiring speech. The specialized capacity includes the ability to mimic accurately the stream of speech (sound, rhythm, intonation, stress, etc.) and to learn to manipulate language patterns easily. (p. 65)

In addition, documented research (Hendrick, 1980) suggests that during the years between three and five, children are increasingly aware of ethnic differences and "therefore if we wish to combat the formation of prejudice, we must conclude that early childhood is the time to begin" (Hendrick, 1980, p. 141). The parents and the school authorities involved in the St. Lambert experiment believed that learning another group's language was an essential first step in developing mutual understanding and respect among people of different cultures.

2.6.7.3 Goals and Objectives

Lambert and Tucker (1972) state that the long-range goals of the St. Lambert Program were: (a) to develop nativelike skills in a second language,

and (b) to develop mutual understanding and respect among people of different cultures and language.

Wilton (1974) states:

> The principle objective (of the Coquitlam program) has always been to enable children to obtain as high as possible mastery of oral and written French without endangering their ability to communicate in English or hindering their general educational progress. Secondary objectives have been to involve French-Canadian culture and to interest the children in it. (p. 172)

2.6.7.4 Content

The Kindergarten curriculum was left largely to the discretion on the participating teachers. Their goal was to prepare the children so that at Grade 1 they could handle the content of the curriculum and function as though they were native French-speaking children. There was an emphasis on listening skills, comprehension, and the development of a French vocabulary along with the other traditional Kindergarten activities.

The program of study for Grade 1 followed the curricula of the French-Canadian school system of Montreal and that of the lycées in France.

The program of study of each grade level focussed attention of the development of academic skills. Language was purposely made incidental. They were comparable in level of difficulty and comprehensiveness to those of the English-Canadian schools in the Greater Montreal region.

When the program was extended upward, similar conditions were maintained.

2.6.7.5 Materials

Some of the books and materials were French-Canadian, some were from France, and some were of joint Canadian and French authorship All materials used were designed for children who spoke French as a native language.

The development of the French language was stressed through the use of story telling, vocabulary build-up, songs and group projects in the plastic arts. Drilling and laboratory techniques were not recommended. Lambert and Tucker (1972, p. 26) felt that transcripts of observations in the Kindergarten and Grade 1 would be more instructive than details of texts, materials, and lesson plans. These are included under the next heading.

2.6.7.6 The Role of the Teacher

The success of the Immersion Program depends upon the teachers who must be native speakers of French. Descriptions of classes in action which

follow delineate the task of the teacher:

DESCRIPTIONS OF THE CLASSES IN ACTION[1]

First impressions is of a well-organized, very disciplined class, where "disciplined" is used with a European meaning. That is, the class seems more French, or European, than a typical kindergarten in North America. The teacher speaks a great deal; actually she speaks all of the time and accompanies her speech with gestures, mimics.

There is less free play and individual activities than one usually finds in North American kindergartens. For instance, I did not see a dolls' corner, or building blocks' corner which could have been used by a child alone. All activities were group ones, some involving the whole class, others smaller numbers of children, but all teacher-directed. Even when the children were given their choice of cutting or gluing or coloring, they sat in groups of four or five at different tables prepared with materials in advance by the teacher who told them what to cut out (e.g., a big fish or a small fish) or how to paste on colored paper.

The teacher circulates all the time, keeping up a steady flow of conversation, commenting, approving asking questions. The children speak English to her. She repeats their sentences in French, answers them, and tries to have the child repeat the answer in French after her. However, she never puts pressure on the children to do so.

Every day the teacher goes through routines, using the same sentences or words; the weather is an example. These routine sentences are very easily understood, and in this respect there is a sort of ritualistic use of French.

There are more group activities involving all the children when the teacher turns to storytelling with picture books, or singing. For other activities the children sit on the floor in a big circle, and take turns doing what the teacher wants them to do. For example, I saw a fishpond game. Three children at a time went to "fish" with a rod with a string and a magnet attached. As each cutout was fished up, the teacher asked questions about it: What is it? Is it big? Who caught it? and so forth, and then another child was asked by the teacher to take a turn.

The teacher waits for the children to answer a question. If no answer is given, or if the answer is given in English, the teacher provides one in French. The children then repeat it together.

The "effort" is almost all the teacher's. The children are very passive towards speaking French. They speak English together and to the teacher.

The children pay great attention and seem more quiet than in an ordinary kindergarten.

Grade I

Very much like a European (or traditional) class. The children sit at desks, are not allowed to move freely in the class, and have to raise their hand before talking. Everything is directed and controlled by the teacher, and most activities are group ones. Again the teacher talks a great deal and gives explanations accompanied by more gestures than would be the case if the children were French-speaking.

Reading is also a group activity at the start. The teacher reads the text slowly and gives many explanations. All the children follow in their books, putting their finger or a ruler under the line being read aloud. Then the children read one after the other. Some reading is mimeographed, and in that case difficult words are depicted pictorially and not written.

For dictations, the teacher prepares stencils with all the words in the text, but in a random order. The children cut out each of the words, and paste them one by one on a sheet of paper as the teacher dictates slowly. Everything is done following directions and suggestions of the teacher: close your books, put them in your drawer, take a pair of scissors, cut the word "le", and so forth.

The children speak mostly English to the teacher and always English to each other. When they speak French at the urging of the teacher, it is done haltingly and hesitantly, and the teacher has to fill in. However, when they read a text already studied in the group, they read very well and with hardly any English accent. The reading book is one used by French-speaking children in grade 1. The workbook that accompanies the text is not used, because it is too difficult. The teacher prefers to prepare stencils to accommodate the limited vocabulary of the children.

There is less "free time" than in a conventional first grade. The emphasis is on understanding French and on acquiring structures and vocabulary, and many activities are directed towards that goal. The class is more "regimented" and "disciplined," but the children do not seem distrubed, nor do they show signs of tension. They seem happy and proud of their work. There is no noise or chatter. The main impression is that the teacher is completely in control of her class, and that everything comes from her. At all times, the children do what she wants them to do.

The incentive and effort come from the teacher. (Lambert & Tucker, 1972, pp. 237-239)

[1]Observations made in early October 1971 by Mme. Benoite Noble, an experienced teacher from France who has taught in France, England, and Canada. This was her first introduction to the school. The observations are based on visits of two hours in each class. Certain subjects matters, such as mathematics and science, did not happen to be in progress during her visits.

The above quote is used with permission of the publisher.

2.6.7.7 Parent Involvement

Parents had an initiating and monitoring function in the programs investigated. In general, they played an important part in establishing attitudes toward the experimental programs. Specifically, they were asked to: (a) insure that the children watched selected French television programs, (b) refrain from teaching the children to read in English, and (c) provide practice in oral French if it were possible outside school.

2.6.7.8 Evaluation

The evaluation of the program plays an important part in every study reported in the literature. Usually this evaluation involves comparison of the Immersion classes with French and English Controls.

In the original St. Lambert Experiment (Lambert & Tucker, 1972) achievement was measured at the end of Grade 1 and each succeeding grade. Attitudes at each level starting at the end of Grade 2 were also measured.

It was found at the end of Grade 4 that the Experimental group did just as well as the English Controls in their home language skills, they scored as well as the French Controls on a test of vocabulary and had a nativelike command of the language when reading in French. They performed as well in mathematics as both Control groups. They had more favorable attitudes toward French-Canadians and European French people than did the English Controls. After five years in the program they thought of themselves as both English-and-French-Canadians in outlook.

Genesee (1978-79) reported the scholastic results of participation in the French Immersion programs of the Protestant School Board of Greater Montreal. Kindergarten, Grade 1 and Grade 2 immersion students generally scored lower than English Control students on those tests which required literacy skills in English: reading, word discrimination, spelling and vocabulary. There were relatively few significant differences in listening, comprehension, aural decoding, speaking and oral vocabulary. As they had had no formal school training in these skills in English, their competence was surprising. It was inferred that language arts skills acquired in French were being transferred to English.

In the French Language tests the Immersion students had acquired a nativelike or near nativelike proficiency in decoding French, and very good functional French oral communication. Similar results were obtained in the longitudinal study of the Coquitlam School District programs (Shapson & Kaufman, 1978). Bousquet (1979), and Cummins (1978) report comparable findings in their reviews of immersion programs in Canada. In general, for the average Canadian child immersion programs appear to be a successful mode of education (Bruck, 1978).

The evidence is not as clear in evaluating the suitability of early French immersion programs for the language-disabled child or for the learning-disabled child. Bruck (1979) suggest that the former should participate in immersion programs but be given more time to acquire proficiency in French.

According to Bruck (1978-79), more systematic research is needed about the effect of immersion programs on the cognitive and affective development of the learning-disabled. Research into the social interaction and friendship choices of preschool children with and across ethnolinguistic lines and the role of second language fluency as a determining factor in play patterns (Doyle, Rappart, & Connelly, 1980) indicates a trend toward the further examination of the effects of the language of instruction on the attitudes of young children. The following section is a summary of the models and major programs discussed in Sections 2.6.1 - 2.6.4.

2.6.8 Summary of Program Models

	Cognitive emphasis ACADEMIC MODELS	COGNITIVE DISCOVERY MODELS		Affective emphasis DISCOVERY MODEL
	Englemann/Becker DISTAR	Cognitively Oriented Curriculum	Responsive Education	EDC Open Education
Assumptions about Children and Learning	Incorporates concepts of active involvement, random order recitation, immediate feedback, learning sequence based on task analysis, transfer of learning, contiguity principle. Specific performance criteria are used. Tasks are the same for all children.	Young children develop in stages outlined by Piaget as a result of active learning (i.e., direct experience of objects, people and events). Children learn through self-initiated activity.	Not based on single theory of learning but draws from many theories. Much of program based on assumption of relationship between maturation and learning. More heavily based on work of developmental theorists than on operant conditioning.	Emphasis on "whole child." Incorporates theories of Froebel, Montessori, Piaget and Bruner. Learning is highly individualized with self-initiated activity in environment of open-ended materials.
Goals and Objectives	To help children acquire the necessary academic skills in language, reading and arithmetic for success in school. To help children understand the language of instruction.	To help children develop the ability to place the self in time and space and to classify and order objects and events. To nuture the thinking and communication skills needed throughout school and life. To develop problem-solving ability. To develop child's self-discipline, perseverance, and spirit of inquiry.	To help children develop a healthy self-concept. To develop intellectual ability. To develop problem-solving ability.	To create stimulating classroom environments that are responsive to children's needs. To develop academic skills in a flexible, self-directive way. To provide resources and environment for growth in problem-solving, ability to express themselves, and ability to take responsibility for own learning.
Content	Emphasis on basic skills: 1. Language-diction, syntax, and grammar 2. Reading-decoding 3. Arithmetic-counting symbols, and equations.	Series of cognitive goals as guide in areas of classification, seriation, spatial relations, and temporal relations. These are to be developed at 3 levels of representation (index, symbol, and sign) and 2 levels of operation (motoric and verbal).	No specific curriculum. Learning episode provided for areas of problem-solving senses and perception, language, concept-formation, social concepts, and understanding and respect for cultural differences.	No specific curriculum. Emphasis on developing a variety of skills through an inter-disciplinary approach.

	ACADEMIC MODELS	COGNITIVE DISCOVERY MODELS		DISCOVERY MODEL
	Englemann/Becker DISTAR	Cognitively Oriented Curriculum	Responsive Education	EDC Open Education
Materials	Prescribed materials for teachers-presentation books, special lesson materials, teacher's guides, and testing material (formative and summative) for pupils --workbooks and take home books. Selected preschool materials. Structured physical environment.	Traditional preschool/kindergarten materials. No specific equipment required. Materials chosen according to concept being emphasized. Classroom environment reflects current emphasis. Organized into activity areas.	Parent Toy Lending Library component. Emphasis on autotelic materials (e.g puzzles, pegboards, nesting objects, etc.) Electric typewriter and booth area. Organized into activity areas.	No required materials. Suggested list of materials emphasizes natural and inexpensive materials (e.g. sand, "junk" materials). Informal activity areas in an "open" environment.
Teacher Role	To present the curriculum as specified. To perform diagnostic operations. To reinforce correct answers. To maintain fast instructional pace.	To determine by observation the developmental level of each child and placement in specific cognitive skill areas. To use a variety of teaching strategies. To implement Staff Model- - teacher planning - teaching by a team	To organize a responsive physical environment. To observe children and respond to their needs. To select appropriate learning episodes.	To assist and guide children in learning rather than to "instruct". To organize a stimulating physical environment. To establish an "intimate personal relationship" with each child.
Parent Involvement*	To ensure that children get to school regularly, punctually, and well-rested. To act as teacher aides after trainning. To work with children on Take Home materials.	Home Visit program. Parent Meetings.	Parent/Child Toy Lending Library. Weekly parent meetings. Parents involved in classroom as trained aides and volunteers.	Observation by parents. Help as aides and/or resource people.
Evaluation of program by developers:	Increase in I.Q. points and language ability. Grade placement in Reading and Arithmetic at second grade level.	By grade 2, gains in intellectual achievement disappear although gains in social-emotional adjustment factors and achievement persist. As secondary students, lower rate of social deviancy and placement in remedial classes. Home Visit program had positive effect on mother and child.	Consistent gain in I.Q. and academic measures but effects "wash-out" over the years if no follow-up program. Parent/Child Toy Lending Library achieved objectives. Parent and child response was favourable.	Developers believe standardized testing is inappropriate, therefore, little data available. Developer evaluation primarily descriptive.
by Follow-Through:	Effective in accomplishing its purposes. With grade-level achievement as the criterion, academic growth surpasses that of children in other programs. Unless DISTAR programs is used from K-3, the immediate academic gains at the preschool/ kindergarten level are diminished.	Has some success in development of achievement, motivation, internal locus of control, and verbal ability.	Show a trend toward increased abilities in reading, arithmetic, and achievement motivation although differences reported across levels of analyses. Overall favourable results in areas of academic achievement and parental attitudes.	Program has some impact on certain children in both achievement and motivation but varies greatly. More susceptible to differences in implementation than other programs. Open vs. traditional British classrooms: at end of primary grades, children in open classroom superior to listening, recalling, neatness, ingenuity, free drawing. English, and interests.

*All of the Follow-Through programs are required to have a parent advisory board.

CHAPTER 3

KINDERGARTEN IN BRITISH COLUMBIA: PAST, PRESENT, AND FUTURE

3.1 Introduction

This chapter is divided into three sections:

1. A summary of the development of Kindergartens in the public schools of British Columbia (3.2),
2. A statistical description of Kindergarten in British Columbia in the 1979/80 school year (3.3), and
3. A summary of projected Kindergarten enrolments to 1990 (3.4).

3.2 Development of Kindergartens

The establishment of Kindergartens in the public schools of British Columbia began in 1922 when the Public Schools Act enpowered school boards to "establish and maintain Kindergarten classes for children between four and six years of age in all cases where instruction in Kindergarten work is considered desirable by the Board" (Statutes of the Province of British Columbia, 1922, Ch. 64, Sec. 50 (b)).

The school boards in British Columbia did not choose to establish Kindergartens at this time and until 1944 the Kindergartens were private Kindergartens. Conway (1968) reported that:

> There were no kindergartens in British Columbia public schools in the years preceding the second world war although there were numerous private kindergartens in the Victoria, Vancouver and Okanagan areas. Some of the latter had originated soon after World War I and their numbers increased rapidly in the early 1940's. (p. 1)

The lack of public school Kindergartens during this time has been attributed to the "cost, the lack of trained teachers and suitable classrooms, and to the fact that many private nursery schools and Kindergartens were available in urban areas although most of them were operated by non-professional personnel" (Conway, 1968, p. 2).

In the early 1940's, there was increasing interest among social agencies, parents, and primary teachers in pre-primary education due in part to the increased need for women in the labor force during World War II. In

February 1944, the government announced financial assistance for the establishment of Kindergarten classes in the public schools. In the 1944-45 school year, Vancouver and Victoria established half-day public school Kindergarten classes which enrolled a total of 260 children (Public Schools Report 1944-45, p. Y10).

In 1946, basic financial grants for Kindergarten teachers were established on the same basis as for other elementary school teachers. The grant "for pupils in average daily attendance" was extended to Kindergartens in 1948. As a result of these two types of grants "the financial effect to school districts was quite a favourable one since half-time and even quarter-time Kindergarten pupils were treated as full-time pupils in attendance and in the pupil/teacher ratios for teacher entitlement" (Conway, 1968, p. 4).

In 1946, a Kindergarten Curriculum Committee was established. This committee wrote Programme of Studies for Elementary Schools in British Columbia: Kindergarten Manual (1948). In this Manual, the following description of the role and purpose of Kindergarten is stated:

> The Kindergarten is organized to promote the full development of the child through his natural activities. The Kindergarten gives the child the opportunity of working, playing and living with children his own age.
>
> The purpose of the Kindergarten year is to ensure the maximum growth of each child, physically, socially, emotionally, as an individual and as a member of the group. (p. 1)

This statement was retained in the revised Kindergarten curriculum guide published in 1954 (Programme of Studies for the Elementary Schools of British Columbia: Kindergarten Manual).

In the Public Schools Act of 1958, the minimum age for admittance into Kindergarten in the public schools was changed from 4 years of age to "one year younger than the age required for admission to Grade 1" (Ch. 42, Sec. 163 (b)). The section of the Public Schools Act dealing with the establishment of Kindergartens by school boards was amended in 1958 to read that the school board of any school district could:

> Where instruction in kindergarten work is considered desirable and expedient by the Board, and if the Superintendent of Education approves, authorize the establishment and maintenance of kindergarten classes for children of one year younger than the age required for admission to Grade 1. (Ch. 42, Sec. 163 (b))

The addition of the phrase "if the Superintendent of Education approves" limited the power of school boards to establish Kindergartens. Conway (1968) concluded that:

> In practice, the addition of kindergarten classes to either urban or rural elementary schools received approval only when there were: (a) sufficient accommodation in the area for all other grades, (b) fully-qualified kindergarten teachers, (c) at least 25 pupils aged 4.7 to 5.7. As few school districts could find fully-qualified teachers or keep up with the expansion of enrolment at that time the effect was to freeze kindergarten enrolment between 3700 and 3900 although total enrolment in other grades rose 16% during this four-year (1956-61) period. (p. 5)

The authors of the Report of the Royal Commission on Education (1960) commented that "there is widespread opinion that these provisions of the Act (for the establishment of Kindergartens) have not been implemented to the extent that they should have been in the interests of the children of the Province" (p. 119). In this Report it was stated that in 1958-59, 46 schools in 10 school districts had public school Kindergartens with a total enrolment of 3891 children. Forty-nine percent of these Kindergartens were in Vancouver, 27% in Greater Victoria and 24% in 8 other school districts (p. 119).

In the Report, the Royal Commission made four specific sets of recommendations on Kindergartens:

1. That where a kindergarten is not available, special provision be made for those who are not ready to begin Grade 1 work at the normal age for entering school (p. 120).

2. That kindergartens of a type required to meet local needs be established at the discretion of the local boards of school trustees; that the expense of such kindergartens be shareable; that no fees be charged: that attendance be voluntary; that the parents be responsible for transporting their children to and from the kindergartens; that daily attendance be not longer than one-half of a school-day, except in the case of a kindergarten which serves also as a creche (p. 127).

3. That the Department of Education assume responsibility for passing upon the qualifications of those who supervise private kindergartens (p. 128).

4. That the age of admission to the first year of elementary school continue as at present, or one year younger into kindergarten (p. 262).

The Public Schools Act in 1962 removed the phrase "if the Superintendent of Education approves" from the regulations on the establishment of Kindergartens (Ch. 319, Sec. 163 (b)). The result of this was increased demand for Kindergartens "so great that kindergarten enrolment doubled almost immediately. . . . During the five year period (1961-62 to 1966-67) public kindergarten enrolment increased 109% while Grade 1 enrolment increased only 21%" (Conway, 1968, p. 6).

Table 3.1 is a summary of Kindergarten enrolments from 1967 to 1979 and shows an increasing number of districts provided Kindergartens and enrolled increasing numbers of children in the late 1960's and early 1970's.

TABLE 3.1

KINDERGARTEN ENROLMENT IN BRITISH COLUMBIA
1967-1979

Year (Sept.)	Number of Districts with Kindergarten	Provincial Kindergarten Enrolment
1967*	43	15,368
1968	44	17,273
1969	49	20,167
1970	54	20,045
1971	56	19,869
1972	60	22,718
1973	71	31,460
1974	75	35,532
1975	75	37,072
1976	75	35,071
1977	75	34,257
1978	75	33,520
1979	75	34,298

Sources: B.C. Public School System September Enrolment Projections 1978-88 and 1979-89.
*Conway, 1968, p. 6.

In April 1973, provision for Kindergartens in each school district in British Columbia was made mandatory (Public Schools Act, Ch. 319, Sec. 163 (b)). The deadline for compliance was the beginning of the 1974-75 school year. As of September 1973, 71 districts provided Kindergartens and as of September 1974, all 75 districts provided Kindergartens. The enrolment of children in Kindergarten peaked in 1975 then declined as a reflection of the declining birth rate.

The latest revision of the Kindergarten curriculum resulted in the publication of the Kindergarten Curriculum Guide (1973) and a Resource Book for Kindergartens (1973). The purpose of the Kindergarten Curriculum

Guide was "to provide basic information relating to the revised Kindergarten programme. In addition to presenting the philosophy and objectives of the new programme the guide discussed the creation of a desirable learning environment and the implementation of an integrated curriculum" (n.p.). The Resource Book for Kindergarten was designed "to supplement the curriculum guide by providing a wealth of additional information and suggestions" (Kindergarten Curriculum Guide, 1973, n.p.).

The basic philosophy of Kindergarten as outlined in both of the above publications is:

> Kindergarten is a fluid living environment in which the young child may move freely from one experience to another, and where his learning is a spontaneous and organic process of discovering and exploring objects, materials, other people, and events, and where all is imbued with that particular quality of magic and love that the child will bring to the experience of living and learning. Most activities contain aspects of language, science, art, physical movement, or other disciplines. The common denominator of activities and subjects in the kindergarten programme must be the child. All learning is integrated in the child. This integration is the centre of kindergarten . . . . (Resource Book for Kindergartens, 1973, pp. 19-20)

3.3 Kindergarten in British Columbia Today

In September 1979, there were 34,298 children enrolled in public school Kindergartens in British Columbia. This is 95% of the total enrolment in all Kindergartens in British Columbia. A breakdown of Kindergarten enrolment by type of school is presented in Table 3.2.

TABLE 3.2

KINDERGARTEN ENROLMENT IN BRITISH COLUMBIA
(1979-1980)

Type of School	Enrolment in Kindergarten	Percentage of Total Kindergarten Enrolment
Public	34,298	94.8
Private (Funded)	1,215	3.4
Band operated	257	.7
Private (non-funded)	223	.6
Correspondence	123	.3
	(In-Province = 92)	
	(Out-of-Province = 31)	
Federally operated	68	.2
Total	36,184	

According to Family Allowance data, in September 1979, there were 36,745 children in British Columbia of Kindergarten age (i.e., 4.8 to 5.8). Therefore, approximately 98.5% of the Kindergarten-aged children attended some type of Kindergarten. This figure agrees with the information gathered by the questionnaires: 98.5% of the responding Grade 1 parents (n = 405) indicated that their child had attended Kindergarten in 1979/80. Of these children, 98.5% attended a public school Kindergarten and 1.5% attended private Kindergarten.

Grade 1 teachers were asked what percentage of their current Grade 1 class did not attend Kindergarten. The percentages given by the responding teachers (n = 455) ranged from 0 to 100%. The median and mode were 0; the mean was 3%.

Preschool parents were asked if they planned to enrol their Preschool child in Kindergarten when he/she is five years of age. Of the responding parents (n = 351), 99% said they were. These parents (n = 349) indicated that 94% would enrol their child in a public school Kindergarten, 5% in a private Kindergarten, and 1% indicated other alternatives (e.g. travel, moving, overseas, etc.).

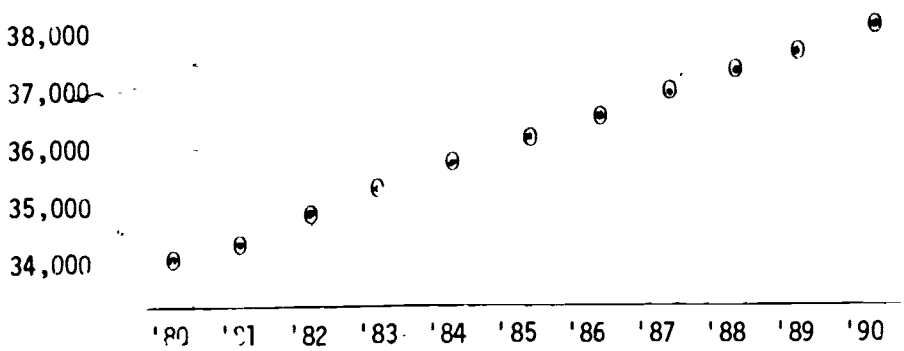
Although provision of Kindergartens is mandatory, the compulsory age of school attendance in British Columbia is seven years.

3.4 Projected Kindergarten Enrolments to 1990

The projected Kindergarten enrolments from 1980 to 1990 (B.C. Public School Systems September Enrolment Projectives 1980-1990, 1980) are present on Figure 3.1.

FIGURE 3.1

PROJECTED KINDERGARTEN ENROLMENT IN BRITISH COLUMBIA
(1980-1990)



An increase of 11% between 1979/80 enrolment and 1990 enrolment is projected. However, if the current trend of movement into British Columbia from other parts of Canada and other countries continues, the projected increase could be much higher. Therefore, one should use the projection of 11% cautiously as it is likely to be a conservative estimate.

3.5 Summary

Although it was possible for School Boards to establish Kindergartens in 1922, none chose to do so until 1944/45 when provincial financial assistance was made available. Establishment of Kindergartens in the public schools was optional until the 1974/75 school year. In 1979/80, there were 36,745 Kindergarten-aged children in B.C.; 98.5% were enrolled in some type of Kindergarten program. In 1979/80, there were 34,298 children enrolled in public school Kindergartens (95% of the total Kindergarten enrolment in B.C.). The Kindergarten population is projected to increase 11% or more by 1990.

CHAPTER 4

CURRENT AND IDEAL KINDERGARTEN PROGRAMS

4.1 Introduction

This chapter summarizes the responses of Kindergarten, Grade 1, and Preschool teachers; School and District administrators; and Kindergarten, Grade 1, and Preschool parents to questions on:

1. The purposes of Kindergarten (4.2);
2. The effectiveness of Kindergarten in achieving these purposes (4.3),
3. The Kindergarten program - actual (4.4-4.5); and
4. The Kindergarten program - actual and ideal (4.6-4.7).

4.2 Purposes of Kindergarten

In Language B.C. (1976), Kindergarten teachers were asked to rate ten purposes of Kindergarten in a context of Language Arts. The majority of the Kindergarten teachers felt the affective purposes (e.g., to develop a positive self-concept to increase the probability of reading success) to be of major importance. In contrast, "the suggestions that more time and opportunity be provided to teach content earlier receive(d) negative reactions" (v.2, p. 48).

A similar format was used in this survey: Kindergarten, Grade 1 and Preschool teachers; School and District administrators; and Kindergarten, Grade 1, and Preschool parents were asked to rate seven purposes of Kindergarten on a scale of "Not at all important" to "Absolutely essential." These seven purposes were selected to reflect the range of purposes found on the continuum of current Kindergarten models described in Chapter 2 (see Table 4.1).

As in Language, B.C. (1976), the affective purposes of Kindergarten were judged to be "Absolutely essential/Very Important" by a majority of teachers, administrators and parents. The least important purpose was judged to be preparing children for academic subjects.

An interesting pattern emerges when one compares the responses of educators and parents. While there is general overall agreement on importance, parents put less emphasis on the affective purposes than do educators but more emphasis on the academic purpose than do educators.

TABLE 4.1

PURPOSES OF KINDERGARTEN
(Entries are percentages)

How would you rate the following purposes of Kindergarten? (Medians are underlined. Where the median is located approximately midway between two response categories, both entries are underlined.)

Purposes and Ratings	Teachers			Administrators		Parents		
	Kgn. (n=489-995)	Gr.1 (n=520-523)	Presch. (n=344-352)	School (n=414-423)	District (n=57-58)	Kgn (n=487-490)	Gr.1 (n=422-425)	Presch. (n=358-361)
To prepare the children for academic subjects in Grade 1								
Not at all important	1	1	3	4	5	1	2	2
Of little importance	16	12	22	27	20	11	13	16
Important	61	49	45	49	51	39	41	38
Very important	16	25	19	16	11	25	22	22
Absolutely essential	6	13	11	4	3	24	22	22
To help children learn to get along with other children								
Not at all important	-	-	-	-	-	-	1	-
Of little importance	-	-	1	-	-	1	1	1
Important	7	4	11	7	12	13	10	20
Very Important	32	32	33	44	52	41	38	45
Absolutely essential	61	64	55	49	36	45	50	34
To familiarize the children with school routine								
Not at all important	-	-	1	1	-	-	-	1
Of little importance	3	6	7	6	10	1	1	4
Important	30	27	44	39	33	23	21	33
Very Important	39	38	28	39	43	42	42	39
Absolutely essential	28	29	20	15	14	34	36	23
To bridge the gap between home and school								
Not at all important	-	-	-	-	-	2	2	1
Of little importance	1	1	4	2	2	8	7	12
Important	20	26	37	26	24	30	31	41
Very Important	39	38	33	49	50	37	36	29
Absolutely essential	40	35	26	23	24	23	24	17
To help the children develop positive self-image								
Not at all important	-	-	-	-	-	-	1	1
Of little importance	-	-	1	-	-	2	2	3
Important	2	4	5	6	9	21	21	19
Very Important	20	26	23	43	29	35	36	36
Absolutely essential	78	70	71	51	62	42	40	41
To enable the children to become self-directing in the own learning								
Not at all important	-	-	-	-	-	1	1	2
Of little importance	1	3	2	8	9	5	5	7
Important	12	25	14	36	33	28	27	28
Very important	39	39	36	35	35	35	39	36
Absolutely essential	48	33	48	21	23	31	28	27
To allow children time to develop as individuals								
Not at all important	-	-	-	-	-	1	1	1
Of little importance	-	-	1	2	2	3	3	4
Important	11	16	11	17	19	24	27	27
Very important	31	33	23	37	33	36	34	28
Absolutely essential	58	51	65	34	46	36	35	38

4.3 Effectiveness of Kindergarten

Grade 1 teachers, School and District Administrators, and Grade 1 parents were then asked to rate ("Not effective" to "Extremely effective") each of the seven purposes of Kindergarten as to how effective was the Kindergarten program in terms of these purposes (see Table 4.2).

TABLE 4.2

EFFECTIVENESS OF KINDERGARTEN
(Entries are percentages)

In your opinion, how Effective, overall, is the Kindergarten program for these purposes? (Medians are underlined. Where the median is located approximately midway between two response categories, both entries are underlined.)

	Teachers	Administrators		Parents
Purposes and Ratings	Grade 1 (n=507-522)	School (n=410-422)	District (n=55-58)	Grade 1 (n=407-423)
To prepare the children for academic subjects in Grade 1				
Not effective	3	4	5	8
Slightly effective	17	18	16	19
Effective	56	56	61	41
Very effective	19	18	18	22
Extremely effective	5	4	-	10
To help children learn to get along with other children				
Not effective	-	-	-	1
Slightly effective	7	1	5	4
Effective	43	31	36	36
Very effective	40	55	49	38
Extremely effective	10	13	10	21
To familiarize the children with school routine				
Not effective	3	-	2	3
Slightly effective	10	3	7	4
Effective	44	37	31	31
Very effective	33	46	48	36
Extremely effective	10	14	12	26
To bridge the gap between home and school				
Not effective	1	-	-	1
Slightly effective	5	3	5	10
Effective	42	33	33	35
Very effective	37	47	50	33
Extremely effective	15	17	12	19
To help children develop positive self-image				
Not effective	1	1	-	4
Slightly effective	9	5	12	16
Effective	43	38	43	34
Very effective	35	42	29	28
Extremely effective	12	14	16	18
To enable the children to become self-directing in their own learning				
Not effective	9	5	9	8
Slightly effective	27	20	23	19
Effective	42	43	41	37
Very effective	17	26	16	21
Extremely effective	5	6	11	15
To allow the children time to develop as individuals				
Not effective	2	2	2	5
Slightly effective	12	12	7	17
Effective	50	44	49	34
Very effective	25	30	31	27
Extremely effective	11	12	11	17

As shown in Table 4.2, the majority of all respondents rated the Kindergarten program as effective in terms of these seven purposes. School and District administrators and Grade 1 parents rated the Kindergarten program most effective in helping children learn to get along with others and bridging the gap between home and school. Grade 1 teachers most frequently rated the latter reason and helping the children develop positive self-concepts.

All four groups rated the Kindergarten program as relatively least effective in enabling children to become self-directing in their own learning. The degree of self-direction necessary in Kindergarten varies with the type of program (see Chapter 2). Some programs require a great deal in this respect; and in others, self-direction by the children is minimal.

4.4 The Kindergarten Program: Introduction

It was judged important in this study to attempt to identify which of the models described in Chapter 2 are used by Kindergarten teachers in their classrooms. Due to time and money constraints, observations in a sample of Kindergarten classrooms were not possible. Therefore, the Contract Team developed a set of 23 statements which were representative of the different models discussed in Chapter 2. The Kindergarten teachers were asked to indicate the extent to which each statement described their present classroom. In addition, Kindergarten teachers, other teachers, administrators, and parents were asked to respond to the set of statements in terms of what they would ideally like to see in Kindergarten.

The responses to the set of 23 statements provided (a) an estimate of the amount of time a particular activity, or form of an activity, occurred in the actual program and (b) an estimate of how frequently it should occur in an ideal Kindergarten program. The seven point rating scale ranged from "Always" to "Never".

4.5 The Actual Kindergarten Program

Table 4.3 shows the mean ratings for each of the 23 statements converted to percentages of time for each group of respondents. In this conversion, it was assumed that the rating scale described equal intervals, and that the anchor points on the scale, "Never", "About half the time", and "Always" corresponded to 0%, 50%, and 100% of the time respectively.

Of the 23 statements on Table 4.3, four were given ratings equivalent to spending 75% or more of the time on the activity. Four others were given ratings equivalent to spending 25% or less of the time on the activity. These extremes are presented on Figure 4.1.

TABLE 4.3

PERCENTAGE OF TIME ALLOTTED TO ACTIVITIES IN THE ACTUAL AND THE IDEAL KINDERGARTEN PROGRAMS FOR ALL GROUPS

	Percentage of Time an Activity Should Occur								
	ACTUAL	IDEAL							
		Teachers			Administrators		Parents		
STATEMENT	Kgn Tchrs.	Kgn	Gr.1	Presch.	Schrol	District	Kgn	Gr.1	Presch.
1. Children would be free to choose their own activities.	61	59	48	55	43	45	40	38	40
2. A spirit of competition would be encouraged in the classroom.	15	12	18	13	20	22	28	28	28
3. The child would learn mainly through the use of manipulative materials (e.g. puzzles, blocks, games, etc.).	75	73	72	62	50	70	50	53	55
4. The children's positive feelings about themselves would be more important than academic skills.	85	88	83	87	78	58	72	68	75
5. There would be an emphasis on materials found in the environment (e.g. sand, water).	60	58	65	70	63	65	55	57	60
6. The children's self-concepts would be developed through success in working with other children.	78	82	80	77	77	75	72	73	73
7. Most of the children would be directed toward the same goals.	58	53	72	43	53	47	65	53	47
8. The children would be mainly involved in learning basic academic skills.	40	37	37	35	28	27	50	50	47
9. The content would be determined by the materials the teachers must use.	35	30	38	38	33	30	47	50	46
10. The learning process would be self-rewarding.	83	87	80	81	75	78	77	78	82
11. Work done would be the result of cooperative planning between the children and the teacher.	53	65	53	68	48	50	67	70	67

TABLE 4.3 (Cont'd)

	Percentage of Time an Activity Should Occur								
	ACTUAL	IDEAL							
		Teachers			Administrators		Parents		
STATEMENT	Kgn Tchrs.	Kgn	Gr.1	Presch.	School	District	Kgn	Gr.1	Presch.
12. There would be a rapid pace of instruction to ensure that children learn all the necessary skills.	24	22	25	15	22	16	32	33	27
13. The children would determine the nature of the activities.	52	55	40	47	35	38	37	38	37
14. Program goals would be determined for each child individually.	57	72	60	78	57	68	60	63	65
15. The interests of the children in the materials would determine the program content.	67	70	55	67	50	50	53	55	55
16. There would be use of workbooks and worksheets.	19	20	20	25	18	18	50	53	47
17. Correct response by the children would be immediately reinforced by material rewards (e.g. candy, raisins, special activities).	7	7	12	8	13	12	13	13	12
18. Children's self-concept would be developed through success in academic skills.	28	35	32	33	33	30	45	47	43
19. The materials would be specifically chosen to increase the academic skills of the children.	64	48	45	48	38	38	58	58	57
20. The activities would be planned so as to ensure the academic achievement of the children.	65	50	47	47	40	38	57	58	57
21. There would be a set sequence of instruction each day.	73	60	58	53	53	50	58	63	60
22. The children would determine the pace of their learning.	68	70	58	70	52	55	58	58	62
23. The teacher would determine the pace of instruction.	65	55	65	57	67	63	65	65	63

FIGURE 4.1

STATEMENT OF ACTIVITIES IN THE ACTUAL KINDERGARTEN PROGRAM IN WHICH MORE THAN 75% OR LESS THAN 25% OF THE TIME IS SPENT

Statements > 75%	% of Time	Statements < 25%	% of Time
The children's positive feelings about themselves are more important than academic skills.	85	Correct responses by the children are immediately reinforced by material rewards (e.g., candy, raisins, special activities).	7
The learning process is self-rewarding.	83	A spirit of competition is encouraged in the classroom.	15
The children's self-concepts are developed through success in working with other children.	78	There is the use of workbooks or worksheets	19
The child would learn mainly through the use of manipulative materials (e g. puzzles, blocks, games, etc)	75	There is a rapid pace of instruction to ensure that children learn all the necessary skills	24

The information in Figure 4.1 provides a picture of a very cooperative, non-competitive Kindergarten with a relatively low emphasis on academic skills and a relatively high emphasis on developing children's self-concepts.

The role of academic subjects is an issue of some concern to Kindergarten teachers (see Chapter 6). In identifying characteristics of the actual program, Kindergarten teachers indicated that approximately two-thirds of the time, materials are specifically chosen to increase the academic skills of the children and activities planned to ensure academic achievement of the children (see Statements 19 and 20, Table 4.3). However, they also indicated that the children are mainly involved in learning basic academic skills only 40% of the time (see Statement 8) and that children's self-concepts are developed through success in academic skills only 28% of the time (see Statement 18). An explanation for these apparently contradictory findings may be that although Kindergarten teachers are aware of the importance of Kindergarten in terms of the future academic achievement of the children they think that direct instruction in academic skills in the Kindergarten is not appropriate.

This is not to say that the present programs do not have some structure. Although children are free to choose their own activities 61% of the time (see Statement 1) and would determine the nature of the activities 52% of the time (see Statement 13), the teachers determine the pace of the instruction 65% of the time (Statement 23), plan the activities with the child 53% of the time (Statement 11), provide a set sequence of instruction 73% of the time (see Statement 21) and direct most of the children toward the same goals 58% of the time (Statement 7). These data indicate that the teachers are structuring and controlling much of the Kindergarten educational environment.

The materials provided for the Kindergarten child were seen as being an important factor in the Kindergarten program. The Kindergarten teachers reported that the children are learning through the use of manipulative materials 75% of the time (see Statement 3) with an emphasis on materials found in the environment 60% of the time (see Statement 5). The program content is determined by the interest the children take in the materials 67% of the time (see Statement 15) and materials which increase the academic skills are chosen 64% of the time (see Statement 19).

In summary, if one were to place the present Kindergarten program on the continuum of models described in Chapter 2 (see Figure 2.1, Section 2.6) the program would be placed between the Cognitive-Discovery Models and the Discovery Model.

4.6 A Comparison of the Actual and Ideal Kindergarten Programs

All respondents were asked to rate the same set of 23 statements in terms of how they would like to see an ideal Kindergarten program structured. These data were compared to the actual Kindergarten program.

4.6.1 Differences Between the Kindergarten Teachers' Actual and Ideal Programs

The differences in mean response for the Kindergarten teachers between each statement describing the actual program and its counterpart for the ideal program was tested to determine whether it was statistically significant. This procedure assumed that each statement pair was independent of every other statement pair. As this was unlikely, only differences which would not occur more than 1 time out of 1000 by chance were reported (i.e., the probability of a difference occuring by chance is less than .001). A more rigourous statistical analysis (i.e., multivariate analysis) is planned for the future. Interested readers may contact the authors for the results.

There were eight statement pairs which had significant differences between the actual and ideal statements. They are reported in Table 4.4.

These results indicate that the Kindergarten teachers would like to see the largest increases in the amount of time in which cooperative planning between teachers and child occurs, and in the amount of time allotted to individualized programs. They would like to see significant decreases in the perceived academic nature of the program, and in the amount of time they follow a fixed sequence of instruction. In terms of the different Kindergarten program models outlined in Chapter 2, the teachers are suggesting a shift toward the Discovery Model.

TABLE 4.4

STATEMENTS WITH SIGNIFICANT DIFFERENCES* BETWEEN ACTUAL AND IDEAL PROGRAM AS REPORTED BY THE KINDERGARTEN TEACHERS

Statement	Actual	Ideal	Suggested change from actual (% change)
There would be an emphasis on materials found in the environment (e.g. sand, water)	60	68	Increase (+8%)
The content would be determined by the materials the teachers must use	35	30	Decrease (-5%)
Work done would be the result of cooperative planning between the children and the teacher	53	65	Increase (+12%)
Program goals would be determined for each child individually	57	72	Increase (+15%)
Children's self-concept would be developed through success in academic skills	28	35	Increase (+7%)
The materials would be specifically chosen to increase the academic skills of the children	64	48	Decrease (-16%)
The activities would be planned so as to ensure the academic achievement of the children	65	50	Drecrease (-15%)
There would be a set sequence of instruction each day	73	60	Decrease (-13%)

*p <.001

4.6.2 Differences Between the Actual Program and the Ideal Program Suggested by All Respondents

There was considerable uniformity of response to the "Ideal Program" question within each of the teacher group, administrator group and parent group. Therefore each group will be discussed separately.

Figure 4.2 was prepared to identify more clearly the larger differences between the actual Kindergarten and the ideal Kindergarten.

A single arrow indicates a difference which is approximately two standard errors of measurement from the "actual" score (the average of the largest standard errors of measurement among the groups was used); and a double arrow indicates a difference which is approximately three or more of the largest standard errors of measurement from the "actual" score. Double arrow differences are therefore highly likely to be "real differences" under these conservative selection conditions, so only those differences are discussed in the following paragraphs.

FIGURE 4.2

DIFFERENCES BETWEEN THE ACTUAL PROGRAM AND THE IDEAL PROGRAM BY ALL RESPONDENT GROUPS

STATEMENT	ACTUAL*	IDEAL							
		Teachers			Administrators		Parents		
	Kgn Tchrs.	Kgn	Gr.1	Presch.	School	District	Kgn	Gr.1	Presch.
1. Children would be free to choose their own activities.	61%		↓	↓	↓↓	↓↓	↓↓	↓↓	↓↓
2. A spirit of competition would be encouraged in the classroom.	15%				↑	↑	↑	↑	↑
3. The ch[illegible] would learn mainly through the use of manipulative materials (e.g. puzzles, blocks, games, etc.).	75%			↓	↓		↓↓	↓↓	↓↓
4. The children's positive feelings about themselves would be more important than academic skills.	85%				↓	↓↓	↓	↓↓	↓
5. There would be an emphasis on materials found in the environment (e.g. sand, water).	60%	↑		↑					
6. The children's self-concepts would be developed through success in working with other children.	78%						↓		↓
7. Most of the children would be directed toward the same goals.	58%		↑	↓	↓	↓	↑		↓
8. The children would be mainly involved in learning basic academic skills.	40%				↓	↓	↑	↑	↑
9. The content would be determined by the materials the teachers must use.	35%	↓				↓	↑	↑	↑
10. The learning process would be self-rewarding.	83%				↓		↓		
11. Work done would be the result of cooperative planning between the children and the teacher.	53%	↑		↑↑			↑	↑↑	

*The estimated ideal time was written within ± 5%.
↑ or ↓ The estimated ideal time was 6-14% more ↑ (or less ↓) than actual.
↑↑ or ↓↓ The estimated time was 15% more ↑↑ (or less ↓↓) than actual.

FIGURE 4.2 (Cont'd)

STATEMENT	ACTUAL*	IDEAL							
		Teachers			Administrators		Parents		
	Kgn Tchrs.	Kgn	Gr.1	Presch.	School	District	Kgn	Gr.1	Presch.
12. There would be a rapid pace of instruction to ensure that children learn all the necessary skills.	24%			↓		↓	↑	↑	
13. The children would determine the nature of the activities.	52%		↓		↓↓	↓	↓	↓	↓
14. Program goals would be determined for each child individually.	57%	↑↑		↑↑		↑		↑	↑
15. The interests of the children in the materials would determine the program content.	67%		↓		↓↓	↓↓	↓	↓	↓
16. There would be use of workbooks and worksheets.	19%			↑			↑↑	↑↑	↑↑
17. Correct response by the children would be immediately reinforced by material rewards (e.g. candy, raisins, special activities).	7%				↑		↑	↑	
18. Children's self-concept would be developed through success in academic skills	28%	↑					↑↑	↑↑	↑↑
19 The materials would be specifically chosen to increase the academic skills of the children.	64%	↓↓	↓↓	↓↓	↓↓	↓↓	↓	↓	↓
20. The activities would be planned so as to ensure the academic achievement of the children.	65%	↓↓	↓↓	↓↓	↓↓	↓↓	↓	↓	↓
21. There would be a set sequence of instruction each day	73%	↓	↓	↓↓	↓↓	↓↓	↓	↓	↓
22. The children would determine the pace of their learning	68%		↓		↓↓	↓	↓	↓	↓
23. The teacher would determine the pace of instruction.	65%	↓		↓					

4.6.2.1 Teachers' Groups

All three teachers' groups indicated that less time should be spent using materials and activities which are aimed toward academic achievement. The Preschool and Kindergarten teachers would like to see more individualization of program goals. The Preschool teachers would also like to see more teacher-child cooperation in planning programs, and less time following a set sequence of instruction. There was close agreement between the Kindergarten teachers and the other two teacher groups, therefore the comments about the Kindergarten teachers in section 4.6.1 are applicable here.

4.6.2.2 Administrators' Groups

Both School and District administrators agreed that there should be a smaller proportion of time devoted to academics on the ideal program. However, they also indicated that there should be less time than at present when children were free to choose their own activities, less time when children would determine their pace of learning, and less time when the children would determine program content by their interests in the materials available. Thus, the administrators suggest that the ideal program would involve a transfer of control over the nature of the activities from the child to the teacher relative to the actual program.

4.6.2.3 The Parents' Groups

The parents would like the ideal Kindergarten program to provide a very large increase over the present program in the use of workbooks and worksheets, and more emphasis on developing a child's self-concept through academic skills. They want less time in which the children are free to choose their own activities, and less time when the children are learning through the use of manipulative materials. All three parent groups would like to see somewhat less time being spent on academics than is presently done, but not as marked a decrease in time as suggested by the teachers and administrators.

The parents' concern over the use of workbooks and worksheets may imply a desire for tangible evidence of a child's progress in Kindergarten, and may indicate a desire by parents to become more familiar with the current Kindergarten program and what their child is doing (see Chapter 7).

4.7 Cluster Analysis

Each Kindergarten teacher's response to the 23 statements, describing the actual Kindergarten program, produced a score profile for that teacher on that question. By examining that profile, a picture of what went on in that teacher's classroom could be obtained. In the previous parts of this chapter, the mean response to each statement was examined and an average profile of Kindergarten teachers classroom was produced.

There are many different ways of teaching Kindergarten, therefore, it is important to determine whether there are subgroups of Kindergarten teachers who have similar score profiles, but are different with respect to their responses from other subgroups. For example, one subgroup might have a child centred approach while another an academic approach. A mathematical technique which will identify these subgroups is called cluster analysis.

Cluster analysis groups persons in the sample so that each "cluster" contains people with similar score profiles (see Blashfield, 1976 for a good summary discussion of the different methods of clustering). The recommended method of clustering is the minimum variance method.

The following discussion is conceptual and omits many supporting statistical details. Readers desiring more technical information are urged to contact the authors.

4.7.1 The Analysis: Step 1

Using the UBC CGROUP cluster analysis program, a random sample of 200 Kindergarten teachers was taken from the 1025 returns. Question 71, the description of the actual program, was analysed (after standardization) using the cluster analysis program. The solution which produced three clusters of teachers was chosen for further examination. Selecting the number of clusters to be retained for further analysis was a judgemental procedure based on an error index and selecting index produced by the CGROUP Program, as well as on the number of persons in each cluster.

4.7.2 The Analysis: Step 2

Given the three groups formed by the cluster analysis, the problem became: to determine which of the 23 statements were contributing most to the differences among the groups. To solve this problem, a statistical procedure called discriminant analysis was used.

The discriminant analysis combined and weighted the ratings given the statements by the cluster groups in order to maximize the "distance" between all possible pairs of the three groups. The weighting given in each statement is representative of the importance of the statement in explaining the "distance" among the groups. For this study, the discriminant analysis program in the Statistical Package for the Social Sciences (SPSS) was used. The step wise option, which selected only those statements giving the best separation, was chosen. The analysis produced two functions. Function 1 described how the groups could be separated in one dimension, and Function 2 how the groups could be separated in another dimension (see Figure 4.3).

FIGURE 4.3

SEPARATION OF THE CLUSTER ANALYSIS GROUPS
(From Group Centroids)

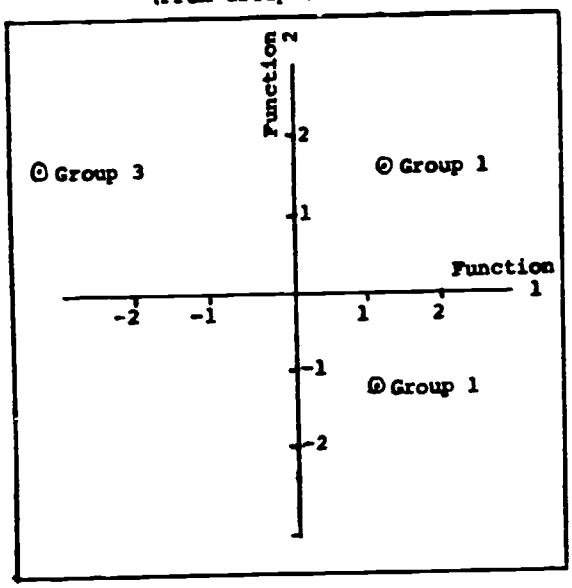


Table 4.5 summarizes the relevant statistics for this analysis.

TABLE 4.5

SUMMARY TABLE FOR THE DISCRIMINANT ANALYSIS USING THE "ACTUAL PROGRAM" QUESTION AND THE CLUSTER GROUPS

Function	Eigen-values	Percent of Variance	Canonical Correlation	Chi Square	df	Sig.	Discrimi-nating Power
1	2.23	67.1	0.83	311.5	34	.000	
2	1.09	32.9	0.72	120.5	16	.000	85%

Table 4.6 shows the weightings produced by the stepwise discriminant analysis for each statement included in the final solution. The statements not included did not significantly add to the separation among the groups. The larger the weightings (i.e., standardized discriminant function co-efficients) the greater the contribution to separating the groups. The Function 1 weightings describe the separation along the horizontal axis in Figure 4.3, and Function 2 describes the vertical separation. Statistically, Function 1 is about twice as important as Function 2.

TABLE 4.6

STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS

	FUNCTION 1	FUNCTION 2
The activities are planned so as to ensure the academic achievement of the children.	0.24816	-0.03736
The teacher determines the pace of instruction.	0.30860*	0.12534
Correct responses by the children are immediately reinforced by material rewards (e.g. candy, raisins, special activities)	0.08118	0.07619
The children's positive feelings about themselves are more important than academic skills.	0.04916	0.34821
There is a rapid pace of instruction to ensure that children learn all the necessary skills.	0.22455	0.46156**
Children's self-concept is developed mainly through success in academic skills	0.38956*	0 06840
The children determine the nature of the activities	-0.20745	0 35381**
Program goals are determined for each child individually.	-0.09058	0 14309
There is a set sequence of instruction each day.	0.14517	-0.024651
The content is determined by the materials the teachers must use.	0.26353	-0.08247
Children are free to choose their own activities.	0.27624	0.13068
The children determine the pace of learning.		
The materials are specifically chosen to increase the academic skills of the children.	0.10551	0.15442
There is an emphasis on materials found in the environment (e.g. sand, water).	-0.13378	0.040412**
The interest of children in the materials determine the program content.	-0.14597	0.29031
The children's self-concepts are developed through success in working with other children.	-0.27141	0 20822

*Coefficients which discriminate in Function 1
**Coefficients which discriminate in Function 2.

A method to determine the adequacy of these two discriminant functions is to use the functions to determine again if each person "belonged" to a certain group. When this was done, 91% of the teachers were correctly reassigned to their groups. Those results suggest that the groups generated by the cluster analysis were statistically distinct.

4.7.3 Description of the Differences Among the Cluster Groups

The most comprehensible solution can be obtained from the statements having the highest three weightings, for each function, shown in Table 4.6. These statements are presented in Figure 4.4. They show that Function 1 discriminates among all three groups; while Function 2 discriminates Cluster 2 from Clusters 1 and 3. The results suggest the following descriptions:

	Description
Cluster 1	Relative to the other clusters there is: 1. A higher emphasis on academics 2. Higher teacher control on the pace of instruction 3. A more rapid pace of instruction 4. A greater emphasis on materials found in the environment 5. A more moderate child control over the nature of the activities.
Cluster 2	Relative to the other clusters there is: 1. A more moderate emphasis on academics 2. More moderate teacher control on the pace of instruction 3. A slower pace of instruction 4. A lower emphasis on materials found in the environment 5. Lower child control over the nature of activities.
Cluster 3	Relative to the other clusters there is: 1. A lower emphasis on academics 2. Lower teacher control on the pace of instruction 3. A more moderate pace of instruction 4. A more moderate to higher emphasis on materials found in the environment 5. Higher child control on the nature of the activities.

The above descriptions provide three pictures of different Kindergartens in the province. Cluster 1 Kindergarten has a relatively higher emphasis on academics with a more rapid pace of instruction than in other Kindergartens. In addition, the teacher controls the pace of instruction. In contrast, the Cluster 3 Kindergarten has a lower emphasis on academics, a more moderate pace of instruction, and lower control by the teacher on the pace of instruction than in other Kindergartens. Cluster 2 is between

those two Clusters in terms of academics and control, but lower in terms of pace of instruction and child control over the nature of the activities.

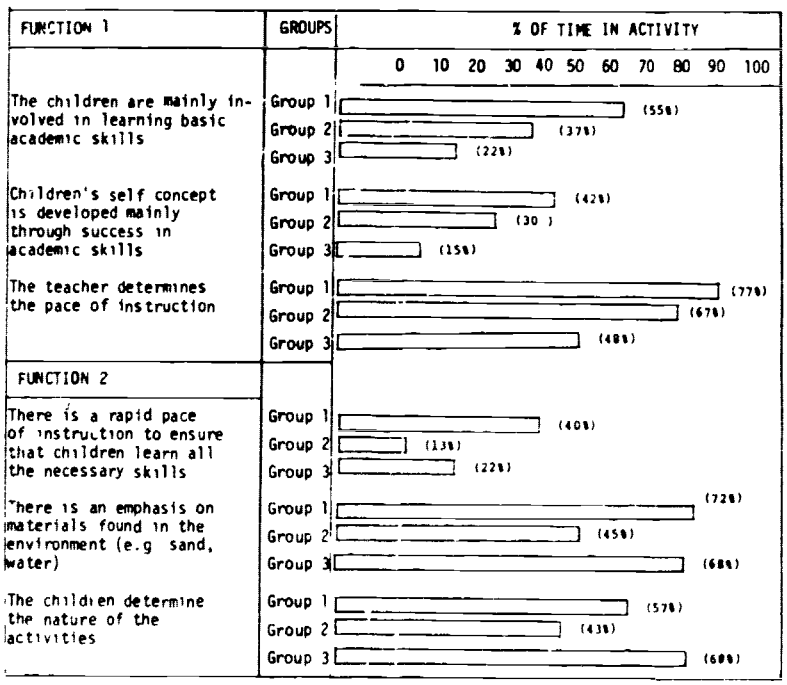
Further analysis using the Chi square statistic revealed that a disproportionate number of teachers in Cluster 1 had formal Reading Readiness programs as compared to the other two Clusters. (X^2 = 18.03, p. 0.001). There were no differences among the clusters on rural or urban location, total years of teaching experince, years teaching Kindergarten or Teacher Qualification Service category.

It must be borne in mind that the above comments are relative comments. That is, the statements that Cluster 1 Kindergartens have a higher emphasis on academics, indicates the emphasis relative to the other groups. Figure 4.4 should be examined for the absolute estimates of time spent.

In terms of the sample of 200 used in this analysis, 29% of Kindergartens are those of Cluster 1, 42% are Cluster 2 and 29% are Cluster 3.

FIGURE 4.4

STATEMENTS DISCRIMINATING AMONG THE CLUSTER GROUPS



4.8 Summary

The eight groups of respondents were asked to rate the purposes of the Kindergarten on a five-point scale ranging from "Not at all important" to "Absolutely essential". The purposes stated reflected those found on the continuum of current curriculum models which ranged from an emphasis on the affective to an emphasis on academic concerns.

The most important purposes selected by all respondents were affective in nature while those emphasizing the preparation for academic subjects were judged to be of relatively less importance. When the responses of the parents and the educators were examined separately, parents put relatively less emphasis on the affective purposes than on academic ones. The reverse was true for the teachers and administrators.

The Grade 1 teachers and parents, and the administrators rated the Kindergarten as effective in meeting the stated purposes with socialization, easing the transition from home to school, and the development of positive self-concepts obtaining the highest scores. All groups rated the Kindergarten relatively least effective in enabling the child to become self-directive.

Twenty-three statements which were representative of the practice of the Early Childhood Education Models were listed. The Kindergarten teachers were asked to indicate the degree to which each statement described their actual classroom. They were also asked as were the other teachers, the administrators and the parents, to indicate which of the same statements would be true of an ideal Kindergarten.

The profile of the actual Kindergarten program which emerged from the information collected, described a model of a highly co operative and non-competitive learning environment with a lower emphasis on academic skills and a higher emphasis on developing positive self-concepts. On the continuum established for Early Childhood Education Models, it would be placed between the Cognitive-Discovery Models and the Discovery Model.

The ideal Kindergarten program selected by the Kindergarten teachers would include increases in the amount of teacher-child co operative planning and of individualized programs. There would be a significant decrease in the academic emphasis perceived in the present program and on fixed sequences of instruction. Thus, the ideal program would be closer than the present one to the Discovery Model. There was close agreement among all groups of teachers on this position.

The School and District administrators indicated that the ideal program should be less child-centred and more teacher-directed than the present one.

The parents would like the ideal program to have more emphasis on some specific academic skills and activities but have less time spent on them. These skills were of the pencil-and-paper type and would provide tangible evidence of the scope of the Kindergarten program.

Each Kindergarten teachers' response to the 23 statements describing the actual Kindergarten program produced a score profile for that teacher on each statement. The mean response to each statement produced the avarage profile of the actual Kindergarten classroom discussed above. It seemed important to determine whether there were subgroups of Kindergarten teachers who had similar score profiles and had different responses from other subgroups. The mathematical technique of Cluster Analysis was used to "cluster" a random sample of 200 Kindergarten teachers into subgroups with similar score profiles.

Three clusters were identified statistically and descriptions made relative to each other. They provide pictures of three different types of Kindergarten classes in the province. These are: (Cluster 1) the highest emphasis on academics particularly in the area of formal reading readiness activities, in a highly teacher-controlled learning situation, (Cluster 2) less emphasis on academic concerns than Cluster 1 and less teacher-control of activities than either Cluster 1 or Cluster 3. (Cluster 3) the least emphasis of the three clusters on academics with less teacher control of instructional activities than Cluster 1.

Less than one-third of the sample of 200 Kindergartens are in each of Cluster 1 and 3, while the greatest number, almost one-half, fall in the Cluster 2 category.

CHAPTER 5

CURRICULUM GUIDE AND RESOURCE BOOK

5.1 Introduction

This chapter presents the results of survey questions to Kindergarten teachers about the current Kindergarten Curriculum Guide (1973) and Resource Book for Kindergartens (1973). These guides resulted from the revision of the 1954 Programme of Studies for the Elementary Schools of British Columbia: Kindergarten Manual (see Chapter 3).

Kindergarten teachers were asked about the following aspects of the Curriculum Guide and Resource Book:

1. Familiarity with and the use of these two publications (5.2);
2. The quality of the current publication (5.3); and
3. Suggestions for each section of the current Resource Book and reaction to possible additions (5.4 and 5.5).

Grade 1 teachers and School and District administrators were also asked to comment on some aspects of the Kindergarten curriculum.

5.2 Familiarity With and Use of the Guides

Kindergarten teachers were asked how familiar they were with the present Kindergarten Curriculum Guide and Resource Book for Kindergartens. Of the responding teachers (n = 984), 39% reported being "Very familiar", 49% were "Somewhat familiar", 8% were "Slightly familiar", and 4% were "Not at all familiar" with these two publications.

Kindergarten teachers were asked to what extent they used the suggested practices described in the present Kindergarten Curriculum Guide and Resource Book. Of the responding teachers (n = 947), 1% indicated "Completely", 39% indicated "Mainly", 40% "Moderately", 13% "Somewhat", 6% "Slightly", and 1% indicated "Not at all".

More than four-fifths of the responding Kindergarten teachers indicated that they were at least somewhat familiar with the Kindergarten Curriculum Guide and Resource Book and used them to at least a moderate extent. A few Kindergarten teachers wrote that they had never seen a copy of the Curriculum Guide.

Other typical comments included:

> I am strongly in favour of the philosophy of the Kindergarten Resource Book (sic) for all young children (ages 5-8). Programs for the children

> K - 2 should be informal, integrated and individualized. (Kindergarten teacher)
>
> I really like the Resource Book and the underlying philosophy of treating each child as a "whole person" rather than the emphasis on just the academic skills. (Kindergarten teacher)

5.3 Quality of the Guides

The Kindergarten teachers who indicated they were at least slightly familiar with the Kindergarten Curriculum Guide and Resource Book were asked to rate the quality of each of these guides.

The quality of the Curriculum Guide was rated as "Excellent" by 5% of the responding teachers (n = 918), "Good" by 38%, "Fair" by 35%, "Poor" by 14%, with 8% indicating "No opinion".

The Resource Book was given a higher quality rating overall than the Curriculum Guide. Of the responding teachers (n = 934), 12% rated it as "Excellent", 50% as "Good", 29% as "Fair", 5% as "Poor", with 4% indicating "No opinion".

Written comments by Kindergarten teachers indicated a desire for an updating of content and for improvement in quality of the guides while expressing concern that any revision not be prescriptive. Some typical comments were:

> The Kindergarten Guide should include philosophy as well as "how to" information. The present Resource Book needs an update and expansion. (Kindergarten teacher)
>
> There is definite need for a more comprehensive guide--what exactly should we be teaching in Kindergarten. (Kindergarten teacher)
>
> I suggest you refer to some excellent kindergarten guides in Ontario, California for a model. Ours is not comparable to a quality guide. (Kindergarten teacher)
>
> I feel that it is very important to leave the program open ended—and not prescriptive. (Kindergarten teacher)

5.4 Degree of Adequacy of Content

Both Kindergarten and Grade 1 teachers were asked to comment on the adequacy of some areas of the Kindergarten curriculum (as they are described in the guides), as to whether or not each should be "Kept the same", or if "More" or "Less" should be required, when compared with what is currently suggested.

TABLE 5.1

ADEQUACY OF CONTENT IN CURRENT KINDERGARTEN CURRICULUM
(Entries are percentages)

Areas	More	Same	Less	Un-decided
Time for teacher preparation within the school day				
Kgn tchrs*	76	19	1	4
Gr. 1 tchrs*	65	28	0	7
Released time for conferences with parents				
Kgn tchrs	75	22	0	3
Gr. 1 tchrs	58	33	0	9
Released time for making home visits				
Kgn tchrs	45	28	6	21
Gr. 1 tchrs	41	34	4	21
Parent involvement				
Kgn tchrs	31	59	3	7
Gr. 1 tchrs	30	60	3	7
Readiness for reading				
Kgn tchrs	28	67	3	2
Gr. 1 tchrs	46	51	1	2
Opportunities for observation by parents				
Kgn tchrs	27	62	4	7
Gr. 1 tchrs	26	61	2	11
Mathematics				
Kgn tchrs	21	78	0	1
Gr. 1 tchrs	15	78	0	1
Activity centres				
Kgn tchrs	19	78	1	2
Gr. 1 tchrs	22	70	1	7
Social sciences (social studies, science)				
Kgn tchrs	17	80	1	2
Gr. 1 tchrs	15	76	1	8
Fine arts (art, music)				
Kgn tchrs	17	82	0	1
Gr. 1 tchrs	14	80	0	6
Free activity time				
Kgn tchrs	7	87	4	2
Gr. 1 tchrs	6	78	11	5
Formalized reading				
Kgn tchrs	5	62	21	12
Gr. 1 tchrs	8	57	21	14

*Kindergarten teachers n = 953 - 986
Grade 1 teachers n = 506 - 520

As shown in Table 5.1, three-quarters of the responding Kindergarten teachers reported more time is needed for preparation and for conferences with parents. Approximately three-quarters of the Kindergarten and Grade 1 teachers were in agreement with keeping the content the same in the other areas on which they were asked to report: free activity time, fine arts, social sciences, activity centres, mathematics, readiness for reading, formalized reading (see Chapter 6), opportunities for parent observation, and parent involvement (see Chapter 7).

It is noted that 46% of the responding Grade 1 teachers want more reading readiness in Kindergarten compared to only 28% of the Kindergarten teachers. This topic is discussed in more detail in Chapter 6.

Three-quarters of the Kindergarten teachers, but only half of the Grade 1 teachers, indicated more release time for conferences with parents is needed. This may be a reflection of Kindergarten teachers' preference for conferences as a means of reporting to parents. This topic is discussed in more detail in Chapter 7.

Seventy percent or more of both the responding Kindergarten and Grade 1 teachers indicated that activity centres should receive the same emphasis as at present. A more detailed description of opinions on activity centres and use of specific activity centres is in Section 11.4.

Kindergarten and Grade 1 teachers, School and District administrators were asked to agree/disagree with the statement: An integrated curriculum is the most effective curriculum for the Kindergarten. Of those responding, 94% of the Kindergarten teachers (n = 1010), 83% of the Grade 1 teachers (n = 512), 84% of the School administrators (n = 413), and 95% of the District administrators (n = 57) agreed with the statement. The percentage of disagreement ranged from 1 to 3%. Therefore, it seems there is a very high percentage of agreement that an integrated curriculum is most effective for Kindergarten.

Support for an integrated curriculum in Kindergarten was also found in the written comments of Kindergarten teachers, as is illustrated by the following typical comment:

> An integrate urriculum should be stressed with the artificial differences between subject areas eliminated. (Kindergarten teacher)

5.5 Advice for Possible Revision

Kindergarten teachers were also asked to give their opinions on (a) possible areas for revision in the Kindergarten curriculum guides, and (b) each section of the current Resource Book for Kindergartens.

5.5.1 Kindergarten Curriculum

With reference to "If the Kindergarten curriculum were to be revised," Kindergarten teachers were asked what advice they would give a revision committee for a new curriculum guide and/or resource book.

As shown in Table 5.2, at least four-fifths of the responding Kindergarten teachers advised that a new curriculum should include more suggestions for possible units or activities, a specific statement of goals and purposes of Kindergarten, and a description of suitable tests and observation instruments for use in Kindergarten.

TABLE 5.2

ADVICE BY KINDERGARTEN TEACHERS* FOR POSSIBLE REVISION
(Entries are percentages)

If the Kindergarten curriculum were to be revised, indicate what advice you would give to a revision committee about a new curriculum guide and resource book.			
Possible changes	Yes	No	Undecided
Provide more SUGGESTIONS for possible units or activities.	93	5	2
Add a SPECIFIC statement as to the goals and purposes of Kindergarten.	84	10	6
Add a section describing tests and observation instruments suitable for Kindergarten.	80	11	9
Add a more specific statement on the role of play.	72	19	9
Provide a list of specific skills which should be attained by the children.	65	24	11
Add a more comprehensive statement on the teaching of reading in Kindergarten	63	26	11
Keep the Kindergarten curriculum guide and resource book as a separate guide.	58	23	19
Include the Kindergarten curriculum as a subsection in the other elementary level curriculum guides.	40	44	16
Keep the content the same as the present.	34	44	22
Provide a list of REQUIRED units or activities.	29	62	9

*n = 862 - 911 depending on item.

A majority of responding Kindergarten teachers did not want required units or activities included in the Kindergarten curriculum. Also, a majority advised that a more specific statement of play, a list of specific skills, and a statement on the teaching of reading be part of a possible revised curriculum guide. These three topics have been areas of controversy and misunderstanding among teachers, parents, and administrators. Written comments by Kindergarten teachers indicated that such statements are needed in order to clarify the Kindergarten curriculum:

> Essential to the curriculum is a statement regarding the value of play. I have observed many Kindergarten teachers resorting to readiness stencils because they either do not know how to establish centres and promote play or they feel guilty allowing kids to play. (Kindergarten teacher)

> Due to the vague "curriculum guide" there has been many a dispute between Kindergarten teachers and grade teachers regarding the necessary skills

needed to pass a child to Grade 1. Let's have the skills listed in black and white. (Kindergarten teacher)

It would be good to have a more definite guideline of skills, or areas that are to be taught in Kindergarten so that there is more consistency throughout the Province. (Kindergarten teacher)

The purpose of Kindergarten is not clearly understood by the teachers and especially the parents . . . the Department of Education (sic) needs to come out and say what the role of Kindergarten is and where does Kindergarten end and Grade 1 begin? (Kindergarten teacher)

Yes, a statement on the teaching of reading in Kindergarten should be added. The section on reading in the Ottawa Kindergarten Resource Book (1974) pp. 62-69 is excellent. (Kindergarten teacher)

I would like to see some clarification of the role of the Kindergarten teacher as regards reading readiness. (Kindergarten teacher)

A resource book giving Kindergarten teachers ideas on innovative and fun pre-reading, pre-arithmetic, language skills would be most helpful--if the suggestions were not work book oriented but game and manipulatively designed. (Kindergarten teacher)

A larger percentage (13% more) of rural teachers expressed a need for a list of specific skills which should be attained by the children. This finding may be related to the fact that the rural Kindergarten teachers did not think they were as well-prepared by pre-service training as urban teachers and have fewer years of training (see Chapter 12).

Kindergarten and Grade 1 teachers, School and District administrators were asked to agree/disagree with the following idea expressed in the Resource Book for Kindergartens: Play is the most important learning method of Kindergarten children. Agreement with this statement was expressed by 88% of the responding Kindergarten teachers (n = 1008), 65% of the Grade 1 teachers (n = 519), 59% of the School administrators (n = 419), and 68% of the District administrators (n = 56). The difference of at least 20% between the level of agreement by Kindergarten teachers and that of the other respondents indicates that play is seen as more important by Kindergarten teachers than by Grade 1 teachers and administrators. It also lends support to the opinion of a majority of Kindergarten teachers that a more specific statement on the role of play is needed in the revised Kindergarten curriculum guides. As one Kindergarten teacher stated:

> The importance of play as a child's work/learning mode needs to have more emphasis particularly to parents today who put pressure on teachers to teach their children "basics" in a more formalized manner. (Kindergarten teacher)

A majority of the responding Kindergarten teachers indicated that the Kindergarten Curriculum Guide and Resource Book should be kept separate. However, the respondents were almost equally divided on including the Kindergarten curriculum as a subsection in the other elementary level curriculum guides. These results may reflect the fact that, while Kindergarten teachers realize a Kindergarten curriculum should not be developed in isolation from the rest of the elementary curricula, they are concerned that the uniqueness of Kindergarten be recognized. As one teacher commented:

> I do like having a separate resource book, but feel the curriculum guide could be put in with the other elementary guides so that staff and parents would start to respect Kindergarten more as an integral part of the system. (Kindergarten teacher)

Format may also be a concern in that a Kindergarten curriculum divided among several separate curriculum guides would be unwieldy in terms of of daily use.

5.5.2 Resource Book

Kindergarten teachers were asked for the advice that they would give a curriculum revision committee regarding each specific section of the Resource Book. As shown in Table 5.3, only a very small percentage (0-2%) of the teachers advised deleting or decreasing any of the sections of the Resource Book. A majority of the responding Kindergarten teachers indicated the sections that needed updating: Ideas that Work; sections dealing with equipment, supplies and materials and where to obtain them; lists of publications for both children and teachers; and the section on Evaluation.

The responding teachers were split as to whether or not to update or leave the same, the sections Subject Areas, Activity Centres, an Integrated Curriculum, the Learning Environment, Work Period, Field Trips and Kindergarten Setting. However, in view of the fact that changes have occurred since the printing of the Kindergarten Curriculum Guide in 1973, a review of these sections especially the Subject Areas, may be advisable.

A majority of the responding Kindergarten teachers wanted the following sections left the same: Blocks of Time, Parent Teacher Partnerships, First Days, and the Kindergarten child.

The sections of the Resource Book that Kindergarten teachers want up-dated or expanded are those concerned with the practical, day-to-day, "how-to" aspects of teaching Kindergarten. The responding teachers are more satisfied with those sections dealing with more general areas (e.g., scheduling, the Kindergarten child).

TABLE 5.3

ADVICE BY KINDERGARTEN TEACHERS* FOR POSSIBLE REVISION OF EACH SECTION OF THE KINDERGARTEN RESOURCE BOOK
(Entries are percentages)

The following are sections in the current Resource Book on Kindergarten. If the Kindergarten curriculum were to be revised, what advice would you give a revision committee regarding each section?

Section of Resource Book	Update or Add to	Leave the same	Decrease	Delete	No opinion or Don't know
Ideas that Work	80	15	0	2	3
Children's Book	79	17	0	0	4
Multi-Media Supplies & Sources	74	20	0	1	5
Professional Bibliography	71	21	1	1	6
Suppliers of Equipment	71	20	0	2	7
Equipment and Material List	70	25	0	0	5
Cooking Experiences	70	25	1	0	4
Directory of Publishers	63	25	1	2	9
Evaluation	62	32	1	0	5
Stuff to Scrounge	56	38	0	2	4
Selecting Equipment	54	40	0	1	5
Subject areas	53	42	0	0	5
Activity centres	51	45	1	0	3
An Integrated Curriculum	50	45	0	0	5
The Learning Environment	45	50	0	0	5
Work Period	45	50	0	0	5
Field Trips	44	51	0	0	5
Kindergarten Setting	41	53	1	0	5
The Kindergarten Child	38	57	0	0	5
First Days	37	57	1	1	4
Parent-Teacher Partnership	34	59	1	0	6
Blocks of Time	31	62	1	1	5

*n = 840 - 856 depending on item.

A content analysis of the written comments showed that the Resource Book/ Curriculum Guide was the most frequent subject of Kindergarten teachers' comments. Some typical written comments are:

> It would be a big help to have outlines for suggested units in all topics which teachers might make use of, as required, in their classes. (Kindergarten teacher)
>
> We need more "Ideas that Work". (Kindergarten teacher)
>
> The Resource Book definitely needs to udpate the cooking section to more nutritious recipes. (Kindergarten teacher)

A list of essential equipment should be given to every school principal. (Kindergarten teacher)

I'd like a good guide to evaluation (formal and anecdotal). (Kindergarten teacher)

Several Kindergarten teachers mentioned the following guides and resource books as having both good formats and practical suggestions:

Nash, B. Chris. A principal's or administrator's guide to kindergarten: what to look for in kindergarten programmes and how to know when you see it. Informal Series/10, Ontario Institute for Studies in Education, Toronto, 1979.

Chernowski, Kay. (Ed.) Come trip with us. Early Childhood Services, Edmonton Public Schools, Edmonton, 1980.

Stewart, Olive M. Coquitlam Kindergartens. Coquitlam School District. Revised 1975.

Other teachers commented favorably on resource materials produced in Manitoba and Ontario, in Winnipeg and Ottawa.

5.6 Summary

In general, Kindergarten teachers used the Curriculum Guide and Resource Book and rated the quality between fair and good.

The majority of responding Kindergarten teachers indicated that more information needs to be included in the Curriculum Guide and Resource Book in the areas of time for preparation and parent conferences; ideas and suggested units and activities; goals and purposes of Kindergarten; methods and instruments suitable for evaluation of the Kindergarten child; the role of play in the Kindergarten; specific skills to be attained by the Kindergarten child; equipment, supplies and materials necessary for implementing the Kindergarten program; and lists of publications for both the Kindergarten child and the teacher.

CHAPTER 6

THE RELATIONSHIP OF THE KINDERGARTEN TO PRESCHOOL AND GRADE 1

6.1 Introduction

This chapter presents the responses of Kindergarten, Grade 1, and Preschool teachers; School and District administrators; and Kindergarten, Grade 1, and Preschool parents to questions on various aspects of:

1. The relationship of Kindergarten and Preschool (6.2); and
2. The relationship of Kindergarten and Grade 1 (6.3).

6.2 Kindergarten and the Preschool

One of the most significant trends in the 1970's with educational implications was the increased number of children enrolled in Preschool programs (e.g., day care, nursery school, play group). This increase has been due in large part to the need of many mothers of young children to work outside the home. In fact, there is "overwhelming evidence . . . that mothers enter the work force either as the sole provider for their families or because they found one salary insufficient to meet the rising cost of living" (National Day Care Information Centre, 1978, p. 1). Preschool, and especially day care, is no longer a luxury of the upper middle class who use the programs to provide extra socialization experiences for their children but a necessity for thousands of parents and children. In "March 1979, there were an estimated 504,000 children (in Canada) aged 2 to 6 of working mothers. The data indicates (sic) that 77,929 or 15.46% of children aged 2 to 6 of working mothers, are enrolled in day care services" (National Day Care Information Center, 1979, p. 6). These statistics do not include attendance in half-day programs (e.g., nursery schools). The National Day Care Information Center, (1979) forecasts that this trend of increasing numbers of working mothers with Preschool-aged children "will continue well into the future" (p. 1).

Because many children will have had experiences in organized educational programs before beginning Kindergarten, it is important to gather as much information as possible about this experience and its possible implications. As part of this survey, an attempt was made to investigate the following areas:

1. The number of children enrolled in the various types of licensed Preschool programs, and the percentage of children currently in Kindergarten and Grade 1 who were enrolled in Preschool programs;

2. The reasons of parents for enrolling or not enrolling children in Preschool programs;
3. The effect of this Preschool experience on how well children adapt to Kindergarten, and
4. The type of contacts between Kindergarten and Preschool teachers and their opinion of the need for closer contact.

6.2.1 Enrolment in Preschool Programs

Kindergarten and Grade 1 parents were asked if their child had attended a Preschool program before entering Kindergarten. Sixty-one percent of the responding Kindergarten parents (n = 458) and 57% of the Grade 1 parents (n = 400) reported doing so. When asked for the length of time of enrolment, the mean, median, and mode for both groups were two years. Kindergarten teachers were asked to give the percentage of their current Kindergarten class that attended Preschool. Of the Kindergarten teachers (n = 992) responding, 12% did not know and the remaining 87% ranged from 0 to 100% with the mode and median at 50%.

The national trend of increased use of Preschool programs is reflected in the percentage of parents reporting their child's attendance in a Preschool program (e.g., day care, nursery school) prior to beginning Kindergarten. Kindergarten teachers indicated a similar degree of previous enrolment in Preschool programs. Sixty-three percent of the responding Preschool teachers indicated having a wait list for enrolment varying from 1 - 125 with a mode of 10 and a median of 14.

If it can be assumed that at least half the children currently attending Kindergarten in British Columbia have had experience in a pre-Kindergarten program, this has implications for the current Kindergarten program. As the number of children enrolled in such programs is projected to increase, planning of the Kindergarten program for the future must consider the possible implications of this trend.

The types of Preschool programs attended by Kindergarten and Grade 1 children or currently being attended by Preschool children are described in Table 6.1

From the information provided by the parents, it appears that the majority of the children were enrolled in a nursery school program of a type involving a co-operative situation. In this setting, parents are required to donate a specific amount of time to the program; and therefore, co-operatives can usually charge lower tuition than other similar programs. These parents have been accustomed to having an active role in their children's education and written comments indicated that some of these parents were disappointed in their more limited role in the public school. A typical comment was:

> I would like to see involvement of parents in our Kindergarten and Grades 1 and 2; parents to help o ., never to take over the teacher's

job. A co-op is a perfect start. (Preschool teacher)

Parent involvement is discussed in detail in Chapter 7.)

TABLE 6.1

DESCRIPTION OF PRESCHOOL PROGRAM ATTENDED BY CHILD
(Entries are percentages)

Which of the following best describes the preschool program attended by your child?			
	Parents		
Type of Preschool Program	Kindergarten n = 284	Grade 1 n = 233	Preschool n = 337
Nursery school	68	64	76
Group day care	19	25	17
Kindergarten	10	7	6
Special day care	3	4	1

Check all* of the following which apply to the preschool program your child attended/ attends		
	Parents	
Type of Preschool Program	Kindergarten n = 264	Grade 1 n = 219
Cooperative preschool	52	51
Daycare/nursery school	43	42
Montessori preschool	8	4
Family day care	5	7
After school care	-	2

*More than one response was possible

6.2.2 Reasons for Enrolling/Not Enrolling Child in Preschool

Kindergarten, Grade 1 and Preschool parents who reported enrolling their children in a Preschool program were asked to indicate their reasons for doing so. As shown in Table 6.2, the most frequent reason indicated by all three groups was that Preschool is a valuable experience for children. A majority also indicated that a good quality program was available and that the child wanted to go to Preschool. The pattern of response among Kindergarten, Grade 1, and Preschool parents was very similar.

Kindergarten and Grade 1 parents who reported not enrolling their children in a Preschool program were asked to indicate their reasons.

TABLE 6.2

MAIN REASONS FOR ENROLLING CHILD IN A PRESCHOOL PROGRAM
(Entries are percentages)

What are the MAIN reasons you enrolled your child(ren) in a preschool program?			
	Parents		
Reasons*	Kindergarten n = 288	Grade 1 n = 233	Preschool n = 353
Preschool is a valuable experience for children	73	76	80
Good quality program available	60	53	55
Child wanted to go	50	52	46
No playmates own age in neighborhood	39	33	38
Conveniently located	16	21	16
Affordable	14	13	11
Working parent(s)	13	15	16
Only child	12	12	8
Reduces stress on parent	9	11	14
Special need child	4	3	1
Other	5	3	4

*More than one response was possible.

The most frequently indicated reason for not enrolling their children was that the child did not need such a program (see Table 6.3). The next most frequent reason given by both groups was that Preschool-aged children are best kept at home. Residence in an urban or rural area did not show a significant difference on items such as distance of, transportation to, or availability of Preschool programs. However, a quarter of the parents of Kindergarten children indicated that a Preschool was too expensive or too far away. In comparing these responses from Kindergarten and Grade 1 parents, there is a 9 - 10% difference between the two groups on these items. One could speculate that the state of the economy and the price of gasoline might contribute to an increasing number of parents indicating expense and distance as reasons for not enrolling their children in a Preschool Program.

TABLE 6.3

MAIN REASONS FOR NOT ENROLLING CHILD IN A PRESCHOOL PROGRAM
(Entries are percentages)

Check the MAIN reasons you did not enrol your child in a preschool program		
	Parents	
Reasons*	Kindergarten n = 177	Grade 1 n = 173
Child did not need preschool program	32	27
Preschool children are best kept at home	26	24
Too expensive	25	16
Too far away	23	13
No transportation available	16	17
Not available	15	18
Not satisfied with the quality of the available program(s)	9	13
Other	17	11

*More than one response was possible

Several Preschool parents suggested including Preschool programs in the public school system "...so that preschool is available to all children regardless of the financial situation of their families" (Written comment of Preschool parent). A written brief prepared by the B.C. Preschool Teachers' Association (1980) recommended that "the Ministry of Education accept basic responsibility for Early Childhood Education programs in British Columbia"(n.p.). None of the reasons indicated for not enrolling a child was a majority response. Thus, from this data, it seems as though there are more diverse reasons for not enrolling a child in Preschool and more consensus among responding parents on reasons for enrolling a child.

A comparison of the most frequent reasons for enrolling or not enrolling children in Preschool reflects the two sides of the debate on Early Childhood Education; i.e., it's a valuable experience for young children vs. children do not need it and are better off at home with their mothers. Written comments by parents also illustrate this dichotomy:

> I feel strongly that children up to age of 4½ should be in the home (enviroment). They need the love and caring of parents, friends or small groups of associates. (Kindergarten teacher)

> Having worked in England and Australia for some years, I think our children have been deprived of some early education which is necessary for their success in reading and for the development of intellect. (Kindergarten teacher)

6.2.3 Effect of Preschool Experience

Kindergarten teachers, Preschool teachers, School and District administrators were asked to indicate how children who had attended Preschool programs adapted to Kindergarten as compared to children who had not had this experience (see Table 6.4).

TABLE 6.4

EFFECT OF PRESCHOOL/DAY CARE EXPERIENCE
(Entries are percentages)

In your experience, do children who have attended preschool and/or day care adapt better, the same, or poorer to Kindergarten than other children? (Median is underlined for each responding group)

Response	Teachers		Administrators	
	Kindergarten n = 971	Preschool n = 345	School n = 406	District n = 56
Much bette	16	74	20	7
Somewhat better	48	23	47	43
About the same	30	2	28	38
Somewhat poorer	5	1	4	12
Much poorer	1	-	1	-

At least 50% of the respondents indicated that children who had attended Preschool programs adapted somewhat or much better to Kindergarten when compared to children who had not attended a Preschool program. Nearly three-quarters of the Preschool teachers, as compared to one-sixth of the Kindergarten teachers, indicated that these children's adaptation to Kindergarten was much better. Of the four groups responding, District administrators were the least certain of the better adaptation due to Preschool attendance. One percent or less of all respondents indicated that the children adapted much more poorly. However, 12% of the District administrators indicated the children adapted somewhat more poorly.

The written comments by teachers indicated that there may be a difference between children who attended nursery school (a half-day program) and those who attended a day care (full-day) program. Some illustrative comments are:

> In my experience children who have attended preschool classes adapt much better to Kindergarten. However, children from day care centres, particularly those who have been in some form of day care since infancy usually adapt much more poorly. (Kindergarten teacher)

> A great many Daycare children have difficulty accepting a more structured environment. They resist such routines as cleaning up and participating in quiet activities. Most of those who have attended my kindergarten are aggressive, noisy, rude and difficult to discipline. (Kindergarten teacher)

Kindergarten teachers may need to be aware that children who attend day care as well as Kindergarten because of working parents are required to make daily transitions between home, Kindergarten, and day care. One Kindergarten teacher recommended:

> Day care children should attend morning classes, rather than afternoon classes. This group of children is brighter, easier to control, more eager to listen, and cooperate during a morning session. Because these children generally spend a total of 8-10 hours with a large group of children they need a rest or sleep in the afternoon of an hour - two hours. It has been my experience that day care children in an afternoon Kindergarten class are noisy, uncooperative, inattentive, and tired. (Written comments of Kindergarten teacher)

The attendance by so many children in a pre-Kindergarten program (see Chapter 3) has implications for the Kindergarten program. This point was made by numerous Preschool and Kindergarten teachers and parents in their written comments; one example follows:

> I was more than pleased to complete this questionnaire because our Kindergarten program does need to be assessed. Youngsters no longer start school and formal learning at 5 - 6 years of age. Today children (not all) are being placed in nursery schools, day care, play school, etc. at the age of three. Good day cares are now providing experiences and activities that the Kindergarten does. . . . I do feel that Kindergarten curriculum needs to be expanded upon. (Kindergarten teacher)

6.2.4 Contact Between Kindergarten and Preschool Teachers

Given the trend of more children having Preschool experience before beginning public school Kindergarten, Kindergarten and Preschool teachers were asked to indicate the various types of contact with each other (see Table 6.5).

TABLE 6.5

METHODS OF CONTACT BETWEEN KINDERGARTEN TEACHERS & PRESCHOOLS AND PRESCHOOL TEACHERS & KINDERGARTENS SINCE SEPT. 1979
(Entries are percentages)

Type of Contact*	Teachers	
	Kindergarten n = 983	Preschool n = 345
Exchanging information about a child	40	54
Contacts at professional meetings	29	38
Visits of preschool/day care children to kindergarten	29	34
Informal visits of preschool/day care teachers to school	27	N/A**
Informal visits of kindergarten teachers to preschool/centre	N/A**	28
Informal visits to centre(s)	24	N/A
Informal visits to Kindergarten	N/A	50
Formal visits of preschool/day care teachers to school	9	N/A
Formal visits of kindergarten teachers to preschool centre	N/A	17
Formal visits to centre(s)	8	N/A
Formal visits to kindergarten	N/A	23
Visits of kindergarten class to preschool/ day care centre	4	10
No contact — I did teach kgn/pre-school last year	38	33
No contact — I did not teach kgn/ preschool last year	15	6
Other	7	18

*More than one response was possible
**N/A = not applicable

A majority of the Kindergarten and Preschool teachers, who were teaching last year, reported contact. The most frequent types of contact reported by Kindergarten teachers were the exchange of information about children, contacts at professional meetings and visits of the Preschool children to the Kindergarten. In comparison, a higher percentage of Preschool teachers than Kindergarten teachers reported exchange of information and contacts at professional meetings. About twice as many Preschool teachers reported formal or informal visits to the Kindergarten than Kindergarten teachers to day care centres/preschools.

The results indicate that more Preschool teachers had contact with Kindergarten teachers than vice versa. However, it may have been that a Kindergarten teacher received children from several nursery schools and day care centres whereas a majority of children in a neighbourhood preschool attended the same public school. It may also have been the case that many day care centre teachers had contact with the Kindergarten teacher when collecting the children who attend Kindergarten for part of the day and the day care centre for the remainder.

The written comments of Kindergarten teachers indicated a willingness to make such contacts if release time were provided. For example:

> There is a great need for more continuity in the preschool to Kindergarten and from Kindergarten to Grades 1 and 2. (Kindergarten teacher).
>
> I feel very strongly that Kindergarten teachers should have more contact with preschools and day care centres. This is an area which I would like to devote more time to, if time were available. (Kindergarten teacher)

In order to assess whether Kindergarten and Grade 1 teachers, School and District administrators thought there should be closer contacts, these groups were asked to agree/disagree with the statement: There is a need for Kindergarten teachers to establish closer contacts with the preschool and day care centres.

TABLE 6.6

CLOSER CONTACTS BETWEEN KINDERGARTEN AND PRESCHOOL/DAY CARE
(Entries are percentages)

There is a need for Kindergarten teachers to establish closer contacts with the preschool and day care centres. (Median is underlined for each responding group.)				
	Teachers		Administrators	
Response	Kindergarten n = 1009	Grade 1 n = 522	School n = 419	District n = 58
Strongly Disagree	3	3	4	-
Disagree	18	20	23	16
Neutral/no opinion	29	<u>46</u>	25	31
Agree	<u>40</u>	22	<u>37</u>	<u>41</u>
Strongly agree	10	9	11	12

As shown in Table 6.6, about half of the Kindergarten teachers, District and School administrators agreed or strongly agreed with the statement. Only one-third of the Grade 1 teachers agreed or strongly agreed.

Preschool teachers were asked if they would like more, the same, or less contact with local Kindergarten teachers. Seventy-nine percent of the responding Preschool teachers (n = 345) indicated a desire for more contact, 18% indicated the same, and 3% indicated undecided. Not one Preschool teacher indicated that she would like less contact:

Some illustrative written comments are:

> I would welcome a closer contact with the Kindergarten teachers to foster exchanges of information about students and to give a sense of continuity in the education of the young. (Preschool teacher)
>
> Kindergarten teachers need to know more about 3 and 4 year olds and to visit nursery schools and day cares. Also preschool educators should visit Kindergartens. (Preschool supervisor)
>
> Something has to be done about the attitudes of Kindergarten teachers and day care staff towards each other . . . There needs to be an appreciation and a dialogue and an understanding on both sides of the fence. You go live a week in my classroom and I'll live a week in your, day care might be a starting point. (Preschool teacher).

In summary, it appears that the teachers are willing, the administration is supportive, but the actual mechanics and procedures needed to establish more Kindergarten-Preschool contact and communication are lacking.

6.3 Kindergarten and Grade 1

The child's transition from Kindergarten to Grade 1 requires some adjustments. Typically, the child must adjust to a full-day program, a more structured day, and a more formal curriculum. It is a concern of all Kindergarten and Grade 1 teachers that this transition be smooth and comfortable for the children. However, Kindergarten, Grade 1 teachers and principals agree that this transition can be difficult for some children (Mayfield, 1980).

A conclusion in Language B.C. (1976), was "that more coordination of Kindergarten and primary programs would result in a greater understanding by all teachers of the expectations upon them and a more effective transition for children from one level to another" (v.L, p. 29). This continuity between Kindergarten and Grade 1 has been of concern to educators for a long time. In 1907, Holmes wrote:

> It is universally accepted that the law of unity and continuity applies to the development

> of human beings . . . but educational practice is slow to adjust itself to education theories even after such theories have been permanently established by scientific investigation and criticism. A bald proof of the truth of this statement is found in the relation of Kindergarten education to the first years of school education. (p. 7)

One possible solution for children judged to be insufficiently prepared for Grade 1 is to place them in a transition class. In this survey, a transition class was defined as "a class for children who have had a year in Kindergarten but who are not judged capable of coping with a regular Grade 1 program; also known as junior Grade 1."

Another current concern expressed by teachers is the effect of the Grade 1 curriculum on the Kindergarten. In Language B.C. (1976), such a concern was identified as "an increasing tendency for Kindergarten programs to be a watered-down version of a formal Grade 1 program" (v.1, p. 28). In a recent survey of teachers and administrators in Victoria, it was found that the majority of Kindergarten, Grade 1 teachers and principals did not think this statement was true (Mayfield, 1980).

This survey investigated the following topics about the Kindergarten-Grade 1 relationship:

1. The types of activities used to facilitate coordination and communication between Kindergarten and Grade 1 teachers;

2. The opinions of teachers and administrators on the need for increased communication and coordination;

3. The desirability of Kindergarten-Grade 1 transition classes;

4. The effect of the Grade 1 curriculum on the Kindergarten program; and

5. The role of reading readiness and reading in the Kindergarten program.

6.3.1 Contact Between Kindergarten and Grade 1 Teachers

Kindergarten and Grade 1 teachers were asked to indicate activities they used to facilitate coordination and communication. Table 6.7 is a summary of the percentage of teachers reporting various activities.

TABLE 6.7

ACTIVITIES USED TO FACILITATE COORDINATION AND COMMUNICATION BETWEEN KINDERGARTEN AND GRADE 1 TEACHERS
(Entries are percentages)

Methods of facilitating program coordination and communication*	Teachers selecting method	
	Kindergarten n = 814	Grade 1 n = 434
Beginning of the year meeting of teachers	43	61
Periodic conference of kindergarten and Grade 1 teachers	57	64
End of the year meeting of teachers	63	74
Informal discussion among kindergarten and Grade 1 teachers	92	95
Informal observations	37	60
Primary teachers' meeting - in school	37	49
Primary teachers' meeting - district wide	38	44
Written reports and/or records	72	76
Visit of kindergarten children to Grade 1	67	67
Other	8	12
None of the above	1	1

*More than one response was possible

Only 1% of the Kindergarten and Grade 1 teachers reported using none of the activities. Nearly all of the Kindergarten and Grade 1 teachers reported the use of informal discussion to facilitate communication and coordination. Almost three-quarters of each group reported the use of written reports and/or records. The two groups responded similarly, although more Grade 1 teachers tended to report using the activities. The one exception was that 60% of the Grade 1 teachers, as compared to 37% of the Kindergarten teachers, reported using informal observations.

Table 6.8 summarizes the responses of Kindergarten teachers, Grade 1 teachers, and administrators to the recommendation for increased communication and coordination between Kindergarten and Grade 1 teachers suggested in Language B.C.

TABLE 6.8

NEED FOR INCREASED KINDERGARTEN-GRADE 1
COMMUNICATION AND COORDINATION
(Entries are percentages, Medians are underlined)

There is a need for INCREASED communication between Kindergarten and Grade 1 teachers.

Response	Teachers		Administrators	
	Kindergarten n = 1025	Grade 1 n = 522	School n = 418	District n = 58
Strongly disagree	1	2	3	-
Disagree	9	11	21	14
Neutral/no opinion	12	10	15	7
Agree	54	52	42	50
Strongly agree	24	25	19	29

More cooperation between Kindergarten and primary programs is needed to promote an understanding by all teachers of the expectations upon them.

Response	Teachers		Administrators	
	Kindergarten n = 1013	Grade 1 n = 523	School n = 417	District n = 57
Stronly disagree	1	1	2	-
Disagree	7	8	16	14
Neutral/no opinion	12	9	11	5
Agree	56	53	52	60
Strongly agree	24	29	19	21

More coordination between Kindergarten and primary programs is needed to promote a more effective transition for children from one level to another.

Response	Teachers		Administrators	
	Kindergarten n = 1010	Grade 1 n = 523	School n = 419	District n = 57
Strongly disagree	1	1	2	-
Disagree	9	10	20	14
Neutral/no opinion	12	13	15	7
Agree	53	49	47	56
Strongly agree	25	27	16	23

There is a majority agreement among Kindergarten and Grade 1 teachers, School and District administrators that there is a need for increased communication and coordination between Kindergarten and Grade 1 teachers which would promote an understanding by all teachers of the expectations upon them and to promote a more effective transition for children from one level to another.

Some typical written comments are:

> More coordination is needed between Grade 1 teachers and Kindergarten teachers. I feel there is just too much pressure for children in Grade 1. (Kindergarten teacher)

> A good relationship between Kindergarten and Grade 1 teachers provides valuable information about the children . . . . they can decide together if the children will manage with a standard Grade 1 program. (Grade 1 teacher)

Thus it seems as though more communication is desired between Kindergarten and Grade 1 teachers as well as between Kindergarten and Preschool teachers. The willingness appears to be present as well as support from a majority of administrators.

6.3.2 Kindergarten-Grade 1 Transition Classes

Kindergarten and Grade 1 teachers and administrators were asked if they favoured Kindergarten-Grade 1 transition classes and the reason for their opinion.

TABLE 6.9

KINDERGARTEN-GRADE 1 TRANSITION CLASS
(Entries are percentages)

Do you favour Kindergarten-Grade 1 transition classes? (i.e. classes for children who have had a year in Kindergarten but who are not judged capable of coping with a regular Grade 1 program. Also known as junior Grade 1)

	Teachers		Administrators	
	Kindergarten n = 975	Grade 1 n = 503	School n = 412	District n = 58
YES	60	82	76	83
Reasons:				
Provides time for child to mature	41	46	54	44
Provides time for child to master necessary skills	24	25	20	23
Does not develop pattern of failure	11	6	10	17
Provides time for individualizing instruction	7	4	3	4
Provides an option to repeating kindergarten	7	3	8	4
Reduces achievement pressure	6	5	2	6
Other	1	2	1	1
Did not give reason	4	10	2	1
NO	9	11	14	14
Reasons:				
Needed by only a small number of children	43	44	56	25
Labels child as failure	22	15	23	25
Establishes a pattern of retention for child	9	5	10	-
Presents difficulty in individualizing instruction	6	16	2	-
Causes parental resistance	-	2	2	-
Other	20	15	7	26
Did not give reason	0	4	0	25
Undecided	11	7	10	3

*More than one response was possible

As shown in Table 6.9, over three-quarters of Kindergarten teachers, Grade 1 teachers, School administrators and District administrators favoured Kindergarten-Grade 1 transition classes. The most frequently reported reason for this was that such classes provide time for children to mature.

A small percentage of Kindergarten teachers (9%), Grade 1 teachers (11%), School (14%) and District (14%) administrators did not favour transition classes, most frequently because of the small number of children who need such classes. If only a few children need a transition class, they might have to be moved to another school in order to make up sufficient numbers for a class and this could be a possible source of problems (e.g., transportation and school outside of the neighbourhood).

Some typical written comments by teachers and administrators are:

> I suggest a transitional class for all of these children so that they may be given time to develop the necessary skills and to develop maturity. (Kindergarten teacher)

> I feel there is a great need for a transition class (K-1) in the district. Another year in Kindergarten is not the answer to some of the repeater's problems. (Kindergarten teacher)

> I believe it is also important to have children stay in Kindergarten longer if they are immature without keeping them there for the whole year. Therefore, a transitional class between K-1 would be beneficial if this class was kept quite small (e.g., no more than 15) and these children could attend a full day rather than the usual half day as most Kindergarten children do. (Administrator)

6.3.3 Effects of Grade 1 Curriculum on Kindergarten

Kindergarten and Grade 1 teachers, as well as administrators, were asked if they thought there had been an increase, a decrease, or no change of emphasis in various aspects of the Kindergarten program in their situation as a result of the Grade 1 curriculum.

As shown in Table 6.10, they most frequently indicated that there had been no change in emphasis on play, affective development, social skills, or motor skills. School and District administrators reported that there had been no change of emphasis on academic skills. As indicated by their most frequent response, Kindergarten and Grade 1 teachers thought there had been an increase in emphasis in academic skills in the Kindergarten program as a result of the Grade 1 curriculum.

TABLE 6.10

EFFECT OF GRADE 1 CURRICULUM ON KINDERGARTEN CURRICULUM
(Entries are percentages)

In your school over the past few years, has there been an increase, a decrease, or no change of emphasis in each of these following aspects of your Kindergarten program AS A RESULT OF THE GRADE 1 CURRICULUM?				
	Teachers		Administrators	
Aspects & Response	Kindergarten (n = 972-993)	Grade 1 (n=425-438)	School (n=412-415)	District (n-57)
Academic skills				
Decrease	1	5	2	-
No change	38	39	48	51
Increase	44	40	39	40
Undecided/don't know	17	16	11	9
Play				
Decrease	15	8	12	9
No change	63	57	68	70
Increase	4	11	10	9
Undecided/don't know	18	24	10	12
Affective development				
Decrease	2	2	1	2
No change	59	50	46	47
Increase	21	30	40	44
Undecided/don't know	18	18	13	7
Social skills				
Decrease	2	2	2	-
No change	65	52	58	61
Increase	15	28	29	30
Undecided/don't know	18	18	11	9
Motor skills				
Decrease	1	2	2	2
No change	51	46	49	51
Increase	31	33	39	40
Undecided/don't know	17	19	10	7

If there is a difference in perception by teachers and administrators throughout the province, this may indicate a need for more clarification of academic skills in Kindergarten. It was reported earlier (Section 5.5.1) that a majority of Kindergarten teachers favoured the addition of a specific statement of goals and purposes of Kindergarten and a list of specific skills to a revised Kindergarten curriculum guide.

Kindergarten teachers were asked if the demands of the Grade 1 curriculum on children were too high, about right, or too low. Forty-two percent of the responding Kindergarten teachers (n = 961) thought the demands were too high, 47% though they were about right, 1% thought they were too low and 10% indicated they didn't know.

The written comments of Kindergarten teachers indicate their concern over the possible effect of the Grade 1 curriculum on the forthcoming Kindergarten curriculum revision. For example.

> I am concerned that Kindergarten will eventually become a "watered down" Grade 1 program. The beauty of the Kindergarten program is the flexibility and spontaneity of learning that occurs in this environment. (Kindergarten teacher)

> The Grade 1 program, in my opinion, is often too vigorous, especially for the less mature child. There tends to be a wide gap between the work-play, hands-on approach in Kindergarten and the desk-work--little play in first year. (Kindergarten teacher)

Preschool teachers and parents also wrote comments indicating their concerns about the current Kindergarten curriculum. Some representative comments are:

> The fact that the majority of children in Kindergarten have gone through 2 years of pre-school has to be taken into account. It seems that my child is doing the same activities in Kindergarten that he was doing at the beginning of his second year of pre-school. (Kindergarten parent)

> I think the Kindergarten program would be more beneficial if it was upgraded to allow more individual attention and an opportunity for children to tackle academic material if they and the teacher felt they were ready for it. (Preschool parent)

> I think Kindergarten is great. I'm fascinated with what a child can learn in such a short time. Kindergarten prepares them for Grade 1. It also gives the child confidence in themselves (sic). (Preschool parent)

6.3.4 Reading in the Kindergarten

When the topics of the effects of Grade 1 on Kindergarten or the role of academics in the Kindergarten are discussed, the area of the curriculum most frequently focussed on is reading. Reading in the Kindergarten has long been a topic of discussion among educators and a source of concern for parents. Educational literature, both scholarly and popular, has consisted of large numbers of articles and books published on the subject.

In the 1950's and 60's, the issue was: Could young children be taught to read? The 1970's saw the issue become: Why should children be taught earlier and who should receive what type of instruction?

Because reading in the Kindergarten is such a hotly debated topic, the questionnaires included several questions designed to assess the opinions of teachers, administrators and parents. One such question was adapted from a question (Those children who are ready should be taught to read in Kindergarten) used in a study by LaConte (1969) that reported 66% of Kindergarten teachers agreed with this statement. This item was used in two recent studies of Kindergarten in British Columbia. Collis (1980) found that 56% of the responding Kindergarten teachers in British Columbia agreed. Mayfield (1980) found that, in Victoria, 53% of the principals

and 77% of the parents of Kindergarten children agreed with the statement. Kindergarten teachers were equally divided (47%/47%), while 58% of the Grade 1 teachers disagreed with the statement.

Kindergarten and Grade 1 teachers and School and District administrators were asked to check their agreement or disagreement with listed statements about reading in the Kindergarten curriculum.

TABLE 6.11

READING IN THE KINDERGARTEN
(Entries are percentages)

The following represent some people's opinions about the Kindergarten curriculum. Check the extent of your agreement or disagreement with each one.

Statement	Teachers						Administrators					
	Kindergarten (n=1004-1077)			Grade 1 (n=515-524)			School (n=418-422)			District (n = 58)		
	Agree	Neu-tral	Dis-Agree	Agree	Neu-tral	Dis-agree	Agree	Neu-tral	Dis-agree	Agree	Neu-tral	Dis-agree
Children should be given a reading readiness test on entry to Kindergarten	10	10	80	21	7	72	15	11	74	20	5	75
Children who are ready to read should be given formal reading instruction in the Kindergarten	13	12	75	21	8	71	27	14	59	31	1	68
Children who are ready to read should be encouraged to continue their interest	98	2	0	97	2	1	96	2	2	96	4	0
Kindergarten children who are already reading should receive formal instruction in reading	19	16	65	26	10	64	32	16	52	37	2	61
Kindergarten children who are already reading should be encouraged to continue their interest	98	2	0	98	1	1	97	1	2	95	3	2

As shown in Table 6.11, the majority of teachers and administrators disagreed with a policy of giving children a reading readiness test on entry to Kindergarten. The responses are similar when considering the inclusion of formal reading instruction in the Kindergarten curriculum although a greater percentage of administrators than teachers agreed with this statement.

The respondents almost unanimously agreed that children who are ready to read or are already reading should be encouraged to continue their interest. For the children who are already reading, the means to further their interest should not be formal instruction in reading, according to 65% of the Kindergarten teachers, 64% of the Grade 1 teachers, 61% of the District administrators, and 52% of the School administrators.

6.3.5 Formal and Informal Reading/Reading Readiness

The debate on reading in the Kindergarten has been clouded by exactly what is meant by reading. Traditionally, early reading instruction has been classified as informal or formal instruction.

The 1954 Kindergarten Manual contained the following statement on formalized instruction: "There should be no formal teaching of these tool subjects (i.e., reading, writing, and spelling) in the Kindergarten. . . . no attempt should be made to give systematic instruction in reading" (p. 101).

The current Resource Book for Kindergartens emphasizes the integrated curriculum and "within this integrated curriculum the teacher will be aware of the (traditional) subject areas but her emphasis will be on the child in the various activity centres, any one of which might embrace all these subject areas" (p. 20). In terms of reading specifically, "initial reading experiences come informally and gradually, and from the children's own needs" (p. 40).

Reading and Pre-First Grade: A Joint Statement of Concerns about Present Practices in Pre-First Grade Reading Instruction (1977) by seven educational groups including three early childhood associations recommended "reading experiences as an integrated part of the broader communication process that includes listening, speaking, and writing...Require that pre-service and in-service teachers of young children be prepared in the teaching of reading in a way that emphasizes reading as an integral part of the language arts as well as the total curriculum" (pp. 780-781).

A recent survey in B.C. (Collis, 1980) presented the conclusion that "most Kindergarten teachers have negative attitudes to formal reading in the Kindergarten, but many actual reading experiences are included in the daily program in informal incidental ways" (p. 140).

The Kindergarten teachers, Grade 1 teachers, School administrators, and District administrators were asked to react to statements that Kindergarten teachers are pressured to run a formal reading program or a formal reading readiness program (see Table 6.12).

A small percentage of the respondents agreed that there are pressures on the teachers to teach reading formally in the Kindergarten. Almost half indicated that Kindergarten teachers are pressured to have a formal reading readiness program, with this pressure being evident to approximately half the Kindergarten teachers and District administrators. A difference of opinion may exist about the place of more formal programs in Kindergarten and/or what constitutes formal and informal programs.

The range of opinions is illustrated by the written comments of two teachers:

> Although I am against the formal teaching of reading in Kindergarten, I feel we should be teaching readiness in Kindergarten to alleviate the heavy, intense curriculum of year one primary. (Kindergarten teacher)

> I feel that the Ginn 720 "Hello Morning Kit' (Level I) is an excellent introduction to reading readiness and this kit should be prescribed into the Kindergarten program. (Grade 1 teacher).

Those who agreed with the statements that there is pressure for either a formal reading program or a reading readiness program were asked to identify the main source of the pressure (see Table 6.12).

TABLE 6.12

PRESSURE TO DO FORMALIZED READING/READING READINESS
(Entries are percentages)

Percentage of respondents agreeing with each statement.				
	Teachers		Administrators	
Statement	Kindergarten (n=1011)	Grade 1 (n=524)	School (n=419-423)	District (n = 57)
Kindergarten teachers are pressured to run a formal READING program in the Kindergarten.	16	13	15	15
Kindergarten teachers are pressured to run a formal READING READINESS program in the Kindergarten	51	43	45	55
If agreed with either of the above statements, what is the MAIN source of the pressure?				
	Teachers		Administrators	
Statement	Kindergarten (n=422)	Grade 1 (n=195)	School (n=154)	District (n = 25)
Parents	46	36	53	48
Grade 1 teacher(s)	22	24	14	8
Administration (District Level)	20	25	16	20
Other Kindergarten Teachers	4	8	7	4
Children	2	1	1	-
Principal	1	2	7	8
Other	5	4	2	12

Approximately half of the responding Kindergarten teachers, School and District administrators, named parents as the main source of pressure. Approximately a third of the Grade 1 teachers shared this point of view. About one-quarter of the Grade 1 and Kindergarten teachers felt that the expectations of Grade 1 teachers exert pressure to include formal reading activities in the Kindergarten. Administrators did not perceive pressure from this direction to any great extent. About 20% indicated that District level administration may have some part in the pressure to begin reading in the Kindergarten. Other Kindergarten teachers, the children, the principal, or other stated sources, seem to be exerting negligible pressure on the Kindergarten program in this respect.

From written comments by parents, it appears that many parents have a different perception of the role of reading in the Kindergarten than do teachers and administrators. Some typical comments are:

> Having experienced a child in Grade 1 — where they learn a fantastic amount — why not prepare the little ones for this by starting them on basic arithmetic, some printing or printing related skills, and reading related skills during the last half of the Kindergarten program. (Kindergarten parent)

> I do feel pressure from parents who want their children reading, riting, (sic) and rithmeticing (sic). I am sure the children are subject to this pressure too. (Kindergarten teacher)

> There is a strong encouragement to have a Reading Readiness program in our district. I don't see this "pressure" as negative since I feel such a program, geared to the individual, is needed. (Kindergarten teacher)

> The best educators analyze the developmental stage of each child and then act as a catalyst. . . . Reading isn't the most important skill to learn in this world but let's not stop a child who's ready for the next stage of language development or push one into reading who needs more pre-reading skills exposures. (Preschool teacher)

This divergence of opinion seems to indicate a need for clarification of reading/reading readiness in the Kindergarten. The present Kindergarten curriculum guides do not seem to meet this need. In Section 5.5.1 it was reported that a majority of responding Kindergarten teachers indicated that a statement on the teaching of reading be included in a revised Kindergarten curriculum guide. Two representative written comments of Kindergarten teachers are:

> I agree that a more comprehensive statement be made about reading in Kindergarten, with the understanding that the statement say formal reading is <u>not</u> taught as part of the Kindergarten program and that reading readiness activities are done on an informal basis only. (Kindergarten teacher)

> I am suggesting that guidance and suggestions about reading are required by all teachers so that this problem is handled properly and the value of play is preserved. (Kindergarten teacher)

In response to the question which asked if they had formal reading in their Kindergarten programs, 92% of the teachers stated that they did not. Four percent indicated that they did have formal reading and 4% were undecided

about the question. Sixty-one percent had formal reading readiness in their Kindergarten program while 31% did not. Eight percent were undecided about whether they did or did not. It may be that they were really undecided about what constitutes a formal reading/reading readiness program. It appears that the majority of Kindergarten teachers are using more formal approaches to reading readiness than the procedures suggested in the current Resource Book.

Some representative comments on informal reading in Kindergarten are:

> Informal reading in Kindergarten. . . promotes the interest, and children who are ready to read or who are reading can learn some reading skills. The Key Word approach is very successful in the Kindergarten. (Kindergarten teacher)

> Reading in Kindergarten does not have to be "formal" — using the Language Experience approach those who are interested and ready will begin to read when they are ready. (Kindergarten teacher)

6.4 Summary

A majority of the Kindergarten and Grade 1 parents reported enrolling their children in Preschool programs. Kindergarten teachers estimated that half of their current class had attended Preschool. The "typical" child currently in Kindergarten or Grade 1, who had experience in a Preschool program, was most likely enrolled in a cooperative nursery school for two years because the parents thought it was a valuable experience for children. A majority of Kindergarten and Preschool teachers, School and District administrators thought that children who attended Preschool programs adapted somewhat or much better to Kindergarten when compared to other children.

About half of the Kindergarten teachers, who were teaching last year, reported no contact with Preschool teachers. What contact there was consisted primarily of the exchange of information about children, contact at professional meetings, and visits of the Preschool children to the Kindergarten. In contrast, two-thirds of the Preschool teachers reported contact with Kindergarten teachers primarily of the same types as reported by the Kindergarten teachers. In addition, half of the Preschool teachers reported making informal visits to the Kindergarten. About half of the Kindergarten teachers and District administrators agreed there is a need for Kindergarten teachers to establish closer contacts with Preschool and day care centres. More than three-quarters of the Preschool teachers indicated that they would like more contact with local Kindergarten teachers. School administrators and Grade 1 teachers did not agree as much with that statement.

More Kindergarten teachers reported contacts with Grade 1 teachers than with Preschool teachers. Nearly all of the responding Kindergarten teachers and Grade 1 teachers indicated using informal discussion as a means of contact. The majority of both groups indicated use of written

reports and/or records, visits of Kindergarten children to Grade 1, end of year meeting of teachers and periodic conferences of teachers as methods of contact. A majority of the Kindergarten and Grade 1 teachers, School and District administrators agreed that there is a need for increased communication and coordination between Kindergarten and Grade 1 teachers in order to promote an understanding by all teachers of the expectations upon them and promote a more effective transition for children from one level to another. Over three-quarters of the Kindergarten and Grade 1 teachers, School and District administrators favoured Kindergarten-Grade 1 transition classes most frequently because such classes provide time for children to mature.

When asked about changes of emphasis on various aspects of the Kindergarten curriculum as a result of the Grade 1 curriculum, School and District administrators most frequently reported no change in any of the areas while Kindergarten and Grade 1 teachers most frequently thought there had been an increased emphasis in academic skills.

A majority of teachers and administrators disagreed with giving children a reading readiness test on entry to Kindergarten, and with including formal reading instruction in the Kindergarten curriculum. However, they was almost unanimous agreement that children who are ready to read or are already reading should be encouraged to continue.

Only a small percentage of teachers and administrators indicated pressure to teach formal reading in the Kindergarten; however, there was general consensus among Kindergarten and Grade 1 teachers and administrators that there was pressure to have a formal reading readiness program. The most frequent source of this pressure was indicated to be parents.

Very few Kindergarten teachers reported having a formal reading program although a majority reported having a formal reading readiness program in their classes.

CHAPTER 7

ROLE OF PARENTS

7.1 Introduction

This chapter is a summary of the responses of teachers, administrators and parents to questions on the following major topics:

1. Parent involvement (7.2);
2. Information about schools (7.3); and
3. Parent-school relationships (7.4).

7.2 Parent Involvement

The role of parents as contributors to the quality of Early Childhood Education programs has been recognized increasingly in the past fifteen years (see Chapter 2). Parent involvement in the child's education has been researched and is generally recognized to be of enduring importance (Hendrick, 1980). In one review of the research (Schaefer, 1971), it was reported that parent involvement was a more important variable in children's achievement than the quality of the school.

The Resource Book for Kindergartens (1973) states that education should be a "Continuing parent-teacher partnership . . . (and that) getting parents involved in the school and its activities can be richly rewarding for everyone concerned" (p. 92).

Parents wish to be sufficiently well-informed about what their children are doing in school, how well they are progressing, and what can be done at home to help (Mayfield, 1980; Gallup, 1980). Recent recommendations on parent involvement made in two reports in British Columbia include suggestions for orientation programs for Preschool and Kindergarten parents to explain the school program, establishment of parenting courses (Gillie, 1980), and provisions of a variety of options for increased parent involvement and contact and for reporting to parents (Mayfield, 1980).

7.2.1 Contact with School

The Kindergarten teachers were asked to estimate the percentage of parents who (a) assisted, (b) observed, and/or (c) participated in parent-teacher conferences during the previous year. The fourth question asked for an estimate of the percentage of parents who never or almost never participated. According to the teachers, about 92% of the parents came to conferences, between 30% and 40% of the parents assisted and/or observed and 31% never or almost never took part in any Kindergarten activities. It is noteworthy that teachers reported contact with nearly all parents through parent-teacher conferences. However, a third of the parents never or almost never took part in any Kindergarten activities. Possible obstacles to parent involvement are discussed in Section 7.2.5.

7.2.2 Frequency of Parent Involvement

Kindergarten teachers were asked to indicate the frequency of parent involvement during the previous year in such tasks as helping with small groups, acting as resource person, reading to children, doing clerical work, etc.

TABLE 7.1

ESTIMATES OF FREQUENCY OF ASSISTANCE FOR PREVIOUS YEAR BY KINDERGARTEN TEACHERS*
(Entries are percentages)

How frequently, ON THE AVERAGE, did any parents or other adult family members give each of the following types of assistance in your classroom LAST YEAR?					
	Frequency				
Types of Assistance	Never	1-4 times a year	Monthly	Weekly	Daily
Helping children in small groups	24	22	10	31	14
Helping children in one-to-one situations	40	17	7	22	14
Acting as resource person	33	48	14	4	.
Assisting in classroom learning centres	39	15	8	24	14
Reading to children	55		7	16	5
Recording children's stories	63	11	6	15	7
Helping prepare materials for class activities	43	21	9	19	9
Doing clerical work	81	7	4	7	2
Assistance on field trips	4	53	35	4	0

*n = 813 - 840 depending on item

As shown in Table 7.1, the activities in which parents assisted most frequently (i.e., monthly or more often) were helping children in small groups, assisting in classroom learning centres, helping children in one-to-one situations, and assisting on field trips. Parents assisted least frequently in performing clerical work.

Approximately half of the responding Kindergarten teachers did not have parents reading to the children in the classroom. Traditionally, this has been a popular use of parent assistance in Kindergarten and primary classroom. Table 7.2 shows parents' willingness to assist in Kindergarten. Approximately half of the parents reported they would be willing to assist on at least a monthly basis with small group work, one-to-one situations, reading to the children, and preparing materials for class activities. Overall, parents seem most unwilling to perform clerical work and most willing to assist on field trips.

TABLE 7.2

WILLINGNESS OF KINDERGARTEN PARENTS* TO ASSIST IN CLASSROOM
(Entries are percentages)

Types of Assistance	Frequency				
	Never	1-4 times a year	Monthly	Weekly	Daily
Helping children in small groups	16	31	30	22	2
Helping children in one-to-one situations	23	27	28	20	3
Acting as resource person	28	35	22	12	2
Assisting in classroom learning centres	21	30	28	19	2
Reading to children	18	26	31	22	3
Recording children's stories	27	29	26	16	2
Helping prepare materials for activities	19	30	29	21	2
Doing clerical work	41	25	22	12	1
Assistance on field trips	11	46	29	13	2

*n = 425 - 472 depending on item

Grade 1 parents were asked to estimate the frequency of their assistance in last year's Kindergarten classroom (see Table 7.3).

TABLE 7.3

FREQUENCY OF ASSISTANCE FOR 1979-80 ESTIMATED BY GRADE 1 PARENTS*

How frequently, ON THE AVERAGE, did you give each of the following types of assistance in your child's Kindergarten classroom?					
	Frequency				
Types of Assistance	Never	1-4 times a year	Monthly	Weekly	Daily
Helping children in small groups	50	29	9	12	1
Helping children in one-to-one situations	71	17	4	7	1
Acting as resource person	77	16	3	4	1
Assisting in classroom learning centres	66	17	7	10	1
Reading to children	85	8	2	4	1
Recording children's stories	93	3	1	2	1
Helping prepare materials for class activities	62	24	7	7	1
Doing clerical work	91	3	2	4	0
Assistance on field trips	41	49	7	3	0

*n = 387 - 410 depending on item

Of the parents who responded, very few provided monthly, weekly or daily assistance. After helping with field trips, the tasks of helping children in small groups and helping prepare materials for class activities were the most common types of assistance given. These results are similar in pattern, but different in magnitude, from the estimates by the Kindergarten teachers. The teachers indicated more parent involvement had occured than was reported by the parents.

7.2.3 Frequency of Teacher-Parent Contact

To gather information on frequency of regular contact between teacher and parent, the Kindergarten teachers were asked to indicate how often they initiated eleven types of contact with the parents of a typical or "average" child. The Kindergarten parents were asked how often they would like such contact and the Grade 1 parents were asked to recall how often they had such contact last year (see Table 7.4).

TABLE 7.4

FREQUENCY OF REGULAR PARENT-TEACHER CONTACT REPORTED BY KINDERGARTEN TEACHERS, KINDERGARTEN PARENTS AND GRADE 1 PARENTS
(Entries are percentages)

	Never			1 or 2 times a year			3 or 4 times a year			Monthly or more		
	Tchr.**	Parents**		Tchr.	Parents		Tchr.	Parents		Tchr.	Parents	
Type of Contact*	Kgn	Kgn	Gr.1	Kgn	Kgn	Gr.1	Kgn	Kgn	Gr.1	Kgn	Kgn	Gr 1
Telehpone calls	3	28	35	38	26	40	46	25	18	13	21	7
Newsletter	9	8	11	6	5	7	22	21	20	3	66	62
Scheduled conferences	1	6	9	49	29	51	50	52	38	0	13	2
Classroom visits for planned observation	28	6	30	54	37	40	15	36	18	3	21	12
Group meetings	29	26	49	58	41	37	12	25	11	1	8	3
Report cards	8	6	3	19	16	25	73	69	71	0	9	1
Home visits	63	51	85	36	42	14	1	5	1	0	2	0
Written notes on individual children (other than report cards or regular newsletter)	25	15	79	35	22	12	28	30	5	12	33	4
Bulletins/ Announcements	4	6	7	6	7	11	20	16	26	70	71	56
Brief, unscheduled visits/chance meetings	3	23	34	18	26	16	26	21	17	53	30	33
Orientation programs	19	12	56	78	62	38	3	19	4	0	7	2

*More than one response was possible
**Kindergarten Teachers n = 823 - 843
Kindergarten Parents n = 449 - 471
Grade 1 Parents n = 387 - 410

The type of contact least preferred by Kindergarten parents was home visits. This was also the contact which occurred the least in the past year as reported by both Kindergarten teachers and Grade 1 parents.

Only six percent of the Kindergarten parents reported never wanting scheduled conferences, classroom visits, report cards, and bulletins. They most frequently (i.e., monthly or more often) would like bulletins/announcements and newsletters as types of contact. These types of contact were also mentioned by the teachers and the previous year's Kindergarten parents as those which were used most frequently.

Approximately 70% of the three groups reported that they would like, or had received, report cards three or four times a year.

There was a large discrepancy between the frequency of orientation meetings the previous year reported by the teachers and the frequency reported by last year's Kindergarten parents. Fifty-six percent of the parents indicated that orientation meetings never occured while only 19% of the teachers indicated that this was the case. This discrepancy may be due, in part, to a different perception of what constitutes an orientation meeting.

7.2.4 Preferred Methods of Contact

To determine the preferred methods of contact, the Kindergarten teachers, Kindergarten parents and the Grade 1 parents were each asked to indicate their first and second choices. There was close agreement among the members of the three groups when their first choices were considered.

TABLE 7.5

FIRST CHOICE OF PREFERRED REGULAR CONTACT BY KINDERGARTEN TEACHERS, KINDERGARTEN PARENTS AND GRADE ONE TEACHERS
(Entries are percentages)

	Teacher	Parents	
Type of Contact	Kindergarten (n=815)	Kindergarten (n=456)	Grade 1 (n=392)
Scheduled conferences	47	35	37
Classroom visit	11	26	16
Unscheduled visits	9	7	10
Home visits	9	4	2
Newsletter	9	4	6
Phone contact	9	7	5

As shown in Table 7.5 scheduled conferences and classroom visits for planned observation were the preferred methods by Kindergarten teachers and Kindergarten and Grade 1 parents. The home visit method of contact was not popular with Kindergarten and Grade 1 parents. This is a significant result as many school districts are considering initiating or expanding home visits. A recent statement by the Ministry of Education suggested release time for Kindergarten teachers in September to conduct home visits. (News Release, 80-12-17). A Ministry of Education Announcements Circular of 80-12-31 stated "Regulations will be changed to allow school districts the option of setting up such visitation programs".

The second choice of preferred regular contact for the Kindergarten teachers included scheduled conferences and classroom visits. Of the teachers responding (n = 813), 20% listed scheduled conferences and 16% classroom visits as their second choice. Four methods of preferred regular contact ranked very closely as second choices of the Kindergarten parents: report cards (16%), classroom visits (15%), written notes (15%), and scheduled conferences (14%). Of the Grade 1 parents (n - 385), 17% selected classroom visits, 16% scheduled conferences and 13% report cards as their second choice.

Overall, it appears that the methods of contact preferred by Kindergarten and Grade 1 parents are scheduled conferences and classroom visits. Some representative written comments about parent-school contact included:

> It would be nice to have some newsletters or directives to the parents so we could be more fully informed as to what our children will be achieving, goals, procedures and if they need any help in any areas. (Kindergarten parents)

> The method is not important as long as contact is made. It should be stressed that parents are contacted so they know there is some problem and together parent and teacher can work it out for the child's benefit. (Kindergarten parent)

> This year I explored, for the first time, the experience of September home visits. I was ecstatic over the amount I learned about my children. I would like to see the Ministry of Education encouraging local districts to motivate (not force) their Kindergarten teachers toward this method of family-teacher interviewing. (Kindergarten teacher)

> People who suggest these procedures (home visits) are failing to put themselves in the position of the parent receiving the notice . . . . These parents should not be put in the position where they have to invite the teacher anyway or make up some excuse. Putting this pressure on these parents creates bad feelings between the parent and the teacher. (Kindergarten teacher)

7.2.5 Obstacles to Parent Involvement

Kindergarten teachers, School and District administrators, and Kindergarten and Grade 1 parents were asked about the existence of possible obstacles to parent participation (see Table 7.6).

TABLE 7.6

EXISTENCE OF OBSTACLES TO PARENT PARTICIPATION
(Entries are percentages)

	Teacher	Administrators		Parents	
Response	Kindergarten (n=969)	School (n=413)	District (n=57)	Kindergarten (n=459)	Grade 1 (n=404)
YES	61	39	44	40	37
NO	37	57	54	41	49
Don't know	3	3	2	20	14

There were members in each group who were not aware of any existing obstacles. The group that was most aware of existing obstacles to parent participation was the group of Kindergarten teachers.

The majority of School and District administrators indicated there were no obstacles to parent participation. Parents were divided in opinion.

Table 7.7 shows the percent of respondents who indicated each obstacle to parent participation in the Kindergarten.

Over eighty percent of the Kindergarten teachers, School and District administrators indicated that the most frquent obstacle to parent involvement was parents who worked. However, of the responding Kindergarten and Grade 1 parents only four-tenths indicated this as an obstacle. A majority of parents indicated that other children needing care at home was the biggest obstacle. If more parents are to be given an opportunity to become involved in their children's education, such obstacles will need to be resolved. However, the first step will be to identify exactly what is the obstacle in a particular situation. This difference of perception of obstacles to parent involvement may indicate a need for more communication between parents and schools.

About 20% of the School administrators and Kindergarten teachers indicated that parents did not see participation as important, whereas only 1 - 2% of the parents indicated this. It may be that some parents are waiting to be encouraged to participate.

TABLE 7.7

OBSTACLES TO PARENT INVOLVEMENT
IN THE KINDERGARTEN PROGRAM

Possible Obstacles to Parent Participation	Percent of Respondents Indicating Each Obstacle *				
	Teachers	Parents		Administrators	
	Kindergarten (n=626)	Kindergarten (n=202)	Grade 1 (n=167)	School (n=188)	District (n = 26)
Working parents	87	38	41	89	85
Transportation problems of parents	20	10	14	27	31
Other children needing care at home	81	62	51	70	50
Lack of teacher time for a parent training program	27	2	4	37	46
Too many adults in the classroom	14	3	2	11	19
Problems of confidentiality	23	3	1	23	23
Poor home-school communication	2	2	9	5	4
School policy	2	5	3	1	0
District policy	1	2	1	1	0
Parents do not see participation as important	18	2	1	22	8
Teachers do not see participation as important	4	5	8	10	12
Parents do not see participation as appropriate	5	4	5	9	4
Teachers do not see participation as appropriate	8	6	10	9	8

*More than one response was possible

The following are some representative written comments on obstacles to parent participation:

> Many teachers use parent helpers in the classroom however I have never had a gread deal of success . . . . I have had some parents who are great - they enjoy it and get really involved while others don't want to be there. (Kindergarten teacher)

> Because I am a working mother I am not able to spend much time in the Kindergarten classroom. If I did not work I would be willing to help with any activity on a daily basis. (Kindergarten parent)

> I believe more emphasis should be put on parent-child-teacher participation in Kindergarten. In another school this was done. . . . I strongly believe some fathers should be encouraged to become involved in their child's school and classes. (Kindergarten parent)

> I feel the parents should not be pressured into having to help all year. I'm already evading my daughter's Kindergarten teacher who loves to give jobs to parents that don't necessarily involve the children. (Kindergarten parent)

7.3 Information about Schools

In order to determine if parents were informed about the Kindergarten program prior to or during the beginning stages of the program, the Kindergarten teachers were asked to indicate whether outlines were provided to parents. Of the responding teachers (n = 965), 17% responded negatively. For the teachers who did provide outlines, 20% of these outlines were presented orally, 19% in written form and 61% both in oral and written form. Of the teachers who provided outlines of some sort, 80% were involved in compiling the outline.

Written comments of the parents indicated that they would appreciate receiving such information; e.g.:

> I feel very strongly that parents need more explanation of the Kindergarten program and its aims and that a program on parent education would be extremely valuable and should be made easily available to the majority of parents. (Preschool parent)

> The major complaint I have about my child's Kindergarten program is that I have very little information on how it is being run and as this is my first child entering the system, I have no background knowledge about it. (Kindergarten parent)

> When a child is registered for Kindergarten a pamphlet should be given to the parents as to what is to be taught and what procedures are followed. (Kindergarten parent)

7.4 Parent-School Relationships

A third of the Kindergarten parents and 45% of the Grade 1 parents indicated that the school staff had not helped them prepare their children for Kindergarten. Of these, 38% and 34%, respectively, indicated that the school staff could have helped in some way to prepare their children for Kindergarten. As more than a third of the parents felt that the school could have helped prepare their child, this may be an area of need that could be addressed at the school and district levels.

Teachers, parents, and administrators were asked to respond to statements on (a) programs to explain the Kindergarten program to parents, (b) the Kindergarten teacher's role in teacher-parent relationships, and (c) courses on parenting/parent education. Table 7.8 shows that there was an overwhelming agreement with all three statements.

TABLE 7.8

PARENT-SCHOOL-RELATIONSHIPS-RESPONSES
IN THE AGREE AND STRONGLY AGREE CATEGORIES
(Entries are percentages)

Statements	Teachers		Administrators		Parents		
	Kgn (n=[illegible])	Presch. (n=353)	School (n=410)	District (n = 58)	Kgn (n=488)	Gr.1 (n=421)	Presch. (n=359)
Each school should plan and implement an educational program for parents of preschool and Kindergarten children to explain the Kindergarten program	81	89	85	95	77	80	87
The Kindergarten teacher is in a unique position to establish early and continuing parent-teacher relationships	97	96	98	100	91	92	90
Courses on parenting/ parent education should be made available to parents in this district	85	99	87	70	85	83	91

More than three-quarters of the respondents agreed that each school should plan and implement an educational program for parents of Preschool and Kindergarten children to explain the Kindergarten program. Such a program might possibly help to meet the need of parents discussed in the previous section.

There was almost unanimous agreement with the statement from the Resource Book for Kindergartens that the Kindergarten teacher is in a unique position to establish early and continuing parent-teacher relationships. Such high degree of agreement puts responsibility on the Kindergarten teacher to promote such relationships. However, it must be recognized that administrative support and assistance may be required. And if such a parent-teacher relationship is to continue, the primary and intermediate teachers must be willing and able to develop the parent-teacher relationship.

There was also a high degree of agreement that courses on parenting/parent education should be made available to parents in the district. Grade 1 teachers were asked to agree/disagree with the statement about the availability of courses in parenting/parent education. Eighty-one percent of the teachers who responded (n = 520) agreed or strongly agreed with the suggestion that such courses should be made available to parents. The highest degree of support was from Preschool teachers and parents. The District administrators were least supportive perhaps because of the time and resources needed to implement such courses.

Some typical written comments on parenting courses included:

> I have attended parenting classes in the past and found them most enlightening even if only a quarter of what you hear, read, or discuss is retained it is not a loss. Would very much like them presented for all parents. (Kindergarten parent)
>
> Parenting courses must be made available and every effort made to encourage parents to attend to learn about the most important job in the world - successful parenting. (Preschool teacher)

7.5 Summary

When asked to estimate the percentage of children whose parents were regularly involved in the program, the Kindergarten teachers indicated approximately one-third. Nearly all parents attended scheduled parent-teacher conferences; however, about one-third of the parents never or almost never took part in any other activities. For the parents who did participate in activities, there was a high degree of similarity between parents' willingness to participate in tasks and the teacher's estimate of parent participation.

There was close agreement between frequency of Kindergarten teacher initiated regular contact and the number of times Kindergarten and Grade 1 parents desired contacts such as newsletters, bulletins/announcements, report cards, scheduled conferences, classroom visits, group meetings, written notes and unscheduled visits. There was a large discrepancy between parents and teachers on the frequency of orientation meetings.

The types of contact most preferred by teachers and parents, on a monthly or more frequent basis, were newsletters, bulletins and announcements. Three or four times a year, teachers and parents would like report cards and scheduled conferences; and one or two times a year, they would like orientation meetings.

Kindergarten teachers, administrators, Kindergarten and Grade 1 parents most frequently indicated working parents and other children needing care at home to be the two most common obstacles to parent participation.

There was a high degree of unanimity among all groups about having the school plan and implement a program to explain the Kindergarten setting and to make courses on parenting/parent education available to parents. The Kindergarten teacher was identified as being in a unique position to establish early and continuing parent-teacher relationships.

CHAPTER 8

ADMISSION, CLASS SIZE AND ORGANIZATION OF DAY

8.1 Introduction

This chapter presents the results of questions to Kindergarten teachers, administrators and parents on the following topics:

1. Admission to school (8.2);
2. Class size and organization (8.3);
3. Organization of the Kindergarten day (8.4); and
4. Transportation of children and its effects on Kindergarten (8.5).

8.2 Admission to School

In this section the topics of (a) age of admission, (b) cut-off date for admission, (c) early admission, (d) twice-a-year entry, and (e) compulsory Kindergarten attendance are discussed.

In British Columbia, children may be admitted to Kindergarten in September if they are five years old on or before December 31 of that year. School attendance is not compulsory until age seven.

In a review of the research on school entrance age, Weinstein (1968) reported that the contention of many teachers was that children "at the younger end of the age range received lower school marks and scored lower on achievement tests than did those at the older end of the age range" (p. 21).

A similar result was reported in a survey conducted in British Columbia School District # 53 - Terrace (Wilson, 1966). It was found that the children "whose birthdays were in the January-June period had a correspondingly lower failure rate in school than did those pupils who had a birthday in the July-December period" (p. 11) and recommended an admittance deadline based on having a fifth birthday on or before August 31.

Early admission is the practice of permitting children who meet established criteria to begin school before the age required by the usual enrolment policy. Such a practice is a subject of considerable debate. In a review of the literature, it was reported that parents are more supportive of the practice of early admission than they are of a specific age of entrance policy (Butler, 1974). This seems to be particularly the case of parents whose child "misses" the cut-off date by a few days or weeks. On the other hand, an early admission plan "is generally not well liked by teachers" (Butler, 1974, p. 116).

In a review of research investigating teacher attitude toward early admission, Braga (1971) concluded that teachers' "responses were generally negative and at odds with the information reported in the literature that

supports early admission for 'mentally advanced children'" (p. 41). Braga (1971) found that teachers who favor early admission gave many reasons for their opinions such as: children who are ready will benefit from early admission; children should not be held back arbitrarily because of age; and "early admission to Kindergarten is preferable to early admission to Grade 1 because Kindergarten is more flexible and generally less demanding" (p. 43). Teachers who did not favor early admission stated that: children admitted early needed more supervision and were less likely to cope with working independently and classroom routine; there would be social adjustment problems now and in later grades; "children need more, not less, time at home, and children should not be forced to grow up so quickly" (p. 44); and "the problems associated with determining readiness for school" (Mayfield, 1980, p. 129).

Early admission to Kindergarten has been used as an option for meeting the needs of gifted children. A review of early admission by Reynolds (1962) contains his oft-quoted statement that "it (early admission) does provide one important and useful means of adjustment in the school program for the precocious child if used with appropriate care" (p. 2). A frequently mentioned concern about early admission is who sets the criteria and who makes the decisions.

Concern has been expressed (Duigou, 1975) about children beginning an educational career too soon. Some educators have suggested delaying school entrance until age 7 or later (Moore & Moore, 1979). Others claim that there is little or no advantage to delaying entrance for immature children (Kulberg, 1973).

One reviewer (Weinstein, 1968) who found adjustment problems to be related to school entrance age suggested use of a non-graded primary or a "return to the all but abandoned semester system with its dual cut-off dates and twice-yearly admissions; this narrows the age range of normal entrants" (p. 27).

The recently completed Reading Assessment (1980) contained the recommendation that "the Ministry of Education examine the appropriateness of existing legislation and current policies dealing with the provision of Kindergarten and attendance requirements" (p. 64). It was reported that by Grade 4 "students who did not attend Kindergarten still perform (on reading measures) significantly below those who did attend Kindergarten" (p. 64).

8.2.1 Age of Admission to Kindergarten

All eight groups included in the survey (the Kindergarten teachers, Grade 1 teachers, Preschool teachers, School and District administrators, Kindergarten parents, Grade 1 parents and Preschool parents) were asked to indicate the earliest enrolment age at which they thought parents should have the option of sending their children to a public school.

TABLE 8.1

ENROLMENT AGES
(Entries are percentages)

Check the EARLIEST age at which you think parents should have the option of enrolling their child in a public school. (Median is underlined for each responding group.)

Age Categories	Teachers			Administrators		Parents		
	Kgn. (n=988)	Gr. 1 (n=510)	Presch. (n=343)	School (n=416)	District (n=57)	Kgn. (n=460)	Gr. 1 (n=408)	Presch. (n=352)
3 years	3	2	9	3	5	5	3	8
4 years	30	24	26	27	28	33	31	29
5 years	<u>65</u>	<u>69</u>	<u>58</u>	<u>64</u>	<u>60</u>	<u>57</u>	<u>61</u>	<u>58</u>
6 years	2	4	7	3	4	3	4	5
7 years	1	1	1	1	2	1	0	0
Other	1	1	0	1	2	1	1	1

The distribution of responses was very similar for all groups. A majority of each of the eight groups indicated five years as the age of earliest public school attendance. Between a quarter and one-third of the respondents indicated four years of age. Although the majority of the respondents supported the current practice, there was a significant percentage of the respondents who supported the option of four-year-olds enrolling in the public school. In written comments several parents indicated that such a practice would provide equal opportunity for more children:

> I would like to see nursery schools included in the public school system to enable those children whose parents otherwise could not afford to pay for this early education--which I consider of utmost importance. (Preschool parent)

> I very much welcome this opportunity, (to answer this questionnaire), especially as a large number of local residents here were about to start a petition for children to start Kindergarten at age 4. (Preschool parent)

8.2.2 Cut-off Date for Admission

Kindergarten teachers and School and District administrators were asked about their preferred cut-off dates for admission to Kindergarten (see Table 8.2).

One-third of the responding Kindergarten teachers indicated September 1st as their preferred cut-off date. About a third of the School administrators and slightly more than half of the District administrators preferred twice-a-year entry. This option was the third most frequent choice of Kindergarten

teachers. The second choice of all three groups was the current date of December 31.

TABLE 8.2

PREFERRED CUT-OFF DATES FOR KINDERGARTEN ADMISSION
(Entries are percentages)

Which ONE of the following dates would you prefer as the cut-off date for admission to Kindergarten? (Median is underlined for each responding group.)

Dates	Teachers	Administrators	
	Kindergarten (n=982)	School (n=419)	District (n=57)
September 1st	33	19	14
October 31st	14	7	5
December 31st	<u>25</u>	<u>32</u>	23
January 31st	2	4	0
Twice a year entry (e.g. Sept. & Feb.)	23	35	<u>54</u>
Other	4	3	4

It is noted that many more District administrators supported twice-a-year entry than did School administrators or teachers. Twice-a-year entry is discussed more specifically in Section 8.2.4.

Some representative written comments by respondents on cut-off dates for admission are:

> Time and time again many of our Learning Assistance cases end up being November-December children. (Kindergarten teacher)
>
> Two out of three of my children (whose) birthdays fall after December 31 were held up one full year due to an inflexible date. (Kindergarten parent)
>
> Entry into Kindergarten needs improvement. Quite often children who just make the cut-off line of December 31 are too immature and others at 4½ are ready. Some method of evaluation should be implemented and the child admitted according to his ability <u>not</u> age. (Preschool parent)
>
> I think screening is a good idea if the child is just after the cut-off date of December 31. (Kindergarten parent)

8.2.3 Early Admission to Kindergarten

When asked whether the school or district had a specific policy on early admission to Kindergarten, 56% of the School administrators (n = 413) and 77% of the District administrators (n = 56) responded negatively. According

to the responding Kindergarten teachers, there were not any children enrolled in Kindergarten for 1979-80 school year who did not meet the usual minimum age requirement.

All eight groups were asked to indicate their reaction to early admission of children who seem to be ready for Kindergarten but do not meet the usual minimum age requirements (see Table 8.3).

TABLE 8.3

OPINIONS ABOUT EARLY ADMISSION
(Entries are percentages)

Are you in favour of, or opposed to, early admission for children who seem ready for Kindergarten but who do not meet the usual minimum age requirements? (i.e. 5th birthday before December 31.) (Median is underlined for each responding group.)

	Teachers			Administrators		Parents		
Response	Kgn (n=1021)	Gr.1 (n=524)	Presch. (n=352)	School (n=418)	District (n=56)	Kgn (n=489)	Gr.1 (n=426)	Presch. (n=360)
Strongly in favour	7	10	26	14	11	36	34	10
Somewhat in favour	25	28	<u>35</u>	21	21	<u>24</u>	<u>27</u>	<u>20</u>
Neutral	10	7	7	9	16	14	11	8
Somewhat opposed	<u>28</u>	<u>26</u>	18	<u>31</u>	<u>20</u>	16	15	7
Strongly opposed	31	30	14	25	32	10	13	7

A majority of Kindergarten and Grade 1 teachers, School and District administrators opposed early admission whereas a majority of Preschool teachers, Kindergarten, Grade 1 and Preschool parents favoured early admission. This pattern of response has been noted in other research reports. Unfortunately, it is not known what percentage of the parent respondents have or have had children who just miss the cut-off date of December 31.

The range of opinion is reflected in the written comments of some of the respondents

> The School Act should be amended to provide for flexibility in determining the school entrance age . . . . The present date of December 31, with no flexibility, creates several kinds of problems. Many Primary children who are often labelled "immature" or who experience a delay in acquiring reading skills are often just not ready. Of these, a significant number are "fall babies". On the other hand, a number of January and February born children (and their) parents have been frustrated by a year's delay in starting school, imposed by the December 31 cut-off. (School administrator)

It is illegal to have an (early) admission policy which is at variance with the School Act. Please note that admission to Grade 1 is spelled out by the Act too. While the two sections of the Act can be questioned on educational grounds, they do provide a "clean" cut-off point that is easy to administer. (School administrator)

The danger of early enrolment is who decide whether the child is ready. Children who are not ready may be admitted due to low enrolment. A better alternative would be good preschools. (Kindergarten teacher)

I am a firm believer that a child of 4 (if ready) should be allowed to enter Kindergarten. Too much stress is put on age instead of ability. (Preschool parent)

8.2.4 Twice-a-year Entry

In response to the question whether twice-a-year entry currently exists in their classes, schools or district, all responding Kindergarten teachers (n = 991), 98% of the Grade 1 teachers (n = 511), 99% of the School administrators (n = 421) and 97% of the District administrators (n = 58) indicated "No."

The Grade 1 and Preschool teachers and Kindergarten, Grade 1 and Preschool parents were asked to indicate their opinions about twice-a-year entry into Kindergarten.

TABLE 8.4

OPINIONS ABOUT TWICE-A-YEAR ADMISSION TO KINDERGARTEN
(Entries are percentages)

Are you in favour of, opposed to, twice-a-year entry into Kindergarten? (e.g. admitting children in September and in February.) (Median is underlined for each responding group.)

Response	Teachers		Parents		
	Gr.1 (n=511)	Presch. (n=345)	Kgn (n=464)	Gr [illegible] (n=[illegible]	Pre h. (n=352)
Strongly in favour	13	30	21	22	39
Somewhat in favour	25	<u>28</u>	24	22	<u>22</u>
Neutral	<u>20</u>	16	<u>24</u>	<u>22</u>	17
Somewhat opposed	22	13	17	17	14
Strongly opposed	21	12	14	19	8

As shown in Table 8.4, a majority of Preschool teachers and parents favoured twice-a-year entry into Kindergarten. More than two-fifths of Kindergarten and Grade 1 parents favoured it whereas less than two-fifths of the Grade 1 teachers were in favour of twice-a-year entry.

In comparing the results of this section and Section 8.2.2, it can be seen that the greatest support for twice-a-year entry lies first with District administrators, Preschool parents and teachers, the Kindergarten and Grade 1 parents, and is least popular with Kindergarten and Grade 1 teachers.

While the written comments of some teachers expressed doubt about twice-a-year entry because of possible administrative difficulties, others pointed out the flexibility twice-a-year entry could provide:

> I would like to see a twice-a-year entry system used. I believe this would close the gaps between our older and younger children. Children who need it could have eighteen months in Kindergarten. The few children who are "super mature" could spend six months. (Kindergarten teacher)

> I feel this idea (twice-a-year entry) accommodates the January, February born child, the early developers or the immature child who needs more time. Using this model the identified "at risk" child could spend 15 months (1½ years) in a compatible, less pressurizing situation. Similarly the much more ready child could get involved with a Formal Year 1 program after a period of ½ year in Kindergarten while the majority of children would utilize and benefit from a full year in that setting. (Grade 1 teacher)

8.2.5 Compulsory Kindergarten Attendance

All groups included in the survey were asked to state their opinions about compulsory Kindergarten programs for children of eligible age. As shown in Table 8.5 a majority of Kindergarten and Grade 1 teachers, Kindergarten, Grade 1, and preschool parents favoured compulsory Kindergarten attendance for all children of eligible age. There was not a clear pattern of response, for or against compulsory Kindergarten, from Preschool teachers, School or District administrators. District administrators were the least supportive. This may be due in part to concern over possible administrative implications, of compulsory Kindergarten (e.g. 1/2 F.T.E. funding, bussing, staffing, etc.).

In comparing the results of this section wth Section 8.2.1, it appears that most respondents favour Kindergarten attendance by five-year-olds to the degree of making it compulsory but generally do not favour the enrolment of children younger than five years of age in the public schools.

TABLE 8.5

OPINIONS ABOUT COMPULSORY KINDERGARTEN
(Entries are percentages)

Should Kindergarten be COMPULSORY for all children of eligible age? (i.e., 5 years old before December 31.)

	Teachers			Administrators		Parents		
Response	Kgn (n=988)	Gr.1 (n=513)	Presch. (n=346)	School (n=420)	District (n=57)	Kgn (n=465)	Gr.1 (n=410)	Presch. (n=354)
Yes	56	70	49	48	40	61	69	58
No	34	26	43	46	44	30	24	32
Undecided	10	5	8	7	16	9	7	11

Kindergarten and Grade 1 teachers, School and District administrators were asked whether or not, in their classes, schools or districts, respectively, six-year-old children can be admitted to Kindergarten, instead of Grade 1, if these children had not previously attended Kindergarten.

Sixty-one percent of the responding Kindergarten teachers (n = 965), 51% of the Grade 1 teachers (n = 503), 72% of the School administrators (n = 419) and 90% of the District administrators (n = 58) indicated this was possible. Approximately one third of the Kindergarten and Grade 1 teachers indicated they did not know. Sixteen percent of the School administrators and 2% of the District administrators indicated a "Don't know" response.

The members of the eight groups included in the survey were also asked to state their opinion about admitting children to Kindergarten at age six if they had had no previous Kindergarten attendance (see Table 8.6).

TABLE 8.6

OPINIONS ABOUT ADMITTANCE OF 6-YEAR-OLDS WITHOUT KINDERGARTEN EXPERIENCE TO KINDERGARTEN
(Entries are percentages)

Are you in favour of, or opposed to, admitting children to Kindergarten at age 6 if they have not previously attended Kindergarten? (Median is underlined for each responding group. Where the median is located approximately midway between two response categories, both entries are underlined.)

	Teachers			Administrators		Parents		
Responses	Kgn (n=1061)	Gr.1 (n=517)	Presch. (n=349)	School (n=422)	District (n=58)	Kgn (n=478)	Gr.1 (n=423)	Presch. (n=358)
Strongly in favour	27	31	19	22	22	13	19	16
Somewhat in favour	<u>34</u>	<u>35</u>	<u>31</u>	<u>36</u>	<u>26</u>	23	23	18
Neutral	26	22	21	27	<u>38</u>	<u>28</u>	<u>27</u>	<u>32</u>
Somewhat opposed	10	9	18	14	10	22	18	22
Strongly opposed	3	3	11	2	3	14	14	13

A majority of responding Kindergarten, Grade 1 and Preschool teachers as well as School administrators favoured admitting children to Kindergarten at age 6. The opinions of Kindergarten, Grade 1, and Preschool parents were divided. A relatively large percentage (21- 38%) indicated they had a neutral position on this subject. From the written comments it appeared that many respondents had not encountered this particular situation.

8.3 Class Size and Organization

Class size is a perennial issue in educational circles. It is a high priority concern of classroom teachers, administrators, school trustees, and parents. Major reviews of the literature on class size have reported conflicting results (Cahen & Filby, 1979).

In several reviews it has been reported that student achievement, individualization, and variety of teaching methods increase when class size is reduced (Reisert, 1971; Olson, 1971; Cahen & Filby, 1979). Other studies have found little difference, in terms of student achievement, between larger and smaller classes (Vincent, 1969; Shapson, Wright, Eason & Fitzgerald, 1978).

As a result of a meta-analysis of data from over a hundred studies on class size, Glass, Cahen, Leonard, Smith & Filby (1979) concluded that "average pupil achievement increases as class size decreases. The typical achievement of pupils in instructional groups of 15 and fewer is several percentile ranks above that of pupils in classes of 25 and 30" (p. 43). However, the conclusion of this study and the process of meta-analysis have been severely criticized (Educational Research Service, 1980).

Very little research has dealt specifically with the class size in Kindergarten. Cannon (1966) found that in the large Kindergarten class there tended to be more aggressive behaviour, less individual attention, and less opportunity to work on problems. In the small Kindergarten class, there were more teacher-child contacts and teacher satisfaction and sense of achievement was greater.

When research on class size is reviewed, the possibility of interactive effects must be taken into consideration. As many researchers have pointed out, there are many factors that can influence the effect of class size. One weakness of the research on class size is the difficulty or inability to control for instructional variables such as the quality of instruction. That is the main reason why "inconsistent results have been obtained between studies and it is difficult to get to the heart of the effects of class size itself" (Shapson, 1972, p. 2).

Polls of classroom teachers have shown that teachers believe small classes are important in improving academic achievement (National Education Association, 1975) and that the biggest handicap in teaching is large class size (Instructor, 1980). Parents have also expressed concern about class size (Gallup, 1979).

Two recent reports to individual school districts in British Columbia described the concern of teachers, administrators and parents on class size. In one report (Mayfield, 1980) it was recommended "that the current policy

on class size be reexamined as a response to the nearly universal agreement among parents, principals, and teachers that reduction of class size would improve the program" (p. 140). The Kindergarten teachers thought 17-18 to be an ideal although realistic class size. Not one Kindergarten teacher recommended a class size above 20.

In a second report (Scarfe, Berger & Polowy, 1980) it was recommended "that no Kindergarten class of 'normal' children should exceed 20 pupils. A ratio of one teacher to 15 children is considered to be an optimal level" (p. 2). In both reports (Mayfield, 1980; Scarfe, et al., 1980) it was recommended that where special needs children are included in the regular Kindergarten class, that the class size be adjusted or "weighted" according to some reasonable factor.

In the sections that follow, class size is discussed in reference to classrooms of "typical" children. The idea of "weighting" class sizes when special needs children are included in the regular classroom is discussed in Chapter 10.

8.3.1 Class Size

The Kindergarten teachers were asked to give the enrolment for their classes. Of the teachers who taught one class (n= 973), the calculated mean was 18 students (median of 19 and mode of 20). For those who taught two classes (n=543), the mean was 20 students (median of 19 and mode of 20).

Next, Kindergarten teachers were asked to give a number for the class size in an ideal Kindergarten. Their responses (n = 1016) resulted in a mean of 16 (median and mode = 15). In response to this same question, Kindergarten (n = 481) and Grade 1 (n = 412) parents' responses resulted in a mean of 14 (median and mode = 15).

Kindergarten teachers were asked to give the maximum number of typical children, excluding special needs children, that could be accommodated per session while maintaining an effective program given present resources and facilities. Their responses (n = 1003) resulted in a mean of 19 (median and mode = 20).

Written comments by respondents were nearly unanimous in the need for reducing class size in Kindergarten. Some typical comments are:

> One poor factor of Kindergarten now is the high teacher-student ratio. Kids are coming from day care with a ratio of one teacher to eight or fewer kids and jumped up to a ratio as high as one to 25 or 30. (Preschool teacher)

> The biggest step forward in the quality of education for Kindergarten children has to be the recent grievance in Surrey and the subsequent Commission and resulting reduction in class size . . . . We can have the best programs and still not have time to use them for the most benefit of all our children. (Kindergarten teacher)

> My greatest frustration with the Kindergarten program is the class size requirement. You must have a magic number before you can have two classes; 25 being the maximum for one class is far too many, yet too few for two classes. The class size should be lowered to 15. (Kindergarten teacher)

8.3.2 Kindergarten Combined with Other Grades

Of the responding Kindergarten teachers (n = 988) 10% reported teaching a class which combines Kindergarten and another grade. Of these, 8% were K/1 transition classes and the others were Kindergarten-Grade 1 (42%); Kindergarten/Grades 1 and 2 (25%); Kindergarten/Grades 1, 2 and 3 (17%) combinations.

The Kindergarten teachers who were in charge of combined classes, reported that there were about 12 children from another grade in their classrooms (mean, median and mode of 12). Twenty-one percent of the responding School administrators and 55% of the District administrators reported classes which combine Kindergarten with another grade. Low enrolment was the major reported reason for combining Kindergarten with another grade (see Table 8.7). This reason, given by a majority of the respondents, is an administrative reason, not an educational one.

TABLE 8.7

REASONS FOR KINDERGARTEN-GRADE COMBINATIONS
(Entries are percentages)

Major Reason for Combining Kindergarten with Other Grades	Teachers	Administrators	
	Kindergarten (n=100)	School (n=88)	District (n=32)
Low enrolment	54	61	78
Multi-age/family grouping	23	13	6
Teacher preference	2	2	9
Continuous progress	5	8	6
Other	16	16	-

Fifty-four percent of the Kindergarten teachers and 52% of the administrators stated that the combining of classes is a policy at the school level. Thirty-seven percent of the teachers and 44% of the administrators stated that this is policy at the district level.

Kindergarten and Grade 1 teachers, School and District administrators, and Kindergarten and Grade 1 parents were asked if they were in favour of or opposed to combining a Kindergarten class full-time with primary grades if the amount of time for Kindergarten was not increased (see Table 8.8).

TABLE 8.8

OPINIONS ABOUT COMBINING KINDERGARTEN CLASS WITH PRIMARY GRADES
(Entries are percentages)

Without increasing the amount of time for Kindergarten, are you in favour of, or opposed to, combining a Kindergaretn class full-time with primary grades? (e.g. a Kindergarten class with Grade 1 or Grade 2.) (Median is underlined for each responding group. Where the median is located approximately midway between two response categories, both entries are underlined.)

	Teachers		Administrators		Parents	
Response	Kgn (n=993)	Gr. 1 (n=512)	School (n=417)	District (n-57)	Kgn (n=489)	Gr. 1 (n=424)
Strongly in favour	5	6	6	9	6	5
Somewhat in favour	14	17	13	18	15	16
Neutral	10	9	15	26	9	13
Somewhat opposed	23	19	26	32	25	22
Strongly opposed	48	49	40	16	45	44

The majority of respondents in all six groups were opposed to combining a Kindergarten class with primary grades. This opposition was also seen in some of their written comments. For example:

> After being compelled to teach a Kindergarten-Grade 1 class with morning and afternoon Kindergarten students I would like to state that I found the combination entirely unsatisfactory and unfair to both groups. (Kindergarten teacher)

> You asked about split classes (e.g., Kindergarten and Grade 1 together). I am strongly opposed! It's bad enough that from Grade 1 and up the classes are mixed but it's not right to have a little Kindergarten child, who may start in September still being only 4 years old and a Grade 1 child who is almost 6 together. (Kindergarten parent)

The Kindergarten and Grade 1 teachers and the School and District administrators were asked to indicate the extent of their agreement or disagreement with nine statements that dealt with opinions on combining Kindergarten with primary grades.

As shown in Table 8.9 the majority of respondents agreed that combining Kindergarten with a Grade 1 class or with other primary grades increases the range of abilities, allows for continuous progress, changes the character of the Kindergarten program and decreases time for other grades. A majority of Kindergarten and Grade 1 teachers and School administrators also agreed that this situation requires diverse teacher competencies.

TABLE 8.9

OPINIONS ABOUT COMBINING KINDERGARTEN WITH PRIMARY GRADES
BY TEACHERS AND ADMINISTRATORS
(Entries are percentages)

People differ in their opinions about combining Kindergarten with primary grades. Assuming class size is not a factor, indicate the extent of your agreement or disagreement with each of the following concepts. (Medians are underlined. Where the median is located approximately midway between two response categories, both entries are underlined.)

Statements	Teachers		Administrators	
	Kgn (n=948-976)	Grade 1 (n=505-516)	School (n=405-416)	District (n=57-58)
Allows for continuous progress				
Strongly disagree	7	7	7	0
Disagree	20	20	24	17
Undecided	16	13	14	26
Agree	48	50	48	47
Strongly agree	9	11	8	10
Changes character of Kindergarten program				
Strongly disagree	2	3	2	2
Disagree	6	9	5	5
Undecided	4	6	5	3
Agree	42	46	52	62
Strongly agree	46	37	36	28
Incr.ases range of abilities				
Strongly disagree	4	3	4	5
Disagree	18	12	14	11
Undecided	15	16	16	14
Agree	45	48	47	49
Stronlgy agree	18	21	18	21
Helps meet individual differences				
Strongly disagree	14	12	14	2
Disagree	34	26	32	33
Undecided	16	13	14	19
Agree	29	39	32	33
Strongly agree	7	11	9	14
Provides a flexible program				
Strongly disagree	16	12	12	4
Disagree	35	26	32	26
Undecided	15	15	14	18
Agree	27	39	35	39
Strongly agree	7	0	7	12
Decreases time for other grades				
Strongly disagree	5	6	5	2
Disagree	13	18	18	24
Undecided	17	8	17	12
Agree	40	32	39	45
Strongly agree	25	37	21	17
Requires diverse teacher competencies				
Strongly disagree	1	1	1	0
Disagree	5	4	4	3
Undecided	8	7	4	60
Agree	46	39	47	36
Strongly agree	40	49	44	0
Provides an advantageous mix for age groups				
Strongly disagree	14	12	13	3
Disagree	30	30	37	22
Undecided	19	22	20	38
Agree	30	28	25	29
Strongly agree	8	8	6	7
Increases the number of contacts with any one parent				
Strongly disagree	8	5	7	0
Disagree	26	22	23	19
Undecided	42	46	44	52
Agree	22	23	22	28
Strongly agree	3	a	1	2

A majority of District administrators agreed that combining Kindergarten and other grades provides for a flexible program whereas a majority of Kindergarten teachers disagree. The response item on the questionnaire did not specify if the flexibility was administrative or educational.

8.4 Organization of the Kindergarten Day

The three topics discussed in this section are (a) the length of the Kindergarten day; (b) the Kindergarten timetable; and (c) the use of shortened sessions in September.

The length of the Kindergarten day in Canada varies from half-day programs (usually 2 - 2½ hours long) to full-day programs (5 - 6 hours). The opinions expressed on this topic are varied; and overall the results of research studies do not show conclusive evidence of the advantages of full-day or half-day programs. Research results can be cited in support of full-day programs (e.g., Gorton & Robinson, 1969 ; Rieman, 1971; Oelerich, 1979) and in support of half-day programs (e.g., Johnson as cited in Beckner et al., 1978). Other research (Lysiak & Evans, 1976) reported mixed results.

Studies comparing full-day, half-day and alternate-day schedules (Grand Rapids, Minnesota, Department of Education & Cleminshaw in Beckner et al., 1978) have also reported inconclusive results in terms of student achievement as measured on standardized tests. The parents who were included in these studies seemed to favour an alternate full-day schedule for their children while the teachers reported mixed reactions.

In British Columbia, the Report of the Royal Commission on Education (1960) recommended that "daily attendance in Kindergarten be not longer than one-half of a school day" (p. 127).

The Canadian Education Association (1972) reported that "a half-day (2½ hours) class is the norm in Canadian Kindergarten" (p. 18). The results of a recent survey (Mayfield, 1980) showed that the half-day 2½ hour session was preferred by the majority of Kindergarten teachers and elementary principals in Greater Victoria.

A report on the extended Kindergarten program from the Child Study Centre at the University of British Columbia (Fisher & Julien, 1979) included in the description of that program and the conclusion that although the experience was judged to be positive for parents, teachers and children "to establish a full-day Kindergarten program, school districts will need to face the problems of cost, space requirements, teacher availability and interest. While we are not recommending the total adoption of an extended day, we are in favour of seeing it as an option for parents" (p. 15).

In the Resource Book for Kindergartens (1973) the following timetable is presented with the caveat that "all timetables must be flexible; this is presented to show the approximate division of time in a Kindergarten day; the order of activities may vary to meet different needs and circumstances" (p. 84).

8:50 - 9:05	Arrival (teacher is at door to greet children) - children arrive and put coats away. Free choice (for early arrivals) - optional: small blocks, puzzles, beads, crayons, and books may be used for a few minutes until the teacher is ready to assemble the group.	12:45 - 12:55
9:05 - 10:00	Group opening-song, checking attendance, morning greetings, conversation discussion and planning of the day by the teacher and children. Demonstration of new skills and equipment. Choosing and recording of activities. Work period - children work in small groups or individually at activities that have been chosen. Evaluation, either formally or informally, at an appropriate time in the work period. Clean-up.	12:55 - 1:45
10:00 - 10:20	Music-songs, rhythms, listening to records.	1:45 - 2:05
10:20 - 10:45	Snack, rest, toileting (for those who do not have facilities in the room and must have a formal bathroom routine).	2:05 - 2:30
10:45 - 11:05	Movement education - indoors, outdoors or in gym.	2:30 - 2:50
11:05 - 11:25	Language arts-stories, poems, speech, conversation.	2:50 - 3:10
11:25 - 11:30	Preparation for dismissal. Dismissal - if possible, let the children say goodbye and leave when they are ready and have been checked by the teacher.	3:10 - 3:15

In the Resource Book for Kindergartens (1973), it is stated that "there are several ways in which school opening can be handled" and "shortened sessions initially are advantageous for several reasons: To allow time for interviews with parents, to give the teacher an opportunity to plan her program carefully on the basis of her observations, to avoid fatigue for the children, to facilitate parents waiting for their children" (p. 79).

In a recent survey (Mayfield, 1980) of Kindergarten teachers, parents and principals in one school district in British Columbia, the results showed that the "Kindergarten teachers and principals support the concept of a shortened Kindergarten day during the first few weeks of school. On the other hand, parents of Kindergarten children are almost equally divided between agreement and disagreement" (p. 129). Some parents thought that the shortened day was unnecessary for children who had experience in a pre-Kindergarten program such as full-time day care or half-day nursery school.

8.4.1 Length of Day

The Kindergarten teachers were asked to report the average daily length, in minutes, of their sessions. The teachers and both groups of administrators were asked to state their opinion about maximum daily length for sessions (see Table 8.10).

TABLE 8.10

MAXIMUM LENGTH OF KINDERGARTEN SESSION

(Entries are in minutes)

Group	Minutes	
	Mean	Standard Deviation
The average daily length of your Kindergarten session is:		
Kindergarten teachers (n=1021)	154	38
In your opinion the maximum daily length of a Kindergarten session should be:		
Kindergarten teachers (n=1011)	156	36
School administrators (n=414)	154	36
District administrators (n=57)	159	29

The means for the actual average daily length and the preferred daily length of the Kindergarten sessions were almost identical to the length of most Kindergarten sessions in Canada (i.e., 2½ hours).

8.4.2 Switching Morning and Afternoon Kindergarten Classes

Grade 1 parents were asked to indicate which class schedules they would have preferred for their Kindergarten child. Of the respondents (n = 400), 40% indicated a preference for mornings only. Only 6% preferred afternoon sessions. The second most popular schedule (31%) was mornings part of the year/afternoons part of the year. There was little support for full-day Kindergartens either part of the week (6%) or every day (5%).

Of the responding Kindergarten teachers (n = 950), 35% reported switching

classes at mid-year, 33% did not, and 32% teach only one Kindergarten session.

The written comments of parents support the preference for morning sessions or switching at mid-year; e.g.:

> I feel if possible they (the Kindergarten children) should be able to go in the mornings . . . . If they have morning and afternoon classes they should switch halfway through the year. (Kindergarten parent)

> (My child is) scheduled for afternoons all year long. This is unfair—should switch to mornings half way through year. (Kindergarten parent)

8.4.3 Kindergarten Timetable

In order to arrive at an idea of the approximate time spent on various areas of the curriculum, Kindergarten teachers were asked to estimate the number of minutes per week they scheduled for each of the areas given on the timetable in the Resource Book for Kindergartens.

TABLE 8.11

ESTIMATED TIME PER WEEK FOR ACTIVITIES BY KINDERGARTEN TEACHERS*

It is recognized that schedules vary from day to day as well as throughout the year. In your USUAL Kindergarten schedule, estimate the number of minutes PER WEEK you allot to each of the following?

Activity	Minutes		Percentage of total time per week	
	Mean	Standard Deviation	Mean	Standard Deviation
Group opening/arrival	73	39	10	5
Work period/activity time	163	82	22	11
Free play	106	74	14	10
Music	66	36	9	5
Movement education-including P.E. in gym	91	45	12	6
Language Arts (verbal and non-verbal) - including library period	121	72	16	9
Snacks	58	32	8	5
Rest	19	23	2	3
Toileting	16	36	2	6
Dismissal	28	18	4	3

*n = 832 - 976 depending on item

Based on the information from responding Kindergarten teachers (see Table 8.11), the typical Kindergarten day consists of 15 minutes for Group Opening/arrival time; 50-60 minutes for Activity time/freeplay/work period; 13 minutes of music; 18 minutes of movement education; 20-24 minutes of Language Arts; 10-18 minutes for snack, toileting, and rest; plus 5 minutes for dismissal. This allotment of time is very similar to that suggested in the Resource Book for Kindergartens with the exception that the latter allots more time (i.e., 25 minutes) to snack, rest, and toileting. This difference is accounted for in that the most frequent response given for rest and toileting was 0 minutes. Many Kindergarten teachers commented that because of the integrated nature of their programs it was difficult to state a specific number of minutes for certain areas. This resulted in some large variations in time allotments given by Kindergarten teachers.

8.4.4 Shortened Kindergarten Sessions

The Kindergarten teachers, the Kindergarten parents and the Grade 1 parents were asked whether, in terms of their experience, Kindergarten session were shorter in September than those in later months. Sixty-six percent of the responding Kindergarten teachers (n = 982), 62% of the Kindergarten parents (n = 455) and 37% of the Grade 1 (n = 399) responded affirmatively.

As shown in Table 8.12, Kindergarten teachers reported shortened sessions were used for a median of 7 days; Grade 1 parents reported a median of 11 days (for last year's Kindergarten); and Kindergarten parents reported a median of 5 days.

TABLE 8.12

NUMBER OF DAYS FOR SHORTENED SESSION

For approximately how many school days is a shortened session used?		
Group	Number of days Median	Interquartile Range
Kindergarten teachers (n=681)	7	5.7
Kindergarten parents (n=293)	5	5.9
Grade 1 parents (n=190)	11	8.2

Kindergarten teachers, Kindergarten and Grade 1 parents, were asked the main purpose of the shortened sessions (see Table 8.13).

TABLE 8.13

PURPOSES OF SHORTENED SESSIONS IN KINDERGARTEN
(Entries are percentages)

What is the MAJOR purpose for using shortened sessions?

Reasons	Teachers	Parents	
	Kgn. (n=584)	Kgn. (n=244)	Grade 1 (n=168)
Interviews with children and parents	13	4	7
Interviews with parents only	4	0	8
Home visits	5	2	0
Staggered entry (a few children at a time)	34	30	36
Orientation for the child	41	58	42
Observation of the children	1	2	2
Other	2	4	5

Parents and Kindergarten teachers agreed that the main purposes were orientation for the child and staggered entry. The two reasons for shortened sessions suggested in the Resource Book for Kindergartens (i.e., observation of children and interviews with parents) were not considered to be main purposes by nearly all respondents.

The Kindergarten (n = 278) and Grade 1 (n = 194) parents were asked whether the shortened sessions caused any problems for the parent or for the child. Twenty-one percent for each group responded positively. Seventy-six percent of the Kindergarten parents and 79% of the Grade 1 parents responded negatively. The remaining parents were undecided.

The Kindergarten and Preschool teachers, and the Kindergarten, Grade 1 and Preschool parents were asked for whom they would favour shortened sessions in September with gradual extension.

As shown in Table 8.14, the percentage of Kindergarten teachers in favour of shortened sessions for all children was more than twice as much as the percentage in favour for any of the other groups. For the response "For those who need it", this ratio was reversed. Twice the percentage of parents and Grade 1 teachers as Kindergarten teachers did not favour shortened sessions in September. In spite of this finding, parents and Kindergarten teachers agreed on the main purposes of shortened sessions.

TABLE 8.14

OPINIONS ABOUT SHORTENED SESSIONS

(Entries are percentages)

For whom do you favour a shortened session in September with gradual extension? (Check one only)

Response	Teachers		Parents		
	Kgn. (n=980)	Gr.1 (n=340)	Kgn. (n=459)	Gr.1 (n=403)	Presch. (n=352)
For all children	72	23	34	32	23
For children who need it	12	45	25	21	46
Not in favour of shortened sessions	16	32	41	47	32

Written comments by parents indicated their dissastisfaction with shortened sessions. Typical comments included:

> My one criticism of the present Kindergarten program is the extended (i.e., one month) period of shortened sessions. I feel most children, particularly those who have attended a Preschool, are ready to go to Kindergarten for more than one or one and one-half hours per day. (Kindergarten parent)

> I think this (staggered entry) is totally unnecessary, as times have changed and most children have attended Preschool before Kindergarten. . . .My niece just started Kindergarten this year and was extremely upset as she only stayed in school 10 minutes the first day and was very disappointed. (Preschool parent)

8.5 Transportation

Kindergarten teachers were asked to estimate what percentage of the children in their Kindergarten class(es) used transportation arranged by the school district. Of the responding Kindergarten teachers (n = 957), 63% reported that none of their children used transportation arranged by the school district Only 5% indicated all of their children used district arranged transportation. Of the Kindergarten teachers who indicated they taught a second Kindergarten class (n = 510), 71% reported that none of the children used district arranged transportation.

Kindergarten teachers were asked if the methods of travel used by the children have an impact on the Kindergarten program in their class(es)

and if so, what are the main effects (see Table 8.15).

TABLE 8.15

EFFECT OF CHILDREN'S METHOD OF TRAVEL TO SCHOOL
(Entries are percentages)

Do the methods of travel used by the children have an impact on the Kindergarten program in your class(es)?	
Response	Kindergarten teachers (n = 9/0)
Yes	24
No	68
Don't know	8
If yes, check the MAIN effects you have noticed.	
Longer day for children	64
Teacher spends more time supervising	51
Children more tired	50
More absenteeism in bad weather	50
Improper clothing worn	2
Lunches lost or forgotten	12
Other	13

n = 231 - 232

Of the 68% of the Kindergarten teachers who reported that the methods of travel used by children had an impact on their Kindergarten program, the most frequently indicated effect was a longer day for the children. Half of the teachers also indicated that other effects included more teacher time spent supervising, more tired children, and more absenteeism in bad weather. The last effect was reported by 18% more rural teachers than urban teachers. In general transportation had a greater impact on the Kindergarten programs of rural teachers than on the programs of urban teachers.

Written comments of parents and Kindergarten teachers indicated further that transportation is a problem in some rural areas. For example:

> Some children in rural areas are left out of the Kindergarten program due to transportation problems (no school bus at the noon hour). (Kindergarten teacher)

> A separate bus service for Kindergarten children in rural areas is needed. Some children in outlying areas miss out on Kindergarten due to inability of parents to drive them to and fro. (Kindergarten parent)

8.6 Summary

The responses for the different groups included in the survey were in close agreement on the earliest age of enrolment in public school with a majority indicating age five, and one-fourth to one-third indicating age four.

One-third of the responding Kindergarten teachers preferred September 1st as the cut-off date for admission to Kindergarten. More than a third of the School administrators and a majority of District administrators preferred twice-a-year entry. The second choice of all three groups was the current cut-off date of December 31.

A majority of Kindergarten and Grade 1 teachers, School and District administrators opposed early admission to Kindergarten whereas a majority of the Preschool teachers, Kindergarten parents, Grade 1 parents and Preschool parents favoured such admission. According to the Kindergarten teachers, "under-age" children are not admitted to Kindergarten. According to the administrators, most schools and districts do not have a specific policy which would permit early admission to Kindergarten.

Twice-a-year entry into Kindergarten is not possible in nearly all schools or districts. Twice-a-year entry was favoured by a majority of Preschool teachers and parents and more than two-fifths of Kindergarten and Grade 1 parents whereas less than two-fift[illegible] the Grade 1 teachers were in favour of it.

A majority of Kindergarten and [illegible] teachers, Kindergarten, Grade 1 and Preschool parents favoured compul[illegible] Kindergarten attendance for all children of eligible age. Distric[illegible]ministrators were the least in favour of compulsory Kindergarten.

A majority of Kindergarten, Grade 1 and Preschool teachers and School administrators were in favour of admitting 6-year-olds to Kindergarten, instead of Grade 1, if they had not previously attended Kindergarten.

The average class size for the Kindergarten teachers included in the survey was eighteen students. These teachers thought that an ideal class would consist of fifteen or sixteen students. The teachers stated that the maximum number of students they could accommodate for an effective program would be twenty.

Ten percent of the responding Kindergarten teachers teach a class which combines Kindergarten and another grade (most frequently Grade 1) consisting of about twelve children from the other grade. This was most frequently done because of low enrolments.

A majority of responding teachers, administrators and parents were opposed to combining Kindergarten classes with primary grades. The majority of teachers and administrators agreed that combining Kindergarten and other primary grades allows for continuous progress, changes the character of the Kindergarten program, increases the range of abilities, and decreases time for other grades. A majority of District administrators agreed that this provides a flexible program whereas a majority of Kindergarten teachers disagreed.

The average daily length of a Kindergarten session was reported as 150 minutes. The Kindergarten teachers and both groups of administrators agreed that that is what it should be.

Grade 1 parents preferred morning sessions for their Kindergarten child with mornings part of the year and afternoons part of the year as the next preferred option. Approximately one-third of the responding Kindergarten teachers switch sessions at mid-year; one-third do not; and one third teach only one Kindergarten session.

The time allotments given by Kindergarten teachers for the different areas of the Kindergarten timetables were very similar to those suggested in the Resource Book for Kindergartens with the exception of less time spent for snack, toileting and rest than suggested.

The Kindergarten teachers who used shortened session for a week, or a week and a half, at the beginning of September, did so mainly for orientation for the child, and for staggered entry. Kindergarten and Grade 1 parents also indicated that these were the two main purposes for shortened sessions. The majority of teachers were in favour of shortened sessions in September for all children, whereas twice the percentage of parents as Kindergarten teachers did not favour shortened sessions.

The majority of responding Kindergarten teachers indicated that none of their children used transportation arranged by the school district but that the children's method of travel did have an impact on the Kindergarten program. The most frequent effect was a longer day for the children.

CHAPTER 9

ASSESSMENT OF KINDERGARTEN CHILDREN

9.1 Introduction

This chapter is a presentation of the results of survey questions to teachers, administrators, and parents on various aspects of:

1. Screening (9.2);
2. Evaluation (9.3); and
3. Reporting (9.4).

9.2 Screening

In the past few years, there has been an increased interest in the early identification of children who might have difficulty in the early school years (Bradley, 1975; O'Bryan, 1976; Pope, Lehrer, and Stevens, 1980). One author commented that "Kindergarten screening is one small part of a ground swell movement which recognizes the importance of educators becoming involved with the child at a young age in order to prevent or reduce failure in school and in life" (Zeitlin, 1976, p. vii). It is recognized that the earlier possible problems are accurately identified and intervention begun, the likelihood of success is increased (Commission on Emotional and Learning Disorders in Children, 1970).

It has been suggested that the main goal of this early identification or screening of children has been "not to stereotype children through labeling . . . but rather to set appropriate expectations . . . and to design appropriate experiences so that they may have success in the classroom" (Zeitlin, 1976, p. 9). The general consensus of educators in this area has been that learning problems of young children are frequently multifactorial and that simplistic one-time assessment with no follow-up action is inappropriate and neglectful of the needs of children.

It has become common for screening to include medical data, information from parents and observation as well as structured assessment although there is quite a degree of variance in the type and purpose of some of these instruments. The Windsor Model (Windsor Board of Education, 1979) includes parent involvement, determination of the child's general health, identification of educational needs, and follow-up of any likely problems.

Four models of screening have been identified: (a) medical model, (b) school readiness model, (c) screening for exceptionality, and (d) screening for curricular programs (Wendt, 1979).

The medical model is frequently identified as a type of developmental screening. Schere and Schere (1977) identified one type of instrument used in the identification of "at risk" children as Developmental Screening which is used to determine the pattern of a child's developmental history. One

example of such instrument is the Denver Developmental Screening Test which assesses gross-motor, language, fine-motor, and personal-social development. Observation by trained people is another technique frequently used in developmental screening of children.

The school readiness model seeks to identify "ready" and "non-ready" children for the purpose of helping "the child avoid consistent failure, and the subsequent lowered self-esteem and avoidance behaviors that could develop in the primary grades" (Wendt, 1979, p. 20).

A test identified by Schere and Schere which could be used in the school readiness model directly measures learning skills considered crucial to successful learning (e.g., perception, memory, problem solving, and visual-motor association). Examples of this type are the Illinois Test of Pyscholinguistic Abilities, the Pre-academic Learning Inventory, and the Metropolitan Readiness Test.

The screening for exceptionality model seeks to identify those children who have exceptional educational needs. Ever since Benet, one of the most frequently used assessment instruments has been the intelligence test which usually samples children's abilities on verbal and performance tasks. A well-known test ofthis type used with young children is the Peabody Picture Vocabulary Test which is designed to measure a child's verbal intelligence. A nonverbal, multiple-choice format is used to evaluate young children if they are able to indicate "yes" or "no" responses. The use of intelligence tests in the determination of exceptionality has long been an area of controversy.

The fourth model is screening for curricula programs which seeks to identify children who could benefit from specific programs (e.g., gifted programs). Schere and Schere (1977) identified instruments in this model as Predictive Tests for Special Populations which include those designed to focus on the abilities necessary before a child can undertake a learning skill.

One of the weaknesses in some types of screening is that poor performance suggests that a problem exists, but does not indicate what the problem is, nor what to do about it. For example, poor performance may result from general lack of mental competence, poor physical health, inability to understand the directions because of auditory or language disabilities, inability to respond or for many other reasons (Bice & Cruickshank, 1966).

In British Columbia, the current Ministry of Education policy is to encourage school districts to develop their own systems of assessment (Special Programs: A Manual of Policies, Procecures and Guidelines, 1980). Recommendations by the B.C.T.F. "suggest early identification programs be designed so that the classroom teacher's observations are the key source of information about the child's learning" (O'Connor, 1980, p. 279).

Some districts have formulated policies on screening and have established on-going programs. Other districts have neither policies nor programs for screening children. Still other districts are in the process of piloting screening programs.

A variety of instrumentation is used: standardized tests, published observation checklists, district developed tests, informal observation, etc. O'Connor (1980) reported the use, in various districts, of the Jansky de Hirsch Screening Index, McCarthy Screening Test, Metropolitan Readiness Test, Slingerland Test, Santa Clara Inventory, Gates-MacGinitie Test, Yellow Brick Road, SPARK, and locally developed instruments. She concluded that "evidence of undirected and arbitrary practice in British Columbia would argue the case for a professionally prepared and monitored program that would be followed throughout the province" (O'Connor, 1980, p. 280).

The following aspects of screening were investigated: (a) screening practices, (b) purposes of screening, (c) the timing of screening, (d) administering screening, (e) screening instruments, and (f) factors to be assessed in screening.

For the items on the questionnaire, screening was defined as "a systematic attempt, at any time, to identify children's strengths and weaknesses."

9.2.1 Screening Practices

Kindergarten and Grade 1 teachers were asked if the children were screened. Eighty-five percent of the Kindergarten teachers reported that some of their pupils have been screened. One hundred percent of the pupils in half of all the Grade 1 classrooms had been screened in Kindergarten. Thirty-five percent of the total sample of Grade 1 pupils had not been screened in Kindergarten.

9.2.2 Purposes of Screening

Teachers, administrators and parents were asked if they favoured screening. An average of eighty-three percent of all the teachers, parents and administrators who responded were in favour of screening (Range: 79% - 88%). This finding is supported by the content analyses of the respondents' written comments. Screening was the only topic that appeared in a list of the three most frequently mentioned topics for all eight groups. Overall, each group was in favour of Kindergarten screening.

Kindergarten teachers were asked to indicate the main purpose(s) of Kindergarten screening in their school last year (see Table 9.1).

More than four-fifths of the respondents indicated "to identify 'at risk' children" as the main purpose. More than half of the teachers also indicated "to plan programs for individual children."

Kindergarten and Grade 1 teachers, School and District administrators who favoured screening were asked to identify what <u>should</u> be the main purpose(s) of screening (see Table 9.1).

The Kindergarten teachers, Grade 1 teachers and School administrators indicated the main purpose of screening <u>should</u> be: To identify "at risk" children, to plan programs for individual children, and to identify "high ability" children. District administrators identified the same first two as being the main purposes, but in reverse order.

TABLE 9.1

PURPOSES OF SCREENING
(Entries are percentages)

Purposes	Percent of Respondents Selecting Purpose				
	Presently	Recommended			
	Teachers	Teachers		Administrators	
	Kgn (n=719)	Kgn (n=835)	Gr.1 (n=454)	School (n=338)	District (n = 50)
To delay entry into Kindergarten	1	9	9	5	2
To accelerate entry into Kindergarten	0	4	5	6	2
To delay entry into Grade 1	12	16	26	6	0
To accelerate entry into Grade 1	2	5	8	4	0
To identify "at risk" children	81	75	67	68	73
To plan the Kindergarten curriculum	24	37	18	25	33
To plan programs for individual children	54	67	53	56	77
To provide information for parents	35	35	22	26	22

Comparing the purposes of screening as they should be to the purposes as they are from the Kindergarten teachers, reveals the same five main purposes, but in slightly different order. The Kindergarten teachers indicated that they would like to see more of the screening results used for identifying "high ability" children, planning programs for individual children, and for planning the Kindergarten curriculum.

This concern with identifying special needs children has implications for training (pre-service and in-service) of Kindergarten teachers (see Chapters 10 and 12), and for the hiring of qualified personnel for the screening of Kindergarten children.

Those who were not in favour of screening were asked to indicate their reasons (see Table 9.2).

About one-sixth of teachers and administrators were against screening. They felt that the test methods were not reliable, and that the children would be labelled.

The following are some typical comments that reflect the range of opinions on screening in Kindergarten:

> The 'spotlight' is on Kindergarten. We are finally beginning to see the value and the necessity of identifying high-ability and 'at risk' children at an early age. It has been shown, statistically, that early intervention and remediation are dramatically more successful in Kindergarten/Grade 1 than later intervention in the intermediate grades. (Kindergarten teacher)

I feel that screening should be for the purpose of informing the teachers and parents of the areas the child needs to develop to become academically and emotionally and socially ready for Grade 1. (Kindergarten parent)

I strongly disagree with screening children so early in age. Why not give them a chance first to develop? (Preschool parent)

TABLE 9.2

REAS'S GIVEN BY RESPONDENTS OPPOSED TO SCREEN.NG

Reasons Not In Favour of Screening	Percent of Respondents Who Chose Each Reason			
	Teachers		Administrators	
	Kindergarten (n=160)	Grade 1 (n=58)	School (n=83)	District (n = 8)
Test methods are not reliable	59	64	60	50
Children are labelled	58	55	48	38
Results depend on who does the screening	45	45	31	63
Upsets parents	15	7	16	13
Time-consuming	27	31	17	25
Information not used	30	36	22	25

9.2.3 Timing of Screening

Kindergarten teachers were asked when screening was done. Kindergarten and Grade 1 teachers, School and District administrators were asked when this screening should be done (see Table 9.3).

TABLE 9 3

TIME OF YEAR FOR SCREENING
(Entries are percentages)

Time of Year	Presently	Recommended			
	Teachers	Teachers		Administrators	
	Kgn (n=651)	Kgn (n=884)	Gr.1 (n=447)	School (n=358)	District (n = 50)
On-going throughout the year	45	59	49	41	48
Before entry into Kindergarten	8	16	11	27	18
During September	7	8	4	11	16
Mid-Term (January/ February)	15	9	15	13	4
Year-end (June)	20	6	20	6	6

For Kindergarten teachers who indicated an existing s eening program, the most frequently indicated times for such screening were: on-going throughout the year (little less than half); year-end (one-fifth) and mid-term (little more than one-sixth). Less than one-tenth of the screening occurred before entry into Kindergarten.

The time category "on-going throughout the year" was most frequently selected by teachers and both groups of administrators as the choice when screening should be done.

The following comment is representative of the written comments of Kindergarten teachers on the timing of screening:

> Screening should be on-going throughout the year but a definite time should be set aside to screen the children individually in September and at the end of May. (Kindergarten teacher)

9.2.4 Administering Screening

Kindergarten teachers were asked to identify who did the screening. Kindergarten and Grade 1 teachers, School and District administrators were asked who should carry out this screening. The results to both these questions are summarized in Table 9.4.

TABLE 9.4

MAIN PERSONS TO PERFORM THE SCREENING
(Entries are percentages)

	Presently	Recommended			
	Teachers	Teachers		Administrators	
Main Persons to Carry out Screening	Kgn (n=721)	Kgn (n=881)	Gr. 1 (n=473)	School (n=358)	District (n = 52)
.indergarten teacher	66	82	90	81	90
School psychologist	12	20	25	23	26
Counsellor	13	10	11	15	8
District test specialist	12	32	37	39	37
Principal	6	5	7	11	10
Primary supervisor	2	4	10	9	10
Speech therapist	36	44	36	39	45
Learning assistance teacher	62	68	62	57	57
Audiologist	14	28	30	37	33
Public health nurse	56	65	53	62	63
Parents	5	6	11	17	24

The Kindergarten teachers, the Learning Assistance teacher, and the Public Health nurse, in that order, were identified by more than half of the Kindergarten teachers as the main persons who carry out the screening of children. A little more than one-third of the Kindergarten teachers also listed the Speech therapist. Only one-seventh of the Kindergarten teachers indicated another person.

More than four-fifths of both groups of teachers and administrators indicated that the Kindergarten teacher should carry out the screening process. This contrasts with two-thirds of the Kindergarten teachers who were involved in screening when it occured.

There existed fairly close agreement between who is carrying out the screening and who the different groups of teachers and administrators think should carry out the screening. The same persons rank high and similar percentages are assigned to these persons. However, one exception is about one-third of both groups of teachers and administrators indicated a District Testing Specialist should be involved in the screening of young children. About one-tenth of the Kindergarten teachers indicated involvement of such a person.

9.2.5 Screening Instruments

A summary of the screening instruments used with Kindergarten children last year, as reported by Kindergarten teachers, is presented in Table 9.5.

TABLE 9.5

INSTRUMENTS USED IN SCREENING

(Entries are percentages)

Instrument	Percent of Kindergarten Teachers who Indicated the Instrument was Used
Bilingual Syntax Measure	4
Boehm Test of Basic Concepts	11
Denver Developmental Screening Test	13
Jansky-deHirsch Readiness Test	23
McCarthy Scales of Children's Abilities	4
Metropolitan Readiness Test	22
Peabody Picture Vocabulary Test	30
Pre-Academic Learning Inventory Test	2
Raven Progressive Matrices Test	4
Santa Clara Inventory of Development Tests	17
SPARK	10
District-developed instrument	16
Teacher-developed instrument	34
Other	25
None of the above	2
Don't know	10

About one-third of the teachers who used screening instruments reported that they developed their own. Almost one-third used the Peabody Picture Vocabulary Test and about one-fifth the Jansky de Hirsch and the Metropolitan Readiness Tests.

According to the classification scheme of Schere & Schere (see Sectio[illegible] these published tests are examples of the Traditional Intelligence Test which are used to sample children's abilities on verbal and performance tasks. No information was asked on the type of instruments de[illegible]ope[illegible] by the teachers.

9.2.6 Factors Assessed in Screening

Kindergarten teachers were asked to indicate areas that were assessed as part of the current screening program (see Table 9.6).

TABLE 9.6

CHARACTERISTICS ASSESSED IN SCREENING

(Entries are percentages)

Characteristics	Percent of Kgn. Teachers who Indicated the Characteristic was Assessed (n=715)
Intelligence	31
Language development	87
Learning rate	31
General health (including vision, hearing, allergies, etc.)	70
Motor abilities/physical development	72
Social/emotional development	41
Other	12

Language development received the most attention in screening with more than four-fifths of the Kindergart[illegible] teachers reporting screening this characteristic in some way. More than two-thirds of the teachers assessed general health and motor abilities as part of the screening. About two-fifths of the teachers assessed social/emotional development and less than one-third attempted to assess intelligence and learning rate.

Kindergarten, Grade 1 and Preschool teachers, School and District administrators, and Kindergarten, Grade 1 and Preschool parents were asked to indicate how important various areas <u>should</u> be as part of Kindergarten screening (see Table 9.7).

TABLE 9.7

CHARACTERISTICS TO BE SCREENED RANKED IN ORDER OF IMPORTANCE

Characteristic	Recommended Importance of Characteristics in Rank Order							
	Teachers			Administrators		Parents		
	Kgn. (n=851)	Gr.1 (n=460)	Presch. (n=258)	School (n=356)	District (n=58)	Kgn. n=367)	Gr.1 (n=337)	Preschool (n=288)
Intelligence	6	6	6	6	6	6	6	6
Language development	2	1	2	2	2	3	3	3
Learning rate	5	5	5	5	5	5	4	5
General health (including vision, hearing, allergies etc.	1	3	1	1	1	2	1	1
Motor abilities/physical development	4	4	4	4	4	4	5	4
Social/emotional development	3	2	3	3	3	1	2	2

All groups, except Grade 1 teachers and Kindergarten parents, rated general health as the most important characteristics to screen. The Grade 1 teachers put more importance on screening language development than did the Kindergarten teachers. Kindergarten parents considered social/emotional development as being the most important characteristic to screen. All groups rated intelligence as the least important characteristic to screen. Although intelligence was ranked last by all groups, it was nevertheless rated to be of some importance in a screening program. Almost one-third of the Kindergarten teachers screened for this (see Table 9.6).

The following comment is representative of the written comments of many Kindergarten teachers:

> Class-wide screening for health and speech is worthwhile. Systematic observation by the teacher, adapting her program and with immediate referral where necessary is best in all other areas. Great batteries of tests are not desirable or worthwhile at this age level. (Kindergarten teacher)

9.3 Evaluation

The Resource Book for Kindergartens (1973) contains the comment: "Teacher and programme effectiveness is evaluated through observing and recording the growth and progress of each child toward suitable goals for him or her. Early, systematic, and continuous evaluation is an integral part of teaching (p. 85)." The Resource Book then lists personal and social growth, language, auditory discrimination, visual perception, large and small muscle control, knowledge and problem solving as important areas of growth for each child. These areas of growth can be measured using a multitude of different instruments and techniques (Evans, 1974; Boehm and Weinberg, 1977). The results of any systematic attempt to evaluate the Kindergarten child can also be reported in many different ways. Therefore, in order to determine the evaluation techniques presently used in Kindergarten classrooms, Kindergarten teachers were asked to indicate:

1. The methods they used to collect data,
2. The methods which gave them the most useful data,
3. The methods in which they would like additional training,
4. How often they recorded information on each area of growth listed in the Resource Book, and
5. The method of reporting they preferred. (Also asked of the parents)

9.3.1 Evaluation Techniques used by Kindergarten Teachers

Kindergarten teachers were asked to indicate how frequently they used the thirteen evaluation methods listed to collect information on the typical Kindergarten child's ability, skills, attitudes or behaviour. The assessment of special needs children was excluded (see Table 9.8).

TABLE 9.8

EVALUATION TECHNIQUES

Technique	Frequency of use by Kgn. teachers (1=never, 2=rarely, 3=sometimes, 4=often, 5=always) (n=975)	Percent of Kgn.Tchrs. who chose technique as providing the most useful information (n=986)			Percent of Kgn.Tchrs.* who indicated they needed more training in technique (n=726)		
	Mean	First Choice	Second Choice	Total	First Choice	Second Choice	Total
Observation without recording	4.11	28	10	38	5	5	10
Anecdotal notes	3.82	35	16	41	11	9	20
Checklists	3.69	10	15	25	4	6	10
Rating scales	1.70		1	2	7	9	16
Teacher-developed testing activities	3.42	12	15	27	35	15	50
District-developed tests	2.00	0	2	2	5	8	13
Commercially published test	2.18	1	3	4	10	10	20
Interviews with parents	3.97	5	15	20	7	8	15
Assessments by specialists	2.84	1	3	4	7	12	19
Readiness workbook exercises	2.07	1	1	2	1	1	2
Case studies	1.82	0	1	1	4	7	11
Interviews with the pupils	3.29	3	6	9	2	7	9
File of children's work	3.92	5	13	18	1	1	2

*234 Kindergarten teachers indicated they did not want additional training in any of the above techniques.

The Kindergarten teachers reported that they most frequently used unrecorded observations to evaluate the Kindergarten children's ability, skills, attitudes and/or behaviour. Other techniques often used are files of children's work, interviews with parents, anecdotal notes and checklists. They rarely or never used rating scales, case studies, district-developed or commercially published tests, or workbook exercises.

The Kindergarten teachers were asked to choose the evaluation technique that they thought provided the most useful information (see Table 9.8). The teachers indicated that recorded observations and teacher-developed testing activities provided the most useful information.

9.3.2 Additional Training in Evaluation

The Kindergarten teachers were asked to indicate in which evaluation technique they would like to have additional training (see Table 9.8). Half of the teachers identified teacher-developed testing activities as their first or second choice. The next most popular techniques for additional training were anecdotal notes and commercially developed tests. One-fifth of the Kindergarten teachers selected these two as their first or second choices, Pre-service and in-service needs of Kindergarten teachers are discussed in more detail in Chapter 12.

9.3.3 Evaluation of Kindergarten Children's Development

The Kindergarten teachers were asked to rate the frequency with which they evaluated different aspects of a typical Kindergarten child's development (see Table 9.9).

TABLE 9.9

KINDERGARTEN CHILDREN CHARACTERISTICS EVALUATED
(Entries are percentages)

Characteristic	Frequency Characteristic is Evaluated. (Medians are underlined. Where the median is located approximately mid-way between two response categories, both entries are underlined.)						Kindergarten Teachers Identifying the Characteristic as Most Important (n = 900)
	Never	Less than 3 times a year	3 or 4 times a year	Monthly	Weekly	Daily	
Personal growth	0	2	16	17	<u>17</u>	<u>48</u>	54
Auditory discrimination	0	6	24	<u>22</u>	<u>28</u>	20	1
Small muscle control	0	1	12	19	<u>29</u>	39	0
Intellectual Problem-solving	1	2	17	20	30	30	6
Social and emotional growth	0	1	10	14	18	<u>57</u>	20
Visual perception	0	2	16	20	<u>35</u>	27	3
Large muscle control	0	2	14	18	<u>36</u>	30	0
Knowledge and concepts	1	2	18	20	<u>30</u>	29	1
Language development	0	1	9	15	24	<u>51</u>	15

Teachers, on the average, evaluated the children on a weekly basis on all aspects listed. About half of the teachers identified the personal growth (a positive self-image, comfortable with self) of the children as the most important to be evaluated. One-fifth of the teachers identified social and emotional development, and about one-sixth of the teachers selected the characteristic labelled language development.

9.3.4 Methods of Reporting

The Kindergarten teachers, School and District administrators were asked to rate possible ways of reporting on Kindergarten children (see Table 9.10).

TABLE 9.10

METHODS OF REPORTING
(Entries are percentages. Medians are underlined.)

Statement and Response	Teachers	Administrators	
	Kindergarten (n=976)	School (n= 98)	District (n = 58)
REPORT CARDS are the preferred method of reporting to parents			
Strongly disagree	21	18	27
Disagree	34	36	23
Neutral/No opinion	9	9	11
Agree	32	33	36
Strongly agree	5	5	3
CONFERENCES are the preferred method of reporting to parents			
Strongly disagree	1	1	2
Disagree	1	1	2
Neutral/No opinion	1	0	0
Agree	24	23	24
Strongly agree	74	76	72
Kindergarten children should be given LETTER GRADES on REPORT CARDS			
Strongly disagree	88	80	77
Disagree	10	17	14
Neutral/No opinion	1	1	5
Agree	1	1	4
Strongly agree	1	1	0
Kindergarten children should be given LETTER GRADES on PERMANENT RECORDS			
Strongly disagree	84	79	82
Disagree	12	16	9
Neutral/No opinion	2	3	2
Agree	1	2	7
Strongly agree	1	1	0

All three groups were strongly opposed to letter grades on report cards and to letter grades on permanent records. They strongly agreed that conferences with parents were the preferred method of reporting. More information on parent-teacher contact is reported in Chapter 7.

The respondents were divided regarding their opinion on using report cards to parents. About half agreed that report cards were the preferred method, and about half disagreed.

The following is a representative summative comment on methods of reporting.

> There should be a great deal of oral communication between the Kindergarten teacher and the parent . . . not formal report cards. The teacher should, however, keep a file on each child's progress. (Kindergarten teacher)

9.4 Summary

The majority of Kindergarten teachers selected the identification of "at risk" children as the main purpose for any screening. When asked to recommend purposes for screening, there existed no difference between what Kindergarten and Grade 1 teachers and administrators selected, and what was presently done by the Kindergarten teachers. About one-sixth of the teachers and administrators opposed screening and they gave unreliable tests and possible labelling of the children as their main reasons. Almost one-half of the teachers reported that screening was an activity that was on-going throughout the year. About the same number of teachers and administrators indicated that is as it should be.

The Kindergarten teacher, the Learning Assisstance teacher and the Public Health nurse were identified by the Kindergarten teacher as the main persons involved in any screening. Again, there was little disagreement between what is done and what teachers and administrators recommended. As far as screening instruments are concerned, teacher-developed instruments and the Peabody Picture Vocabulary Test were used by the greatest percentage of teachers.

When asked to identify characteristics that were assessed as part of the screening, language development, general health and motor abilities ranked highest. Social development ranked next and about one-third of the teachers selected intelligence. When asked to rank characteristics in terms of importance, the ranking differed slightly between the groups included in the study, but all of them included general health, social/emotional development and language development as the top three on their lists.

According to the Kindergarten teachers, anecdotal reports, unrecorded observations and teacher-developed testing activities were the evaluation techniques that provided the most useful information about Kindergarten children. One-half of the teachers indicated that they needed more training as far as teacher-developed testing activities were concerned.

The characteristics most frequently evaluated included personal growth, social and emotional growth and language development. The Kindergarten teacher and both groups of administration favoured conferences with parents and disagreed with letter grades as methods of reporting.

CHAPTER 10

SPECIAL NEEDS CHILDREN AND SUPPORT SERVICES

10.1 Introduction

This chapter presents the results of survey questions to teachers, administrators, and parents on various aspects of:

1. Special needs children (10.2); and
2. Support services (10.3).

10.2 Special Needs Children

There is a growing awareness of special needs children and their situations by teachers, administrators and parents. This awareness can be seen in the increased emphasis on early identification of special needs (see Chapter 9). However, as educators are quick to point out, the identification of children having special needs results in a dilemma. On the one hand, it is important to accurately identify the child's difficulties in order to formulate a plan to teach effectively and to provide the necessary resources for the child. On the other hand, there are the problems associated with placing the emphasis on the atypical characteristics of the child. One of these problems is the "labelling" of special needs children.

The concept of mainstreaming (i.e., integrating special needs children into the regular classroom for at least part of the day) has been "gaining increasing support".(Zeitlin, 1976, p. 118). As with most educational concepts, there are different opinions and viewpoints; mainstreaming or integration of special needs children is no exception. This difference is illustrated in the following statement from a publication by the National Institute on Mental Retardation (1978):

> In integrated programs the child with special needs has a chance to be accepted by other children and adults, to gain confidence in his abilities and strengths, and to learn to deal with and accept his limitations. The other children have a chance to deal with and accept differences between people and to understand the problems of children with special needs. Yet parents of handicapped children, parents of non-handicapped children, and program administrators and staff are often reluctant to become involved in the integration process. They may question whether overwhelming, expensive alterations will have to be made to adopt the program, environment and personnel to the special needs of handicapped children. They may be uncertain whether the exceptional child will receive the intensive skill training he possibly (sic) could receive in a more specialized setting.

> Finally, they may be concerned that the non-handicapped child's needs may be ignored. These are legitimate concerns. (p. 15)

In British Columbia, the stated policy of the Ministry of Education is that children with special needs be provided with necessary services within the framework of general education and within the regular classroom setting whenever possible (Special Programs: A Manual of Policies, Procedures and Guidelines, 1980).

Estimates of the number of children who have problems affecting their learning range from one to thirty percent of the school population, depending on the criteria used (Lerner, 1971). The Commission on Emotional and Learning Disorders in Children (1970) outlined the difficulty of defining special needs in order to estimate the incidence. The Commission concluded that ten to fifteen percent of the Canadian school-age population (i.e., 840,000 - 1,260,000 children) have emotional and/or learning disorders. Among the younger population of the Head Start programs, almost half of the special needs children are speech or hearing impaired (Tjassem, 1976).

The effect of special needs children on the teaching-learning situation in the classroom has been a frequent topic in the educational literature. One interesting plan for dealing with the problem of increased teacher time and effort required by mainstreaming special needs is the weighted class size plan.

The most well-known of such plans is the weighted pupil plan which was created in Lodi (California) Unified School District in 1975 and was adopted with modifications by the Denver Public School system. Denver's Superintendent Brzeinski stated "It's (the weighted pupil plan) as highly praised by the school board, principals and administrators as it is by the teacher union. Because of it --and the cooperation among all groups - we've been able to provide more help for kids in the system who really need it" (Parker, 1979, p. 42).

Basically, a weighted pupil plan is a method of determining the distribution among classrom teachers of a school district's resources (usually teacher aides) in order to alleviate problems caused by class size. A description of how the Denver plan operates is:

> At contract time, teacher union officials and school board negotiators agree on a class size relief formula to assist teachers who can demonstrate that there are special classroom problems that merit special attention. A teacher can demonstrate that he needs assistance - usually in the form of a classroom aide - by using the predetermined "weighting factors" that have been written into the contract. The weighting formula takes into account not only the total number of pupils in a class but also the number of students whose special handicaps, problems or abilities compound the effects of class size for the teacher.
> Generally, weighting is assigned on a scale of 1.0 (for "normal functioning") to 2.5 (for "disruptive students" and others requiring increased amounts of individual

> time and attention). If the class's combined "weight" is more than the board's specified maximum class size, then the teacher can request assistance. (Parker, 1979, p. 40)

First this assistance is requested of the school-based committee which examines the request and suggests possible solutions. If the solutions are not acceptable or if additional help is required, the request is forwarded to a school district class size committee which determines what can be done.

In Denver, this plan was funded by Denver teachers allocating one-half of one percent of their salary increases to create the budget for the program. The Denver Public School system distributes information packages on request. The Lodi/Denver plan has been cited by the BCTF Learning Conditions Quality Education Series, 1980-81 as one method of affecting class size.

In this survey, special needs children were defined as "children whose individual needs significantly affect the teacher-learning situation."

This survey investigated the following aspects of special needs children at the Kindergarten level: (a) types of special needs, (b) number of special needs children in Kindergarten classes, (c) the time and effort needed, (d) training and experience of teachers in special needs, (e) assistance available, and (f) the issues of enrichment and mainstreaming.

10.2.1 Types of Special Needs Children in Classes

Kindergarten and Preschool teachers were asked to give the number of children with various special needs who attended last year's classes (see Table 10.1).

TABLE 10.1

REPORTED NUMBER OF SPECIAL NEEDS CHILDREN IN KINDERGARTEN AND PRESCHOOL CLASSROOMS

(Entries are percentages)

Type of Special Need	Number of Special Needs Children in Class							
	Kindergarten Teachers (n = 841)				Preschool Teachers (n = 230)			
	0	1-3	4-6	6	0	1-3	4-6	6
Hearing impaired	74	24	2	1	45	49	6	0
Visually impaired	82	18	1	1	57	42	1	0
Other physically handicapped	85	15	1	1	68	26	3	2
Emotionally disordered/ severe behaviour problems	53	43	3	1	35	57	6	2
Learning disabled	64	32	3	1	66	30	4	0
Mentally handicapped	90	10	1	0	80	15	3	2
Gifted (academically talented)	54	38	6	2	48	46	5	1
English as a second language	44	37	8	11	30	45	12	13
Culturally different	49	31	9	11	27	42	14	17
Speech problems	26	61	11	2	16	62	14	8
Other	95	3	1	1	79	15	3	3

Last year, Kindergarten teachers and Preschool teachers most frequently encountered special needs children who had emotional/behavioural problems, or speech problems. Both groups of teachers least frequently encountered children who were mentally handicapped. The largest groups of special needs children in single classroom were English as a Second Language children and culturally different children.

Table 10.2 was prepared using the mean number of special needs children reported in last year's Kindergarten classrooms. The table shows estimates of the number of special needs children a teacher is likely to encounter in a five-year period.

TABLE 10.2

ESTIMATES OF THE NUMBER OF SPECIAL NEEDS CHILDREN A KINDERGARTEN TEACHER WILL ENCOUNTER IN FIVE YEARS

Category of Special Need	Average Number of Children in Category likely to be Encountered in Five Years of Kindergarten Teaching. (Estimated from results in Table 10.1.)
Hearing impaired	2
Visually impaired	1
Other physically handicapped	1
Emotionally disordered/severe behaviour problems	4
Learning disabled	3
Mentally handicapped	1
Gifted (academically talented)	5
English as a second language	9
Culturally different	7
Speech problems	9

10.2.2 Relative Amounts of Teacher Time and Effort for Special Needs Children

For each special needs area and based on their previous experience, the Kindergarten teachers, School and District administrators were asked to estimate how many average children are equivalent to one special needs child in terms of teacher time and effort. This question yeilded two pieces of information: the percent of respondents who had experience with each special need; and the estimated equivalence of a special needs child to an average child in terms of teacher time and effort.

As shown in Table 10.3, children with speech problems had been encountered by the greatest percent of Kindergarten teachers followed by encounters with children with emotional and behavioural problems and English as a Second Language. The teachers as a group had had the least amount of experience with visually impaired children. School and District administrators reported the most experience with children having enotional or behavioural problems and the least experience with children who were visually impaired.

TABLE 10.3

KINDERGARTEN TEACHERS', PRINCIPALS' AND DISTRICT ADMINISTRATORS' EXPERIENCE WITH SPECIAL NEEDS AND ESTIMATED EQUIVALENCE TO AVERAGE CHILDREN IN TIME AND EFFORT

	Percent Having Experience with The Special Need			Estimated Equivalence to Average Children in Terms of Teacher Time and Effort (from Those People Who Had Experience with the Need (Median Scores)		
	Teachers	Administrator		Teachers	Administrator	
	Kgn (n=968)	School (n=426)	District (n = 58)	Kgn (n=968)	School (n=426)	District (n = 58)
Hearing impaired	58	63	76	1.96	2.00	1.97
Visually impaired	52	59	72	1.97	2.01	1.96
Other physically handicapped	56	65	83	2.00	1.98	1.58
Emotionally disordered/ severe behaviour problems	87	85	97	3.00	3.00	2.55
Learning disabled	74	84	90	2.00	1.48	1.55
Mentally handicapped	57	67	91	2.95	2.05	1.99
Gifted (academically talented)	75	79	86	1.52	1.51	1.49
English as a second language	82	83	93	1.95	1.98	1.54
Culturally different	71	70	84	1.50	1.48	1.38
Speech problems	89	83	91	1.51	1.51	1.49

The Kindergarten teachers, School and District administrators estimated that most special needs children are equivalent to between 1.5 and 2.5 average children in terms of teacher time and effort. These weightings are similar to those used in the Denver/Lodi plan described in Section 10.2. Children who were emotionally disordered or with severe behavioural problems were estimated to require between 2.5 and 3 times the teacher time and effort of an average child.

Parents were also aware that special needs children require more teacher time and effort as expressed in comments similar to the following:

> I think a "special needs" child, i.e. deaf, behavioural, emotionally disturbed, needs and requires extra help in the classroom. (Kindergarten teacher)

It has been reported that special needs children were included in the regular Kindergarten programs and required more teacher time and effort. In addition, the concern that the maximum class size for Kindergarten not exceed 20 "typical" children (see Chapter 8.3) may indicate that a possible "weighting formula" should be considered (see Section 10.2).

10.2.3 Adequacy of Training and Experience in Special Needs

Kindergarten teachers were asked if they were able to identify children with special needs and effectively teach such children (see Table 10.4).

TABLE 10.4

PREPAREDNESS OF KINDERGARTEN TEACHERS FOR THE IDENTIFICATION AND TEACHING OF SPECIAL NEEDS CHILDREN

(Entries are percentages)

Special Need Children	Able to IDENTIFY Children with Special Need (n=947)		Able to EFFECTIVELY TEACH Children with Special Need (n=947)		
	Yes	No	Yes	No	Undecided
Hearing impaired	40	60	15	65	20
Visually impaired	36	64	13	67	20
Other physically handicapped	36	64	20	47	33
Emotionally disordered/severe behaviour problems	60	40	24	52	23
Learning disabled	54	46	41	39	20
Mentally handicapped	39	61	16	66	19
Gifted (academically talented)	54	46	62	19	20
English as a second language	55	45	44	38	18
Culturally different	52	48	60	20	20
Speech problems	57	43	36	46	18

Most Kindergarten teachers indicated they could identify children who were emotionally disordered or who had severe behavioural problems; and most indicated they could effectively teach gifted children. The fewest number of teachers reported being able to identify and effectively teach children who were hearing or visually impaired.

In Chapter 12, Kindergarten teachers reported their pre-service training was lacking in the areas of Identification and Instruction of Special Needs Children (see Section 12.2).

10.2.4 Professional Assistance in Special Needs

Kindergarten teachers were asked to rate their access to professional assistance from district/school personnel for various special needs areas (see Table 10.5).

The assistance available to the Kindergarten teachers was rated as adequate by half or more of the teachers for half of the special needs areas. Assistance for the other half of the special needs was rated as inadequate or not available. Assistance in the special needs area of emotionally disordered or behavioural problems was rated inadequate by the greatest number of teachers. Assistance for the hearing impaired was rated the most adequate by the most teachers.

TABLE 10.5

KINDERGARTEN TEACHER RATING OF ACCESS TO SPECIAL NEEDS PROFESSIONAL ASSISTANCE FROM DISTRICT/ SCHOOL PERSONNEL

(Entries are percentages)

Special Need Area	Percent of Kindergarten Teachers Who Do Not Know or Who Do Not Require Assistance	Kindergarten Teachers Who Required Assistance	
		Assistance Not Available or Inadequate	Assistance Adequate
Hearing impaired	31	40	60
Visually impaired	39	42	58
Other physically handicapped	44	58	42
Emotionally disordered/ severe behaviour problems	13	67	33
Learning disabled	19	47	53
Mentally handicapped	42	52	48
Gifted (academically talented)	20	56	44
English as a second language	17	44	56
Culturally different	30	55	45
Speech problems	4	43	57

Information was also sought from Kindergarten teachers, School and District administrators on the availability of support services for parents of special needs children (see Table 10.6).

TABLE 10.6

AVAILABILITY OF SUPPORT SERVICES FOR PARENTS OF CHILDREN WITH SPECIAL NEEDS AS REPORTED BY KINDERGARTEN TEACHERS, PRINCIPALS AND DISTRICT ADMINISTRATORS
(Entries are Percentages)

Special Need Area	Support Services/Programs for Parents								
	Teachers			Administrators					
	Kgn (n=959)			School (n=416)			District (n=58)		
	Yes	No	Do Not Know	Yes	No	Do Not Know	Yes	No	Do Not Know
Hearing impaired	42	16	42	51	37	12	59	38	3
Visually impaired	34	18	48	37	44	19	41	53	5
Other physically handicapped	34	16	50	42	40	17	50	43	7
Emotionally disordered/ severe behaviour problems	56	15	29	56	32	11	55	43	2
Learning disabled	54	15	31	54	36	10	48	50	2
Mentally handicapped	48	13	38	48	39	13	52	47	2
Gifted (academically talented)	30	28	42	29	59	13	22	74	3
English as a second language	54	16	31	58	33	10	49	49	2
Culturally different	23	25	52	19	61	20	26	67	7
Speech problems	65	12	23	63	27	10	72	24	3

Seventy-two percent of the districts had programs or support services for the parents of children with speech problems. This was the most common program or service for parents of special needs children reported by District administrators. The least common program was for the parents of gifted children. Across the special needs areas mentioned on the questionnaire, an average of thirty-nine percent of the Kindergarten teachers, fourteen percent of the School administrators and four percent of the District administrators did not know if programs for parents of special needs children were available.

School and District administrators were also asked about the availability of classes for special needs children (see Table 10.7).

TABLE 10.7

AVAILABILITY OF SPECIAL NEEDS CLASSES FOR KINDERGARTEN CHILDREN IN SCHOOLS AND DISTRICTS
(Entries are percentages)

Special Need Area	Special Needs Classes Available			
	Administrators			
	School (n=391)		District (n=58)	
	Yes	No	Yes	No
Hearing impaired	23	77	28	72
Visually impaired	15	86	21	79
Other physically handicapped	21	79	36	64
Emotionally disordered/severe behaviour	28	72	35	65
Learning disabled	30	70	32	68
Mentally handicapped	39	61	51	49
Gifted (academically talented)	9	91	6	94
English as a second language	34	66	36	64
Culturally different	5	94	12	88
Speech problems	23	77	23	77

The most available special class at both school and district level was for the mentally handicapped. This may be a reason teachers reported encountering mentally handicapped children in the regular program least frequently (10.2.1). Classes for the gifted were the least available. They were reported in fewer than one-tenth of the schools and districts.

When asked if they had any intervention programs (i.e., special programs designed for "at risk" children) before Kindergarten entry, between one-tenth and one-quarter of District administrators reported that they had such programs.

10.2.5 Enrichment

Kindergarten teachers, School and District administrators were asked to indicate the program they would recommend for a Kindergarten child who would benefit from some type of enriched or accelerated program (see Table 10.8).

The Kindergarten teachers, School and District administrators all recommended that these children have enrichment as part of the regular Kindergarten program.

TABLE 10.8

RECOMMENDED PROGRAMS FOR GIFTED KINDERGARTEN CHILDREN

(Entries are percentages)

Program	Percent Who Recommend the Program		
	Teachers	Administrator	
	Kgn. (n=967)	School (n=405)	District (n=56)
Enrichment as part of the regular on-going Kindergarten program	57	72	80
Special Program by learning assistance teacher outside the regular classes	8	4	4
Placement for part of the school day in a Grade 1 class and part in the Kindergarten	4	5	0
Placement for part of the school day in a special enrichment class and part in the Kindergarten	21	11	11
Placement in Grade 1	1	3	0
Remain in regular Kindergarten program/no special program	1	1	0
Learning assistance within the regular classroom	7	4	5

Seventy-six percent of the responding School administrators (n = 409) and sixty-six percent of the District administrators (n = 56) indicated that no acceleration/enrichment programs for Kindergarten were available in their school or district.

10.2.6 Mainstreaming

Kindergarten, Grade 1 and Preschool teachers, School and District administrators, Kindergarten, Grade 1 and Preschool parents were asked if they thought most special needs children should be in a regular Kindergarten classroom all, part or none of the time (see Table 10.9).

TABLE 10.9

PERIOD OF TIME SPECIAL NEEDS CHILDREN SHOULD BE IN THE REGULAR CLASSROOM

(Entries are percentages)

Period of Time	Teachers			Administrators		Parents		
	Kgn. (n=966)	Gr.1 (n=508)	Presch. (n=337)	School (n=414)	District (n=58)	Kgn. (n=459)	Gr.1 (n=406)	Presch. (n=333)
All of the time	15	10	29	19	20	30	30	25
Part of the time	75	71	69	74	79	65	64	71
None of the time	10	19	3	7	2	6	6	5

Two-thirds or more of all groups indicated that these children should be in the regular Kindergarten class part of the time. The written comments

supporting mainstreaming for, at least, part of the time also emphasized the need for trained aides supporting the special needs children in the regular program. For example:

> Special needs children should be in a regular Kindergarten classroom part time or full time - however, there should be a support worker to help the special needs children to obtain the maximum benefit from the Kindergarten program. (Kindergarten teacher)

> My overall opinion is that special needs children should be with peers as much as possible, providing the ministries supply adequate funding for aides and childcare workers without long delays and reams of red tape. If the problems are social-emotional and very disruptive - then only part time or not at all - the cost to the teacher and other youngsters is sometimes too great in terms of time and physical endurance. (Administrator)

> A trained "Paid-Aide" is essential to help the "special needs children". (Administrator)

10.2.7 Special Needs Identified by Parents

Kindergarten and Preschool parents were asked if they had a special needs child and if so, the type of special need (see Table 10.10).

TABLE 10.10

SPECIAL NEED OF CHILDREN AS IDENTIFIED BY PARENTS

(Entries are percentages)

Special Need Area	Percent of Children with Need			
	As a Percent of Total Group		As a Percent of Children With Special Needs	
	Kindergarten Parents (n=461)	Preschool Parents (n=344)	Kindergarten Parents (n=32)	Preschool Parents (n=24)
Hearing impaired	0	1	0	12
Visually impaired	1	1	8	4
Other physically handicapped	1	0	5	0
Emotionally disordered/severe behaviour problems	1	1	5	8
Learning disabled	1	0	13	0
Mentally handicapped	0	0	0	0
Gifted (academically talented)	2	4	29	52
English as a second language	0	1	0	12
Culturally different	1	0	3	0
Speech problems	3	2	42	28
Other	3	1	34	4

Seven percent of the Preschool parents and Kindergarten parents reported that they had special needs children. The Kindergarten parents identified speech problems as the most common kind of special need. Preschool parents identified gifted as being the most common special need of their children.

10.3 Support Services

The professional literature dealing with the education of Special Needs children stresses the importance of support services in the development of a program to meet the needs of these children.

Figure 10.1 displays a cross tabulation for the availability of, and need for support services as rated by the Kindergarten teachers. The cross tabulation shows that for most teachers the support services are obtainable when they are needed.

FIGURE 10.1

NEED AND AVAILABILITY OF SERVICES FOR THE KINDERGARTEN PROGRAM
(Categorization based on median ratings by Kindergarten teachers)

		Availability				
		Not Available	Very difficult To obtain	Somewhat difficult to obtain	Not in school but easily available	Usually Available in school
Need	Never or almost never needed	Art specialist	Audiologist	Hearing Therapist Psychologist E.S.L.teacher	District supervisors Music specialist P.E. specialist	
	Occasionally needed		Paid teacher aide		Speech therapist Counsellor School nurse Community resource people Volunteer teacher aide Resource centre staff Qualified substitute teachers	Learning Assistance Teacher Principals Older Pupils
	Frequently needed				Parents	

Kindergarten teachers, School and District administrators were asked to rate the availability of support when needed of twenty types of support personnel (see Table 10.11).

TABLE 10.11

AVAILABILITY OF SUPPORT SERVICE

(Entries are median scores*)

Support Service	Teachers	Administrators	
	Kindergarten (n=840)	School (n=420)	District (n=58)
School nurse	3.0	4.0	4.0
Speech therapist	3.6	3.8	3.9
Hearing therapist	3.1	3.5	3.5
Psychologist	3.0	3.1	3.0
Counsellor	3.6	3.8	3.4
Community resource people (e.g., police, etc.)	3.9	4.0	4.0
Art specialist	1.5	2.0	2.3
Music specialist	3.5	3.5	3.6
P.E. specialist	3.5	3.5	3.3
District supervisors/staff	3.9	3.9	3.0
Teacher aide (paid)	2.3	2.7	3.7
Teacher aide (volunteer)	3.8	4.1	4.5
Resource centre staff	4.0	4.0	3.9
Learning assistance teacher	4.8	4.9	5.0
Principals/area principals	4.9	5.0	5.0
Qualified substitute teacher (Kindergarten level)	3.7	3.8	3.6
English as a second language teacher	3.2	3.5	3.7
Older pupils	4.9	4.8	4.9
Parents	4.0	4.2	4.1
Audiologists	3.1	3.3	3.1

*Not available 1
Very difficult to obtain 2
Somewhat difficult to obtain 3
Not usually in school, but easily available 4
Usually available in school 5

There is very close agreement among the three groups.

10.4 Summary

The special needs children encountered most often in the regular Kindergarten program are those with emotional and behavioural problems and those with speech problems. The mentally handicapped are least often encountered and have special classes available to them most often. The largest number of special needs children within a single classroom were those with cultural differences and having English as a Second Language.

In terms of time and effort, it was estimated that a special needs child requires on the average of between 1.5 and 2.5 times more than the average child, depending on the severity of handicap. Children with emotional disorders and severe behaviour problems required even more.

In this same area of special needs (i.e., emotional and behavioural problems), the teachers reported that professional assistance was inadequate. Professional assistance was reported to be most adequate for the hearing impaired.

Support services for parents of special needs children were available most frequently for speech therapy, a need most often identified by Kindergarten parents; and least often for gifted programs, a need identified most often by Preschool parents. Support services were reported as being obtainable when requested.

In conclusion, in both the answers to the questionnaire and comments, special needs children should be and are in the regular Kindergarten class for at least part of the time. The request by the Kindergarten teachers for more training in the identification and instruction of special needs children indicates their interest and concern in this area. The inclusion of these special needs children in the regular Kindergarten program also necessitates the need to consider the options of a weighted class size plan and the need for paid and trained aides to accompany these children.

CHAPTER 11

PHYSICAL ENVIRONMENT AND FACILITIES

11.1 Introduction

Kindergarten teachers were surveyed about three aspects of their physical environment and facilities:

1. The sufficiency and quality of the physical environment and its components (11.2);
2. The sufficiency and quality of the equipment and supplies (11.3);
3. The availability of specific activity centres (11.4); and
4. The funding of Kindergarten programs (11.5).

11.2 The Physical Environment and its Components

Relatively little research has been done on the effects of the physical environment on young children and their learning even though "it is axiomatic that the physical environment of a school is important as a factor in each child's learning" (Anderson, 1971, p. 278). (For a comprehensive review of recent research see Weinstein, 1979.)

One aspect of the physical environment that has been of continuing interest to Early Childhood educators is the amount of space suggested for Kindergarten classrooms. Kritchevsky investigated physical space in Early Childhood programs concluding that "one of the most effective predictors of program quality was found to be physical space" (Kritchevsky, 1977, p.5). In day care centers investigated in that study:

> The higher the quality of space . . . the more likely were teachers to be sensitive and friendly in their manner toward children, to encourage children in their self-chosen activities, and to teach consideration for the rights and feelings of self and others. Where spatial quality was low, children were less likely to be involved and interested, and teachers more likely to be neutral or insensitive in their manner, to use larger amounts of guidance and restriction, and to teach arbitrary rules of social living. (p. 6)

The 1954 Kindergarten Manual (p. 10) recommended a room 24' X 45' (1080 square feet) or 30' x 42' (1260 square feet). In 1967, the Association for Childhood Education International (Gardner & Berson, 1967) recommended 1500 square feet of unobstructed indoor floor space and 15,000 square feet of outdoor space for a Kindergarten class of fifteen children. A submission on Kindergarten by the B C.T.F. (1973) recommended at least 1200 square feet of working classroom space for 20 Kindergarten children with

the suggested addition of cloakrooms, toilets, sinks, storage cupboards and entrance areas requiring an additional 200 square feet (p. 3).

The current Resource Book for Kindergartens (1973) has no suggestions on the size of the Kindergarten room. The current School Building Manual (1967) applies the standards for primary rooms (i.e., 896 square feet maximum) to Kindergarten classrooms. However, "if toilet facilities and separate storage is included within the Kindergarten unit, the area may be increased from 896 to 1008 square feet" (p. 52). Information from the proposed B.C. Schools Facilities Manual Part 4. Space Standards (1980) states "where Kindergarten enrolment is 10 or more Kindergarten facilities may be provided up to maximum areas for every 50 Kindergarten pupils of 80m^2 (860 square feet) for general instruction space and an additional 34m^2 (366 square feet) of design space" (4.2.2).

In addition to physical space, another important part of the physical environment is the materials and equipment provided. In an Early Childhood program, it is crucial that the materials and equipment necessary to support the goals and objectives of the program are available. The current Resource Book for Kindergartens (1973) provides one page on the criteria for selecting equipment and three pages of suggested Kindergarten equipment and materials. This section does not contain information on the specific quantities needed for a specific number of children. A more complete listing of suggested educational equipment and materials for a Kindergarten group of 20-24 children including quantities and order of acquisition (i.e., essential items, replacements and additions, and luxury items) is presented in Selecting Educational Equipment and Materials for School and Home (Association for Childhood Education International, 1976).

Kindergarten teachers were asked to rate the quality of the components of the Kindergarten physical environment if these components existed in their current teaching situation (see Table 11.1).

On the average, Kindergarten teachers reported the following as adequate or better: access to the library, the indoor play area and/or access to the gymnasium; easy access to an outdoor play area (though a separate Kindergarten outdoor play area was not available to 36% of the Kindergartens); the indoor decoration; chalkboards; the artificial lighting; the floor coverings; bulletin boards; sinks; the heating, ventilation and humidity; the window area for natural lighting; the cloakroom area; and the soundproofing. The size of the room was reported by the responding teachers as being "Excellent" by 16%, "Good" by 21%, "Adequate" by 35%, and "Poor" or "Very Poor" by 28%.

Though storage space for the children's belongings was reported as being very adequate or better by 65% of the responding teachers, the overall storage for supplies and teachers' materials was rated as poor or worse by 41-43%. Half of the responding teachers rated electrical outlets and storage for outdoor equipment as poorest of all components.

TABLE 11.1

QUALITY OF COMPONENTS OF PHYSICAL ENVIRONMENT
(Entries are percentages)

Rate the following components of the Kindergarten physcial environment as they exist in your current teaching situation.

Component	Percentage of teachers not having component	Rating of teachers having the component				
		Very Poor	Poor	Ade-quate	Good	Excel-lent
Artificial lighting	0	3	8	48	32	9
Sound proofing	6	8	23	44	20	5
Window area/Natural lighting	2	12	15	31	28	14
Floor coverings	1	6	13	33	36	12
Window coverings (blinds, curtains)	15	5	8	37	36	14
Ventilation/Humidity	1	10	20	43	23	4
Heating	1	5	13	45	32	5
Size of room	0	9	19	35	21	16
Toilets	18	5	11	38	28	18
Sinks	3	5	13	39	29	14
Cloak room	9	5	16	44	26	9
Easy access to outdoor play area	4	4	10	29	34	23
Kindergarten outdoor play area	36	7	19	36	24	14
Interior decorations, e.g. attractiveness	1	3	9	39	37	12
Chalkboard(s)	3	3	6	47	35	9
Bulletin board(s)	1	6	13	34	34	13
Storage space for children's belongings	3	12	23	42	16	5
Storage space for supplies	1	19	22	33	19	7
Storage space for teacher's materials	2	18	25	34	16	7
Storage for large outdoor equipment	49	24	40	25	9	2
Electrical outlets	3	22	28	36	11	3
Indoor play area/ Gymnasium	7	2	6	33	42	17
Access to gym facilities	4	6	15	30	32	17
Access to library facilities	2	2	5	32	40	21
Hot water in classroom	35	2	6	34	36	22
Stove in classroom	81	8	15	36	24	17

Most often not present in the Kindergarten physical environments were refrigerators; stoves; storage for large outdoor equipment; hot water; toilets; and window coverings. When these components were present in the Kindergarten, the refrigerators, stoves, hot water, toilets and window coverings were rated as good or excellent by 42%-60% of the responding teachers.

Kindergarten teachers were asked to rate the physical environment as it presently exists in their Kindergarten classrooms. Of the responding teachers (n = 990), 6% indicated the physical environment was "Excellent"; 33% rated it "Good"; 43% rated it "Adequate"; 16% rated it "Poor"; and 2% rated it as "Very Poor".

Although generally satisfied with the physical environment of their classrooms, Kindergarten teachers indicated that improvement could be made about electrical outlets, storage, stoves, refrigerators, hot water and toilets in the Kindergarten room. Written comments by Kindergarten teachers reflecting these concerns included:

> Small cramped basement rooms, poor storage, very poor materials (manipulative and learning materials) . . . hazardous chairs that I've tried to get recalled . . . inadequate carpeting. The amount of my own personal money I have had to invest in upgrading the materials and environment of both Kindergartens I've taught in goes into thousands of dollars. Granted I have high standards of both materials and environment but I believe these are essential ingredients in a good Early Childhood Program. (Kindergarten teacher)

> Many rooms in our district have been converted to Kindergarten rooms and the space for a Kindergarten programme is very inadequate. We need a space allotment for Kindergarten children like they have for daycare centres. (Kindergarten teacher)

> This past year my room has been doubled by knocking a wall out between the next room and the Kindergarten . . . The general behavior of the students has improved because they have enough space to move in. (Kindergarten teacher)

The equipment and facilities provided for the Kindergarten affect the curriculum. For example, the fact that most teachers do not have ready access to refrigerators, stoves (and the heavy-duty electrical outlets needed), and running water means that, in many classrooms, cooking by the children is limited. This in turn has implications for the degree of emphasis that can be place on nutrition in the Kindergarten curriculum.

11.3 Equipment and Supplies

Kindergarten teachers were asked to assess their equipment and supplies in terms of the quantity and the quality. The results of the Kindergarten teachers' ratings of the sufficiency (quantity) of equipment and supplies of their Kindergarten and the quality of the equipment (if present) are presented in Table 11.2.

TABLE 11.2

QUANTITY AND QUALITY OF KINDERGARTEN EQUIPMENT AND SUPPLIES

(Entries are percentages)

Rate the SUFFICIENCY (quantity) of the following equipment and supplies for your Kindergarten. Rate the QUALITY, if the item is present, of the following equipment and supplies for your Kindergarten.

Equipment	QUANTITY (n=1009 - 1020)			QUALITY					
	Not present	Present but insufficient	Sufficient	Percentage of teachers not having equipment (n=979-1016)	Rating of teachers having the equipment (n=525 - 1013)				
					Very Poor	Poor	Adequate	Good	Excellent
Art Supplies (except paper)	0	23	77	.2	1	8	35	44	12
Woodworking equipment	34	30	36	32	4	21	41	28	6
Woodworking supplies	49	29	22	45	9	32	37	18	4
Science materials	12	39	49	11	4	21	47	23	5
Musical instruments	4	24	72	4	3	12	42	32	11
Water table	23	8	69	22	2	9	26	44	19
Sand table	20	7	73	19	2	7	28	41	22
Blocks	1	13	86	1	2	6	24	42	26
Large wheel toys	31	23	46	30	3	15	35	32	15
A-V equipment	4	20	76	4	1	8	32	41	18
Live animal facilities	48	17	35	45	3	20	43	27	7
First aid equipment	28	16	56	28	2	11	50	30	7
Paper materials	0	15	85	.1	1	4	30	46	19
Table and chairs	0	12	88	1	2	4	25	47	22
Books	2	19	79	2	2	8	24	45	21
Manipulative materials	0	31	69	.1	2	11	29	42	16
Outdoor Equipment	28	36	36	28	5	20	38	28	9

The responding Kindergarten teachers, on the average, reported the following to be insufficient quantity: tables and chairs, blocks, paper materials, books, art supplies, A-V equipment, manipulative materials, musical instruments, sand tables, and water tables. Forty-four to 78% reported that the following were in sufficient or not present: first aid equipment, science materials, large wheel toys, outdoor equipment, woodworking equipment and supplies, and live animal facilities.

On the average, the equipment and supplies the responding Kindergarten teachers reported as being sufficient in quantity were also rated as adequate or better quality. The equipment and supplies available but not in sufficient quantity or the average were also rated the poorest quality by the responding teachers.

Again, the concern arises that if such things as live animals and wood-working experiences are desirable in a Kindergarten program, provision of the necessary equipment is required. As one teacher stated:

> More money should be available to teachers to help enrich his/her own program, e.g., pets, field trips, supplementary materials. (Kindergarten teacher)

11.4 Activity Centres

When asked to agree/disagree with the statement: "Much of the Kindergarten program should be organized around activity centres" (Resource Book for Kindergartens, (1973, p. 29) there was a high degree of agreement among responding Kindergarten teachers (94%), Grade 1 teachers (81%), and administrators at both the School (84%) and District (92%) levels.

Kindergarten teachers were asked to what extent specific activity centres were available in their Kindergarten classroom (see Table 11.3).

TABLE 11.3

AVAILABILITY OF ACTIVITY CENTRES
(Entries are percentages)

Check the response that most closely describes the extent to which the following activity centres are available in your Kindergarten classroom.

Activity centre	Never	1-4 times a year	Monthly	Weekly	Daily
Assembly centre	2	2	2	3	91
Sand/water centre	8	9	10	11	62
Dramatic play/home centre	0	1	1	3	95
Book centre	0	0	0	2	98
Block centre	0	0	1	3	96
Math/science centre	2	2	10	20	66
Modelling centre	2	4	8	21	65
Painting centre	0	0	1	8	91
Woodwork centre	31	25	18	8	18
Music centre	8	10	12	22	48
Listening & viewing centre	6	7	14	22	51
Construction and manipulation centre	1	1	3	8	87
Cooking centre	8	15	32	38	7
Animal & pets	26	29	5	2	38
Puppets & theatre	5	21	26	16	32
Quiet area	9	1	1	2	87
P E area	15	2	1	32	50
Arts and crafts area	1	0	1	9	89

The book centre, block centre, dramatic play and home centre, painting centre, arts and crafts centre, assembly centre, construction and manipulation centre, quiet area, math and science centre, modelling centre, listening and viewing centre, sand and water centre, P.E. area and music centre were reported by 68-100% of the responding Kindergarten teachers to be set up and available most frequently on a daily or at least weekly basis.

There was a marked difference between urban and rural situations as urban more frequently had the following centres on a daily basis: dramatic play/home centre, mathematics and science, painting, arts/crafts, music, blocks, and physical education.

Centres set up less frequently, but still available on a weekly or monthly basis, were puppets and theatre, and cooking. The animal and pet centre and woodwork centre were least frequently used by the responding teachers.

The less frequent availability of activity centres such as cooking, animals and pets, and woodworking may be due to the lack of the equipment necessary for these centres (see Section 11.3).

The availability and quality of equipment and materials are essential in the setting up of these activity centres. The lack in quantity and/or quality of science materials, large wheel toys, outdoor equipment, live animal facilities, and woodworking equipment and supplies is a direct factor in the lessened availability of the centres using these items. Kindergarten teachers also reported (see Chapter 5) a need to update all sections concerned with equipment, supplies, and materials in the Resource Book to better meet the goals and objectives of their Kindergarten programs.

11.5 Funding of Kindergarten Programs

If special facilities and equipment are needed to implement the Kindergarten curriculum, the funding of Kindergartens is a direct concern. Kindergarten teachers, School and District administrators were asked about the adequacy of the current Kindergarten funding formula and about the availability and adequacy of School and District funds for incidental expenses.

11.5.1 Adequacy of Kindergarten Funding Formula

The current funding formula used by the Ministry of Education is based on the amount of time a child spends in school. Therefore, for funding purposes, a Kindergarten child in a half-day program is funded at one-half the amount for a child in the primary grades (i.e., full-day program). Kindergarten teachers, School and District administrators were asked to rate the adequacy of this funding (see Table 11.4).

The current funding formula was rated as somewhat or very inadequate by approximately three-quarters of the responding teachers, School and District administrators.

Written comments by administrators and teachers indicated funding at ½ F.T.E. is a problem. For example:

> At present, budget provisions for upgrading established Kindergartens cause problems in most districts -- and ours is no exception. I feel there should be some plan to allow for application of Capital Funds specifically for keeping Kindergarten classroom materials up-to-date and to replace worn out items. (District administrator)

Using a Kindergarten child statistically as ½ F.T.E. is unsatisfactory when calculating per capita funding supply costs -- and enrolment which affects principals' administrative allowances. Although in school for only half a day these students consume much material and wear and tear is great. (School administrator)

I feel more money is needed to properly equip classrooms with the necessary manipulative and problem solving materials and more should be allotted for field trips. (Kindergarten teacher)

TABLE 11.4

ADEQUACY OF CURRENT KINDERGARTEN FUNDING FORMULA
(Entries are percentages)

The current Kindergarten funding formula used by the Ministry of Education is based on the amount of time the Kindergarten child is in school. Hence funding for each Kindergarten child is one half the amount for a Grade 1-12 child. Rate the adequacy of this funding for your program needs.

	Teachers	Administrators	
Response	Kindergarten (n=1007)	School (n=424)	District (n = 57)
Very inadequate	30	23	23
Somewhat inadequate	45	47	51
Adequate	24	29	26
More than adequate	1	1	-

11.5.2 Adequacy of School and District Funds for Incidental Expenses

School and District administrators were asked if general funds at the school and district level for incidental expenses in Kindergarten were available (e.g., field trips, snacks, extra materials, etc.). Of the District administrators responding (n = 58), 91% indicated yes, 7% no, and 2% didn't know. Of the School administrators (n = 417), 90% indicated yes, 9% no, and 1% didn't know.

Kindergarten teachers were asked to rate the adequacy of money available from general school funds for incidental expenses. Of the responding Kindergarten teachers (n = 1006), 42% rated the availability of money as adequate, 17% as very inadequate, 4% as more than adequate, and 2% indicated that none was available. There was a significant difference between rural and urban situations as more urban teachers indicated funding was adequate or better and more rural teachers reported no such funds were available.

11.6 Summary

Kindergarten teachers generally were satisfied with the sufficiency and quality of the physical environment, equipment and supplies, and the availability of specific activity centres.

The size of the classroom was a concern for 28% of the respondents who rated it poor as compared with 37% who felt that the Kindergarten classrooms were good to excellent.

The facilities most often not included in the environment were stoves, refrigerators, hot water, storage for outdoor equipment, toilets within the classroom area, and window coverings. The majority of teachers mentioned a need for more storage space for supplies, equipment and teacher materials.

In rating the sufficiency or the availability of equipment and supplies, the Kindergarten teachers indicated that there was a lack of science materials, first aid equipment, large wheel toys, outdoor equipment, woodworking equipment and supplies and facilities to house animals. Those items which were available and in sufficient supply were rated to be of adequate or better quality.

Activity centres were reported to be universally accepted and used in the Kindergarten environment on a daily or at least a weekly basis. Centres least frequently used were puppets, theatre, cooking, animal and pets, and woodworking.

Nearly three-quarters of the Kindergarten teachers, School and District administrators indicated that the current funding formula used for Kindergarten was somewhat or very inadequate. Nearly all of the School and District administrators stated that money is made available from general funds at the school and district level for incidental expenses in Kindergarten; however, a majority of the Kindergarten teachers rated the adequacy of such funds as somewhat or very inadequate.

CHAPTER 12

EDUCATION, EXPERIENCE AND QUALIFICATIONS OF KINDERGARTEN TEACHERS

12.1 Introduction

This chapter reports the opinions expressed by the Preschool, Kindergarten and Grade 1 teachers; School and District administrators; and the parents of Kindergarten and Grade 1 children in British Columbia regarding:

1. Appropriate pre-service training for Kindergarten teachers (12.2 - 12.4);
2. The availability and adequacy of in-service training (12.5);
3. Prerequisites for assignment to Kindergarten classes (12.6); and
4. The current professional status of Kindergarten teachers in the Province (12.7 - 12.11).

In 1975, Flemming and Kratzmann investigated the state of the pre-primary education in western Canada. They concluded that professional educators, politicians and laymen were becoming increasingly aware that planned educational environments were crucial to the optimal development of children under six years of age and of the significance in entrusting young children to "highly-qualified instructional personnel" (p. 24).

Two of the recommendations from Language B.C. (1976) regarding the selection of teachers for Kindergarten classes and their subsequent in-service education were:

1. Since the Kindergarten year is viewed as being very important and specialized with the teacher being responsible for the development of the Kindergarten curriculum, it is strongly suggested that teachers with appropriate training and suitable experience should be secured for Kindergarten classes.

2. Since the pre-service preparation of the Kindergarten teacher may be incomplete and teachers in the field have expressed a need for further practical assistance, and since voluntary participation in workshops and non-credit courses is not high, it is suggested that School Boards and Districts should provide and schedule in-service opportunities as a required part of the professional development of Kindergarten teachers in their Districts. (p. 63)

A Survey of Kindergarten Programs in the Greater Victoria District, #61, (Mayfield, 1980) reported the opinions of Kindergarten and Grade 1 teachers, principals, and Kindergarten parents about the appropriate training and experience for teachers assigned to Kindergarten classes. Recommendations arising from these findings were:

1. Only teachers with appropriate Early Childhood Education training and/or experience should be assigned to the Kindergarten.

2. Teachers should be allowed to identify and define their own specific in-service needs. The District staff should then plan appropriate in-service and professional development activities. (p. 141)

In 1967, the Education Committee of the Association for Childhood Education International prepared a statement which outlined preparation standards for teachers in Early Childhood Education. This statement was aslo approved by the National Association for the Education of Young Children (A.C.E.I, 1967). The stand was taken that these teachers should be recognized as professionals, and also since they should be acquainted with the broad spectrum of elementary education, the specialty should be developed within the broad scope of teacher preparation.

The specific program for teachers of young children should include the following areas: (a) Liberal Education - art, music, literature, science, sociology, communication skills, and etc., (b) Foundations of Early Childhood Education - to formulate a personal educational philosophy and approach consistent with the best educational theory and practice of our present day culture; (c) Child Growth and Development- to understand the meaning and intent of variations among individuals and within individuals; (d) The Nature of the Learning-Teaching Process - the role of the teacher in facilitating learning in cognitive, physical, social, and emotional domains; (e) Small Group Dynamics - to learn to deal effectively with classroom interaction and a high degree of parent involvement, (f) Curriculum and Method - to become familiar with uses of play, the story interests of children, suitable materials, and the techniques of selecting, planning, organizing, presenting and evaluating educational experiences; (g) Professional Laboratory Experiences - which would include observation, participation, student teaching and seminar discussion under the supervision of qualified teachers (A.C.E.I., 1967).

It was judged important to investigate what British Columbia teachers and administrators concerned with Early Childhood Education considered appropriate teacher education courses and professional experiences for the preparation and continuing education of highly qualified instructional personnel at the Kindergarten level, and to survey the present status of Kindergarten teachers in the province.

12.2 Pre-Service Training

This section presents the results of questions asked of Kindergarten teachers and administrators about pre-service training of Kindergarten teachers. They were asked to check the extent to which, in their opinion,

a given list of areas in Early Childhood Education were needed in the pre-service training of Kindergarten teachers. This list did not include teacher background in liberal arts (see Table 12.1).

TABLE 12.1

KINDERGARTEN TEACHERS' OPINIONS ON AREAS FOR PRE-SERVICE TRAINING
(Entries are percentages)

Check the extent to which each of the following areas in Early Childhood Education is needed by Kindergarten teachers as part of the pre-service training. In this question we are interested in your OPINION. (Medians are underlined. Where the median is located approximately mid-way between two response categories both entries are underlined.

Areas of Early Childhood Education	Teachers	Administrators	
	Kindergarten (n=989-1007)	School (n=409-429)	District (n=56-58)
Art Education			
Not a need	1	0	2
Slight need	14	17	22
Strong need	45	60	57
Definite requirement	40	23	19
Music Education			
Not a need	0	0	0
Slight need	9	11	21
Strong need	48	62	58
Definite requirement	43	27	21
Physical Education			
Not a need	0	0	0
Slight need	9	17	21
Strong need	49	58	60
Definite requirement	42	25	19
Child Development			
Not a need	0	0	0
Slight need	2	2	2
Strong need	24	22	26
Definite requirement	74	77	72
Currirulum Development			
Not a need	1	3	7
Slight need	15	34	37
Strong need	49	45	45
Definite requirement	35	18	11
Kindergarten Methods			
Not a need	0	0	0
Slight need	3	2	0
Strong need	31	22	20
Definite requirement	66	76	80
Kindergarten Materials			
Not a need	0	0	0
Slight need	9	8	5
Strong need	40	41	45
Definite requirement	51	51	50
Language Development			
Not a need	0	0	0
Slight need	3	6	5
Strong need	31	39	28
Definite requirement	66	55	67

Table 12.1 (Cont'd)

Areas of Early Childhood Education	Teachers	Administrators	
	Kindergarten (n=989-1007)	School (n=409-429)	District (n=56-58)
Reading Methods			
Not a need	3	2	2
Slight need	35	41	43
Strong need	42	41	46
Definite requirement	20	15	10
Science & Social Studies Methods			
Not a need	1	8	3
Slight need	31	56	59
Strong need	48	31	33
Definite requirement	20	5	5
Mathematics Methods			
Not a need	0	7	3
Slight need	21	49	46
Strong need	50	35	37
Definite requirement	29	8	14
Special Needs Children:Identification			
Not a need	0	0	0
Slight need	13	10	7
Strong need	42	44	50
Definite requirement	45	46	43
Special Needs Children: Instruction			
Not a need	1	2	2
Slight need	23	24	22
Strong need	44	46	47
Definite requirement	32	28	29
Evaluation			
Not a need	1	2	2
Slight need	9	23	15
Strong need	41	45	48
Definite requirement	49	30	35
History of Early Childhood Education			
Not a need	13	13	15
Slight need	45	49	47
Strong need	26	21	19
Definite requirement	16	17	19
Children's Literature			
Not a need	1	1	2
Slight need	13	23	12
Strong need	46	47	53
Definite requirement	41	29	33

Child Development, Language Development, Kindergarten Methods and Materials, Music and Physical Education and Evaluation were each identified as a "Strong need" or a "Definite requirement" by almost all Kindergarten teachers. Next in importance for the respondents were Special Needs Children: Identification Children's Literature, Art Education, and Curriculum Development. Mathematics Methods, Special Needs Children: Instruction, Science and Social Studies Methods were seen as a requisite part of pre-service training by approximately three-quarters of the Kindergarten teachers. There was a high degree of agreement with the areas listed by the Association for Childhood Education International (see Section 12.1).

Reading Methods were endorsed by over one-half, while the same number thought the History of Early Childhood Education was "Not a need" or only a "Slight need".

Administrators agreed with the Kindergarten teachers about the importance of Child Development, Language Development, Kindergarten Methods and Materials. In addition, they rated Special Needs Children: Identification among the top-priority areas. School administrators indicated that Music and Art Education were very important areas of pre-service training while fewer of District administrators shared this opinion. In the areas of Children's Literature and Evaluation, the positions were reversed with more District administrators giving a higher rating to these areas. The same percentages of Kindergarten teachers and both groups of administrators agreed on the need for Special Needs Children: Instruction. Approximately three-quarters were of the opinion that this area was a "Strong need" and/or a "Definite requirement". Curriculum Development, Mathematics Methods, Reading Methods and Social Studies Methods were perceived by the administrators to be of less importance than by Kindergarten teachers. History of Early Childhood Education was uniformly given a low priority by all respondents which differs from its importance in the Association for Childhood Education International statement (see Section 12.1).

The following comments are representative of opinions expressed by the respondents:

> (To improve the Kindergarten) encourage teacher training agencies to program for Kindergarten teachers. (Administrator)

> Kindergarten teachers are often appointed without even basic background training in Early Childhood Education . . . . Teachers need training in the value of play and exploration, in interpreting these areas, in evaluating a child's communication skills and enhancing the child's language, and in understanding the nature of developmental learning. Our Universities should be encouraged to provide this. (Administrator)

> Emphasis should be placed on Method courses and on classroom management and organization. (Kindergarten teacher)

> I strongly feel that teachers now in Kindergarten often have no training in early Child Development and yet they are making decisions that demand this information. (Kindergarten teacher)

12.3 Adequacy of Pre-service Training

The Kindergarten teachers were asked to state how well their pre service training had prepared them for teaching Kindergarten classes (see Table 12.2).

Forty-two percent reported that they had had adequate preparation while forty percent indicated that they had been very well or exceptionally well prepared by their pre-service training. Examination of the response from rural and urban teachers showed urban teachers felt better prepared than did rural teachers.

TABLE 12.2

ADEQUACY OF KINDERGARTEN TEACHERS' PRE-SERVICE TRAINING

(Entries are percentages)

Overall, as a result of your PRESERVICE TRAINING, how well prepared do you feel for teaching Kindergarten?	
Responses	Kindergarten teachers (n=1005)
Not at all	3
Somewhat	15
Adequate	42
Very well	35
Exceptionally well	5

12.4 Areas of Additional Training

The Kindergarten teachers were asked in which areas they would like to have additional training. The responses in each area are shown in Table 12.3.

Except in the identification and instruction of Special Needs Children, the majority of Kindergarten teachers appeared to be reasonably confident about their competencies. This reflects the high percentage of Kindergarten teachers who expressed satisfaction with their pre-service training. It might be speculated that the current trend toward mainstreaming and the early identification of "at risk" Preschool children accounts for the inetrest in special needs and, to a lesser degree, in evaluation. Their comments indicate that additional training through in-service would be helpful. The following examples indicate some areas of concern:

> These programs (in service) should be developed for specific areas such as art, music, P.E. etc. and booklets of ideas for each area should be given to the teacher at the time of instruction. (Kindergarten teacher)

> It seems that special needs children (both handicapped or gifted) are increasing in number and I feel a need for ideas or workshops to adequately work with these children. (Kindergarten teacher)

TABLE 12.3

ADDITIONAL TRAINING FOR KINDERGARTEN TEACHERS*

(Entries are percentages)

In which of the following areas, if any, would you like to have additional training?	
Areas of Early Childhood Education (Ranked in order of descending frequency)	% of Kindergarten teachers wishing additional training
Special Needs Children: instruction	62
Special Needs Children: identification	58
Evaluation	40
Music Education	39
Language Development	37
Physical Education	36
Kindergarten Methods	34
Art Education	29
Curriculum Development	25
Child Development	25
Kindergarten Materials	25
Mathematics Methods	20
Science and Social Studies Methods	19
Children's Literature	17
Reading Methods	17
History of Early Childhood Education	5
Other	3
None of the above	2

*n = 928 - 984 depending on item

12.5 In-service

This section presents the results on the current availability of in-service and what in-service education is needed for Kindergarten teachers.

12.5.1 Availability of In-service

The Kindergarten teachers were asked to provide information about in-service opportunities in their district and school. Frequency of response is shown in Table 12.4.

TABLE 12.4

INSERVICE OPPORTUNITIES OF KINDERGARTEN TEACHERS*
(Entries are percentages)

Type of Inservice	Number of days			
	0	1	2	2+
Workshops attended				
More than a full day	65	26	5	4
Full day	45	24	18	13
Half day	44	27	18	11
Less than half a day	47	10	13	30
Professional Days				
Full day	63	23	11	3
Part day	72	18	8	2
Discretionary Days				
Full day	81	11	6	2
Part day	78	12	7	3

* n = 694 - 850 depending on item

Less than half the responding teachers had attended workshops relevant to Kindergarten. Approximately thirty-eight percent reported that professional days had been devoted to Kindergarten concerns. Eighty percent of the teachers reported that there had been no discretionary days devoted to Kindergarten.

12.5.2 Needed In-service

Kindergarten teachers and administrators were asked if there was a need for in-service and professional development activities for Kindergarten teachers over and above what occurred last year (see Table 12.5).

TABLE 12.5

INSERVICE NEEDED FOR KINDERGARTEN TEACHERS
(Entries are percentages)

In your district is there a need for regular inservice and professional development activities for Kindergarten teachers, over and above what occurred last year?

Responses	Teachers	Administrators	
	Kindergarten (n=964)	School (n=420)	District (n=58)
Yes	67	50	65
No	15	31	26
Don't know	18	19	9

The majority of Kindergarten teachers and District administrators agreed on the need for more in-service education. Half the School administrators expressed a need for more Kindergarten in-service opportunities. A greater proportion of rural administrators than urban administrators favoured in-service. Eighteen percent of the Kindergarten teachers indicated that they didn't know if more in-service was needed. Comments from Kindergarten teachers and administrators revealed their concerns about the need for in-service:

> Too often the days (in-service) have been used for school business, e.g. determining goals of the school, disicplinary procedures, etc. which do not affect Kindergarten. (Kindergarten teacher)
>
> I feel that Kindergarten teachers would benefit most from in-service workshops. Teacher training cannot prepare a teacher adequately as you do not realize where you are lacking training until you are actually in a regular teaching situation. (Kindergarten teacher)
>
> I believe that Kindergarten teachers should attend workshops that are compulsory. (Administrator)

12.6 Assignment of Teachers to Kindergarten Classes

This section deals with the question of assignment of teachers to Kindergarten classes. Kindergarten teachers, Preschool teachers, School and District administrators were asked to estimate the need for each item in a list of prerequisites for Kindergarten teaching (see Table 12.6).

There was clear agreement among all groups that Early Childhood Education training is the top-priority requisite. Administrators also perceived recent in-service in Kindergarten to be an important qualification.

The large majority of Preschool teachers and District administrators indicated that Early Childhood experience is a strong need or a definite requirement, while school personnel did not rate it as highly.

Administrators were in agreement that primary education training is a strong need. Kindergarten teachers were about evenly divided on this question. This response from Kindergarten teachers was somewhat surprising as the majority of them have taught in the primary grades (see Table 12.12). Preschool teachers reject primary training with sixty-one percent rating it as not a need or only a slight need.

A Specialist's certificate in Early Childhood Education did not rate very highly as a need among Kindergarten teachers. Approximately half of the District administrators and Preschool teachers indicated that it is a strong need or a definite requirement, while half of the School administrators were of the same opinion.

TABLE 12 6

PREREQUISITES FOR ASSIGNMENT TO KINDERGARTEN CLASSES
(Entries are percentages)

Estimate the need for each of the following as prerequisites for assignment of teachers to Kindergarten classes. (Medians are underlined. Where the median is located approximately mid-way between two response categories both entries are underlined.)

Prerequisites (ranked in order of descending frequency) and Estimate of need for each	Teachers		Administrators	
	Kgn (n=940-994)	Preschool (n=334-348)	School (n=404-420)	District (n=57 58)
Early Childhood Education training (ages 3-5)				
Not a need	1	1	0	2
Slight need	12	6	10	2
Strong need	38	25	43	40
Definite requirement	49	68	47	56
Recent in-service in Kindergarten (within past three years)				
Not a need	4	7	2	2
Slight need	19	17	13	7
Strong need	48	35	54	53
Definite requirement	29	41	31	38
Early childhood education experience (ages 3-5)				
Not a need	4	1	2	4
Slight need	19	9	20	12
Strong need	44	47	54	54
Definite requirement	33	53	24	30
Primary education training (ages 6-9)				
Not a need	9	29	3	3
Slight need	33	32	27	26
Strong need	38	21	48	55
Definite requirement	20	18	22	16
Specialist's certificate in early childhood education (ages 3-5)				
Not a need	27	20	16	14
Slight need	32	24	34	30
Strong need	26	30	36	44
Definite requirement	15	26	14	12
Teaching experience in Grade 1				
Not a need	26	31	15	17
Slight need	37	38	38	50
Strong need	29	24	40	28
Definite requirement	8	7	7	5

Teaching experience in Grade 1 was not thought to be needed to any great extent, although several Grade 1 teachers voluntered the opinion that this experience makes Kindergarten teachers aware of the tasks which face the Grade 1 child.

Comments from all groups of respondents expressed a regret that the personal qualities of a teacher had not been included in the prerequisites for assignement to a Kindergarten class.

The following are some written comments about the qualification of Kindergarten teachers:

> Inservice and professional development courses are a definite must for teachers coming from other grades to teach Kindergarten. (Kindergarten teacher)
>
> The largest problem by far . . . is the lack of specific training (early education) that our Kindergarten teachers have. Most Kindergarten teachers have come from the grades and lack knowledge of the history, aims and philosophy of Early Childhood Education. (Kindergarten teacher)
>
> Too many teachers are put in Kindergarten who have not had Early Childhood experience. They tend to change the nature of the program by too much formal instruction and structured time. (Kindergarten teacher)
>
> In order to improve the status of Kindergartens within the community. . . teachers should be required to have a certain number of credits in Early Childhood Education, as well as four to five years experience teaching in a First Year classroom. (Grade 1 teacher)
>
> The personality of the teacher should be most important in the Kindergarten program. She/He should be enthusiastic, very open and loving with the children. (Kindergarten parent)
>
> This questionnaire lacks any references to the personal qualities of the Kindergarten teacher which is an extremely important contributor to the success of Kindergarten programs. (Administrator)

The parents of Kindergarten and Grade 1 were asked if they thought that teachers should have special training in teaching Kindergarten and be required to have experience with young children before being assigned to a Kindergarten class. Their responses to these questions are combined in Table 12.7.

TABLE 12.7

SPECIAL TRAINING AND EXPERIENCE REQUIRED FOR ASSIGNMENT TO KINDERGARTEN CLASSES
(Entries are percentages)

Response	Special Training in teaching of Kindergarten		Experience with young children	
	Kgn Parents (n=463)	Gr. 1 Parents (n=411)	Kgn Parents (n=463)	Gr. 1 Parents (n=409)
Yes	90	86	85	85
No	4	7	10	9
Undecided	5	7	5	5

The parents showed a high degree of agreement with Kindergarten teachers and Administrators about the desirability of a special training and experience. Only a small percentage indicated that these two qualifications were unnecessary. The following comments are representative of the opinions expressed:

> The Kindergarten teacher must be trained in Early Childhood Education to know the Five-year-old's needs. (Kindergarten teacher)
>
> I feel that it is definitely necessary for teachers to have actual experience with children as well as training because all the training in a classroom cannot fully prepare a person to the practical aspect of working with young people. (Kindergarten parent)
>
> The teacher should have training in evaluating and understanding small children. (Kindergarten parent)
>
> I really believe there should be more well-qualified teachers for each new Kindergarten class, as a good, helpful, understanding teacher is the most important part of getting a young student used to school time. (Grade 1 parent)
>
> I am strongly in favour of Kindergarten teachers being qualified Early Childhood Education supervisors. Most Kindergarten teachers are very nice people with only the best in mind for the children, but if they had Early Childhood Education their best would be better. (Preschool teacher)

12.7 Professional Organizations

The Kindergarten teachers were asked to indicate the professional organizations to which they currently belonged (see Table 12.8).

It is evident that responding Kindergarten teachers belonged to very few of the available professional organizations. Ten percent of the Kindergarten teachers did not belong to any Early Childhood Education organizations. A very small proportion of the teachers reported belonging to national or international Early Childhood Education groups. This finding could be partially due to the fact that there are relatively few opportunities in many parts of the Province to belong to organizations devoted to Kindergarten concerns. It may be that further efforts are needed to establish branches of Early Childhood Education organizations in more areas of the province to provide a medium for teachers to share professional ideas and to consider solutions for common problems. This would also augment the provision of in-service activities and reduce the sense of isolation many Kindergarten teachers tend to experience.

TABLE 12.8

MEMBERSHIP OF KINDERGARTEN TEACHERS IN PROFESSIONAL ORGANIZATIONS

(Entries are percentages)

Indicate any of the following professional organizations to which you CURRENTLY belong:	
Organizations (Ranked in order of descending frequency)	Percentage of Kindergarten Teachers (n=977)
Local Primary Teachers' Association	61
Local Kindergarten Teachers' Association	57
Primary Teachers' Association of the B.C.T.F.	48
Canadian Association for Young Children	6
B.C. Preschool Teachers' Association	3
Association for Childhood Education International	3
National Association for the Education of Young Children	1
Organisation Mondiale pour l'Education Préscolaire	.4
Other	7
None of the above	10

12.8 Professional Journals

The Kindergarten teachers were asked to check tc which of the listed professional journals they had access and those that they read on a regular basis (see Table 12.9).

The most available journals were Teacher, B.C. Teacher and Prime Areas. The latter two were read most regularly. The Instructor was read by forty-one percent of those who had access to it. The same number (twenty-four percent) had access to Learning, but fewer teachers read it regularly. The rest of the journals were not very accessible nor read to any extent when they were. This lack of accessibility could be a reflection of the low percentage of membership in the professional organizations which publish these journals.

TABLE 12.9

PROFESSIONAL JOURNALS
(Entries are percentages)

Check the following professional journals that you have access to, and in the second column, those you read regularly.

Professional Journals	Have access to (n = 912)	Read Regularly
Prime Areas	63	38
B.C. Teacher	74	51
Teacher	75	21
Instructor	24	10
Learning	24	2
Young Children	10	1
Journal of Canadian Association for Young Children	11	1
Childhood Education	14	1
Early Childhood Education	16	2
Day Care and Early Education	2	0
Early Years	12	1
Other	7	.2
None of the Above	2	0

12.9 Training Institutions Attended

The institution at which the Kindergarten teachers received their pre-service and additional training are shown in Table 12.10.

TABLE 12.10

INSTITUTIONS OF PRESERVICE AND ADDITIONAL TRAINING
(Entries are percentages)

Check any of the following institutions in which you received preservice teacher training and, in the second column, those in which you received additional training.

Institution	Pre-service training (n=981)	Additional training (n=675)
British Columbia institutions	75	84
Other Canadian institutions	16	13
United States institutions	6	8
United Kingdom institutions	6	2
Other	3	3

The majority of Kindergarten teachers in British Columbia received their initial training at provincial institutions and returned there for additional training. A small percentage had training in other Canadian institutions. Less than fifteen percent had been trained outside Canada.

12.10 Teaching Experience

With 1003 Kindergarten teachers responding, the years of teaching experience previous to September 1980 showed a mean of 11 years with a median and a mode of 9 years. Two percent of the teachers had no teaching experience. Eighty-three percent of the 992 teachers responding taught Kindergarten in 1979. The percentage of Kindergarten teachers with experience at this level prior to 1980 is shown in Table 12.11.

TABLE 12.11

YEARS OF EXPERIENCE TEACHING KINDERGARTEN PRIOR TO 1980

(Entries are percentages)

How many years have you taught Kindergarten prior to September 1980?	
Number of years	Kindergarten teachers (n=992)
0 years (first year in Kindergarten)	11
1 - 2 years	27
3 - 5 years	28
6 - 10 years	22
11 or more years	12

Fifty-five percent of the Kindergarten teachers had between 1 and 5 years experience at the Kindergarten level.

Other grades taught on a regular part-time or full-time basis are shown in Table 12.12.

The majority of Kindergarten teachers had experience teaching at the primary level.

TABLE 12.12

OTHER GRADES TAUGHT BY KINDERGARTEN TEACHERS

(Entries are percentages)

What other grades have you taught on a regular part-time or full-time basis?	
Grades (Ranked in order of descending frequency)	Kindergarten Teachers (n=992)
Grades 2 or 3	69
Grade 1	65
Grades 4 - 7	37
Preschool/Day Care	14
Other	13
No other grades	12
Grades 8 - 12	8

12.11 Teacher Qualification Service Category

Table 12.13 shows the percentage of Kindergarten teachers in each qualification category.

TABLE 12.13

TEACHER QUALIFICATION CATEGORY 1980

(Entries are percentages)

Please indicate your present Teacher Qualification Service category	
Category	Kindergarten teachers (n = 966)
EB	10
EA	32
PC	32
PB	21
PA	4
Other	1

Thirty-two percent of the responding teachers had three years of training; fifty-seven percent had four or more years. It is probable that the one percent shown in the other category were teaching with a letter of persmission. This represents little change in the level of certification of Kindergarten teachers since the 1975 suvery and parallels the information from Form J for 1979. The difference between the years of training for rural and urban teachers was significant with urban teachers having had more training.

12.12 Summary

There appears to be general agreement among the respondents that Kindergarten teachers should have training in Early Childhood Education. This training should have an emphasis on courses in Child Development, Language Development, Kindergarten Methods and Materials, the Identification of Special Needs Children, and Evaluation. Courses in Art, Music, Physical Education and Children's Literature are considered to be important components of the training program. Methods courses in Reading, Mathematics, Science and Social Studies, the Instruction of Special Needs Children and Curriculum Development are also viewed as desirable. Courses in the History of Early Childhood Education are thought to be of little value, especially by the Kindergarten teachers.

The majority of responding Kindergarten teachers expressed satisfaction with their pre-service training. Except in the areas of Identification and Instruction of Special Needs Children, less than half wished to have additional training.

In addition to Early Childhood Education training, recent in-service and Early Childhood Education experience are regarded as desirable prerequisites for assignment to Kindergarten classes. However, Primary Education training, while favoured by a majority of the administrators, did not rate highly with either the Kindergarten or Preschool teachers. A majority of the School administrators indicated a Specialist's certificate in Early Childhood Education is a strong need or should be a definite requirement; the majority of the other respondents considered it to be only slightly needed. Less than half of the four groups responding to this question indicated that teaching experience in Grade 1 should be a prerequisite for assignment to Kindergarten classes. All groups of respondents volunteered by written comments the opinion that personal qualities of the Kindergarten teacher were of utmost importance.

It is evident that in-service education specifically focussed on Kindergarten concerns has been sparse. Sixty percent of the Kindergarten teachers responding had not attended more than a full day of workshops; approximately forty percent had not attended workshops of a full day or less. Sixty-two percent reported that no full-day professional days had been devoted to Kindergarten and seventy-two percent stated that the situation is the same for those occupying part of a day. Discretionary days devoted to Kindergarten, either full-or part-day were even fewer in number, with approximately eighty percent of the responses indicating that there were none.

A majority of the Kindergarten teachers and District administrators indicated that more in-service should be directed to Kindergarten needs. Approximately a fifth of the Kindergarten teachers and the School administrators did not know whether in-service is needed.

The "typical" Kindergarten teacher in British Columbia has recieved three or more years of training at a British Columbia institution, taught Kindergarten in 1978-79, has 11 years teaching experience, 3 - 5 of them in Kindergarten, the others in Grades 2 and/or 3, belongs to the Local Primary Teachers' Association, and reads the B.C.Teacher and Prime Areas on a regular basis.

CHAPTER 13

CONCLUSIONS AND RECOMMENDATIONS

This assessment gathered information in a number of ways: discussions with review panels and Advisory Committee members, a literature review, and more exhaustively, by questionnaires distributed to a variety of interested groups. The recommendations which follow represent the Contract Team's interpretation of that body of knowledge, and each one can be traced in its origin back to earlier sections of this report. The following recommendations are not in order of priority as the Contract Team considers all of them important.

13.1 Kindergarten Curriculum

The major goal of the overall assessment was to provide direction to the Ministry of Education as it began the process of reviewing the Kindergarten curriculum. Of first importance was the issue of what models of the program were currently in place in B.C. Kindergartens. Three of these were identified in practice. The preferred model lies between the Cognitive-Discovery and Discovery Models (see description in Chapter 4). Nearly all Kindergarten teachers agree that the Kindergarten curriculum should be an integrated curriculum organized around activity centres. The teachers indicated that the Kindergarten guides should be updated and expanded. Written comments of Kindergarten teachers indicated they would like more guidance but not prescription.

1. It is recommended, therefore, that the Kindergarten Curriculum Committee should:

- *review the models identified and their use in B. C. Kindergartens;*
- *develop, as a result of this review, a curriculum guide that provides specific guidance without prescription. Such a guide would provide direction, continuity and similarity of programs provincially but would be flexible enough to meet the unique needs of individual children; and*
- *supplement the curriculum guide with resource information including suggestions for possible units and activities, book lists, recipes, and suggested formats for evaluation.*

More than four-fifths of the Kindergarten teachers responding indicated the need for a specific statement of the goals and purposes of Kindergarten. The written comments of teachers, administrators, and parents indicated that such a statement would be highly desirable.

2. It is recommended, therefore, that the Ministry of Education include a specific statement of goals and purposes of Kindergarten in the revised Curriculum Guide. This statement should be

sufficiently specific so that Kindergarten teachers and administrators can articulate what Kindergarten is and what it is not and enable researchers to delineate the scope of future assessments accurately.

Many of the responding Kindergarten and Grade 1 teachers indicated that there had been an increase in emphasis in academic skills in Kindergarten as a result of the Grade 1 curriculum. This is not in agreement with their preferred model for Kindergarten.

3. It is recommended, therefore, that the Ministry of Education examine the Grade 1 curriculum and consider its relationship to the Kindergarten curriculum in order to develop one that assures continuity and a smooth transition for the children from one level to another.

There seems to be considerable controversy among teachers, administrators and parents as to the place of reading in the Kindergarten curriculum. Kindergarten teachers want direction in this area but not prescription.

4. It is recommended, therefore, that the Ministry of Education:

- *include a comprehensive statement on reading/reading readiness in a revised Kindergarten Curriculum Guide that defines reading and reading readiness, informal and formal approaches (with examples of each) and indicates their appropriateness for Kindergarten children;*
- *explain, in an introductory section, the integrated nature of the language arts;*
- *provide a scope and sequence for each area of the language arts at the Kindergarten level similar to one provided in the current curriculum guide, Elementary Language Arts (1978);*
- *share and discuss the statements described above with Kindergarten teachers, Grade 1 teachers, administrators, and parents.*

It is recommended further that District Personnel:

- *ensure that inservice opportunities are provided to promote discussion and a more thorough understanding of the meaning and implications of the statement.*

Nearly three-quarters of the responding Kindergarten teachers indicated that a statement on play should be included in the Curriculum Guide. Written comments indicated that some parents, Grade 1 teachers and

administrators are not familiar with the role of play in Early Childhood Education.

5. It is recommended, therefore, that the Ministry of Education:

- *develop a specific statement on play and its role in Kindergarten, including the different types and purposes of play and its importance as a learning method of young children.*

It is recommended further that District Personnel

- *ensure that this statement is shared and discussed with primary teachers, parents and administrators.*

The data indicate that more than half the children enrolling in Kindergarten in British Columbia have attended a Preschool program for at least a year. This trend of Preschool enrolment is expected to continue and increase in the future. Written comments of Kindergarten and Grade 1 parents, Preschool and Kindergarten teachers indicate that this previous experience is not always taken into consideration in some aspects of the Kindergarten program.

6. It is recommended, therefore, that the Ministry of Education consider the Preschool experience of many children prior to beginning Kindergarten in further developing a Kindergarten curriculum that is flexible enough to accommodate these children's needs throughout the year.

Further, in response to the desire expressed by a majority of Kindergarten and Preschool teachers, as well as administrators, it would be important to enable Kindergarten teachers to become more familiar with local Preschool programs.

7. It is recommended, therefore, that District and School Administrators:

- *plan and implement procedures whereby Kindergarten teachers and elementary school principals be given release time and other necessary support and encouragement to establish on-going communication with nursery schools, daycare centres, etc. in their area for the purpose of becoming more familiar with each other's programs; and*

- *initiate inservice activities to facilitate such communication.*

It is further recommended that the Ministry of Education

- *include in a revised curriculum guide a statement on the importance of Kindergarten-Preschool communication; and*

- *provide suggestions in a resource book concerning the variety of ways such communication could be implemented.*

A majority of Kindergarten and Grade 1 teachers, School and District administrators agree that there is a need for increased communication and coordination between Kindergarten and Grade 1 teachers in order to promote an understanding by all teachers of the expectations upon them and to promote more effective transitions for children from one level to another.

8. It is recommended, therefore, that the District and Schools Administrators provide means and procedures necessary for Kindergarten and Grade 1 teachers to expand their communication beyond informal discussion to include other activities such as observation of each other's classes, conferences about the children and programs, and inservice on topics of common concern.

13.2 Admission to Kindergarten

The current School Act does not require compulsory school attendance until the age of seven years. In September 1979, 98.5% of all eligible Kindergarten aged children in B. C. were attending some type of Kindergarten. A majority of the responding Kindergarten and Grade 1 and Preschool parents think Kindergarten attendance should be compulsory. Almost half of the School and District administrators and Preschool teachers also agree.

9. It is recommended, therefore, that the Ministry of Education:

- *examine all aspects of the question of compulsory Kindergarten attendance, and*
- *make any policy changes as seem appropriate as a result of that examination.*

Some interest in twice-a-year entry was expressed by teachers, administrators and parents. Although twice-a-year entry is favoured by a majority of Preschool teachers and parents only, there is sufficient interest to warrant further investigation.

10. It is recommended, therefore, that the Ministry of Education:

- *investigate the feasibility of a pilot project that would examine the advantages and disadvantages of twice-a-year entry and, if feasible, initiate a pilot project with any district expressing interest in such a plan; and*
- *make any policy changes as seem appropriate as a result of that project.*

There is no definitive statistical evidence to support the use of chronological age to determine readiness for Kindergarten nor upon which to predict success at this level. Evidence about alternative criteria is equally lacking. Certainly several groups expressed interest in alternative admission procedures by indicating their dissatisfaction with the present arrangements.

11. It is recommended, therefore, that the Ministry of Education in cooperation with educational researchers:

- *investigate the ramifications of admission procedures for Kindergarten based on criteria other than chronological age; and*
- *provide, if the investigation so warrants, alternative procedures for admission.*

13.3 Funding and Facilities

At least 70% of the responding Kindergarten teachers, School and District administrators rated the current funding formula for Kindergarten used by the Ministry of Education as "somewhat inadequate" or "very inadequate". Kindergarten teachers rated some types of equipment and supplies as not present or insufficient. It is recognized that funding has direct implication for the establishment of effective programs. Sufficient materials and equipment are necessary requirements for effective curriculum implementation. Teachers and parents reported that some children living in rural areas, although eligible to attend Kindergarten, are not able to do so through a lack of transportation provided by the school district.

12. It is recommended, therefore, that the Ministry of Education:

- *examine the existing Kindergarten funding policy and practices in light of the current evidence in this report, and*
- *revise the 1/2 F.T.E. funding formula upward to more effectively match the needs of Kindergarten programs.*

It is further recommended, therefore, that each School District.

- *provide transportation to Kindergarten for all children eligible for Kindergarten; and*
- *supply each Kindergarten teacher with a special fund sufficient to meet those incidental expenses unique to the Kindergarten program.*

Various Early Childhood Education organizations recommend an area of 1200-1500 square feet (111 to 140 square meters) for the Kindergarten classroom. The current specification in British Columbia is 896 square feet. (The new draft of the School Building Manual (1980) specifies 80 square meters (860 square feet) with 34 square meters (366 square feet) of optional design space.) More than a quarter of responding Kindergarten teachers rated their present classroom size as poor or worse. With a program organized around activity centers and with dual class use, it is clear that Kindergarten classrooms can not be considered in the same way as other primary classrooms.

> *13. It is recommended, therefore, that the Ministry of Education set the size of the Kindergarten classroom for 20 children at a minimum of 1200 square feet (111 square meters) not including washrooms, cloakrooms, and storage areas.*

Further it is suggested that, whenever possible, direct outside access from the Kindergarten room be provided. It is also suggested that future planning of Kindergarten classrooms include adequate storage space and electrical equipment of higher voltage necessary for the implementation of the Kindergarten curriculum.

Many of the responding Kindergarten teachers indicated a lack of sufficient materials and equipment of certain types (e.g., woodworking, large wheel toys, animal facilities, stoves, refrigerators, etc.). The majority of teachers wanted the sections of the Resource Book for Kindergartens on equipment and materials to be expanded.

> *14. It is recommended, therefore, that the Ministry of Education develop a suggested list of materials, supplies, and equipment for Kindergarten in sufficient detail to aid teachers and administrators in providing materials, supplies, and equipment necessary to the implementation of the Kindergarten curriculum.*

Many Grade 1 teachers expressed a desire for Kindergarten-type materials for the first part of Grade 1.

> *15. It is recommended, therefore, that each School District implement procedures to enable teachers and administrators to plan how sufficient materials of this type can be obtained and shared between Kindergarten and Grade 1.*

13.4 Class Size and Organization

Kindergarten teachers, Kindergarten and Grade 1 parents indicated 15 to be considered by them as the ideal class size for Kindergarten. Written comments by Kindergarten and Grade 1 parents, administrators and teachers indicated class size to be a very common concern. The inadequate size of some Kindergarten classrooms also has implications for class size. Many Kindergarten teachers teach two sessions a day and must deal with more children and parents than other primary teachers do.

16. It is recommended therefore, that the class size for Kindergartens be between 15 and 20 with the exact number dependent upon the needs of the children (e.g., special needs), the general resources, and the physical facilities available. Further, it is recommended that the class size should not exceed 20.

Most Kindergarten teachers have had special needs children in the Kindergarten and these teachers, School and District administrators indicated that such children require more teacher time, effort, and attention than typical children.

17. It is recommended, therefore, that the Ministry of Education develop guidelines for weighted enrolment to be implemented by each school district.

(One model which could be considered in developing such guidelines is the Denver/Lodi (California) Public School Systems' Weighted Pupil Plan).

More than three-quarters of the responding teachers and administrators favour transition classes between Kindergarten and Grade 1.

18. It is recommended, therefore, that all School Districts:

- *pursue the establishment of transition classes to meet the needs of the children who would benefit from such a program.*

It is further recommended that the Ministry of Education:

- *fund a longitudinal research study to investigate the effectiveness of transition classes.*

At least two-thirds of Kindergarten and Grade 1 teachers, School administrators, and the parents of Kindergarten and grade 1 children oppose combining a Kindergarten class with primary grades on a full-time basis for non-educational reasons (e.g., low enrollment).

19. It is recommended, therefore, that each school district and school continue the practice of not combining Kindergarten with other grades. This would not include school organization based on a family grouping model nor the transition classes in Recommendation 18.

Over half the Kindergarten teachers who taught two Kindergarten sessions per day reported switching morning and afternoon classes part way through the year. When asked what they liked the least about their child's Kindergarten, many parents of Kindergarten and Grade 1 children cited attendance in afternoon sessions for the whole year.

20. It is recommended, therefore, that all School Districts:

- *implement a policy of alternating morning and afternoon classes halfway through the year where this policy does not cause hardship for the parents or children; and*

- *explain the advantages of such a procedure to parents when their child is enrolled in Kindergarten.*

13.5 Teacher Training and Qualifications

At least three-quarters of the responding teachers, parents and administrators think that special training in Early Childhood Education and experience with children ages 3 to 5 should be requirements for assignment to Kindergarten.

21. It is recommended, therefore, that all School Districts:

- *assign to Kindergarten classes only teachers with appropriate recent Early Childhood Education training and/or recent Early Childhood experience and inservice work;*

- *encourage and support professional development for those currently teaching Kindergarten; and*

- *continue to make every effort to recruit teachers for Kindergarten with appropriate qualifications.*

A large majority of Kindergarten teachers agreed that more inservice education specifically planned for Kindergarten is needed. These teachers indicated that additional training in the education of special needs children, evaluation, test development, observation skills, and practical ideas for the classroom should be given high priority.

22. It is recommended, therefore, that all School Districts:

- *plan future inservice opportunities after determining the professional backgrounds and perceived needs of the Kindergarten teachers; and*

- *communicate these needs to the universities.*

It is recommended further that the Universities:

- *provide opportunities for teachers in all parts of the province for inservice education (Credit and non-credit)in Early Childhood Education relevant to their expressed needs and in a mode easily accessible to them (e.g., Extension Department, Anik-B satellite, Knowledge Network, on site-courses).*

13.6 Parents

Recently, the Minister of Education has announced that regulations will be changed to allow school districts the option of setting up visitation programs. Home visits by the teacher and school visits by the parents and child are suggested optional components of this procedure.

Parents responding to the questionnaire indicated that home visits were their least-preferred form of parent-teacher contact. In addition, they indicated that they did not favour shortened sessions in September.

23. It is recommended, therefore, that School Personnel:

- *give parents the option of selecting home or school visits during this release time;*
- *explain the reasons for shortened sessions (if used) in relation to the Kindergarten program for the whole year; and*
- *respond to parents' concerns on these and other questions as part of the enrolment procedures prior to the children entering Kindergarten.*

More than three-quarters of the responding teachers, administrators and parents agree it is desirable for each school to plan and implement an educational program for parents of Preschool and Kindergarten children to explain and discuss the Kindergarten program.

24. It is recommended, therefore, that School Districts:

- *fund and support educational programs for parents in each school enrolling Kindergarten students.*

It is further recommended that School Personnel in each school enrolling Kindergarten students:

- *use such a program to explain and discuss the Kindergarten program with parents, including the statement of goals and purposes (see Recommendation 2).*

Over 90% of responding teachers, administrators, and parents agreed that the Kindergarten teacher is in a unique position to establish early and continuing parent-teacher relationships. Parents indicated their willingness to be involved and their desire that this involvement continue through the grades. The two major obstacles to parent involvement and participation were parents who work and other children needing care at home.

A revised Curriculum Guide or Resource Book could provide Kindergarten teachers with suggestions for a variety of ways to involve parents in meaningful activities. Parents' preferred types of involvement were those that brought them into direct contact with the children (e.g., helping children in small groups or 1-to-1 situations and field trips); clerical work and similar activities were not popular.

25. It is recommended, therefore, that District and School Personnel:

- *implement a variety of ways parent-teacher contact and involvement can be established and maintained; and*
- *examine programs in the province and elsewhere that have proved successful in continuing teacher-parent contact and involvement and which accommodate parents' varying circumstances and preferences.*

There was a high degree of unanimity among responding teachers, administrators, and parents that parenting/parent education should be made available to parents.

26. It is recommended, therefore, that the Ministry of Education, perhaps in conjunction with the Ministries of Human Resources and Health provide parenting courses throughout the province. These courses could be delivered by a variety of means, including satellite transmission and distribution of video-tapes to schools and other interested organizations.

13.7 Screening

More than three quarters of the teachers, administrators and parents were in favour of the screening of Kindergarten children for the purpose of identifying special needs children, and for planning the Kindergarten programs and programs for individual children.

27. It is recommended, therefore, that the Ministry of Education establish further province-wide guidelines for use by school districts in planning and implementing screening procedures for all children before entry into Kindergarten or early in the school year. These guidelines should include the requirements that:

- *information be collected about general health, vision, hearing, speech and motor co-ordination;*
- *specialists, including the Kindergarten teacher, conduct this screening;*

- *districts provide any necessary follow-up indicated by screening procedures;*

- *information derived from screening be communicated both to teachers and to parents;*

13.8 Support Services

The Kindergarten teachers, School and District administrators estimated that most special needs children are equivalent to between 1.5 and 2.5 average children in terms of teacher time and effort. Children who were emotionally disordered or who had severe behavioural problems were estimated to require between 2.5 and 3 times the teacher time and effort of an average child.

28. *It is recommended, therefore, that each School District:*

- *ensure that Kindergarten teachers and children received, where necessary, the support services of Learning Assistance teachers, speech therapists, counsellors, etc.; and*

- *provide a qualified child care worker for any child who requires specialized attention beyond the capability of a classroom teacher when that child is placed in a regular Kindergarten classroom.*

13.9 Future Kindergarten Needs Assessments

Based on the experiences gained as a result of carrying out this assessment, the following recommendations are made concerning future Kindergarten Needs Assessments:

29. *It is recommended that the Ministry of Education:*

- *ensure that on-site observations in Kindergartens by trained observers take place, that these observations and other data-collection occur during the March-May period, that teachers be provided with the resources necessary to complete their part of the assessment in such a manner that it does not interfere with their other professional duties;*

- *that a timeline of at least eighteen months be arranged; and*

- *that a practising Preschool teacher and a Kindergarten/Grade 1 transition class teacher be included on the Advisory Committee.*

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APPENDIX

Kindergarten Review Panels

Prince George

Elizabeth Balla, Resource Teacher, Peace River South School District
Sandi Bruce, Teacher, Prince George School District
Sharon Carrell, Helping Teacher, Kamloops School District
Lyvonne DeBruin, Supervisor of Instruction, Quesnel School District
Gail Fensom, Primary Consultant, Prince George School District
David Greenberg, Teacher, Prince George School District
Joyce Krause, Trustee, Terrace School District
Joan McGogy, Pre-school Teacher, Prince George
Sharon Ramsay, Parent, Prince George
Doreen Stalker, Teacher, Smithers School District
Jeanne Suttis, Helping Teacher, Cariboo-Chilcotin School District
Gerry Withler, Pre-school Supervisor, Williams Lake

Richmond

Patricia Arlin, Faculty of Education, University of British Columbia
Sylvia Brandt, Parent, Delta
Iris Fenwick, Pre-school Teacher, North Vancouver
Sharon Gunter, Parent, Surrey
Suzanne Hepting, Primary Coordinator, Chilliwack School District
Beverly Holt, Parent, Richmond
Cynthia Howard, Parent, Vancouver
Carol Johnson, Parent, Westbank
Ellen Kadonaga, Teacher, Hope School District
Arlene Kropp, Teacher, Abbotsford School District
Bridie McIlwraith, Pre-school Teacher, Burnaby, B. C.
Joyce Mahy, Supervisor of Primary Instruction, Richmond School District
Lynne Matthews, Principal, North Vancouver School District
Elizabeth Miller, Teacher, Nishga School District
Sondra Saslow, Teacher, Vancouver School District
Shirley Sawyer, Teacher, Langley School District
Lorna Sellers, Teacher, Burnaby School District
Sheila Sexsmith, Teacher, West Vancouver School District
Patrick von Hahn, Teacher, Richmond School District
June Williams, Parent, Burnaby School District

Cranbrook

Leah Bradford, Teacher, Cranbrook School District
Rosemary Bradford, Teacher, Windermere School District
Gwen Bristow, Teacher, Castlegar School District
Lilian Corriveau, Trustee, Kimberley School District
Nancy Hogue, East Kootenay College, Cranbrook
Irene Humble, Teacher, Creston-Kaslo School District

Mary Phillips, Supervisor of Elementary Instruction, Cranbrook School District
Lois Ruzicka, Parent, Creston
Peggy Salvador, Parent, Cranbrook
Ilha Strachan, Teacher, Fernie School District

Duncan

Nola Adams, Teacher, Cowichan School District
Rae Benham, Parent, Duncan
Sheila Cahill, Curriculum Coordinator, Sooke School District
Judy Donald, Teacher, Cowichan School District
Vilma Dube, Teacher, Nanaimo School District
Pippa Keam, Teacher, Courtenay School District
Barbara King, Teacher, Qualicum School District
Elizabeth Latta, Parent, Victoria
Esme Madsen, Teacher, Vancouver Island North
Anne MacMillan, Malaspina College, Nanaimo
Daphne McMullen, Resource Teacher, Nanaimo School District
Beverly Phillips, Teacher, Sooke School District
Sheila Reid, Teacher, Gulf Islands School District
Gail Wallace, Pre-school Supervisor, Victoria